BEFORE THE HON'BLE PUNJAB STATE ELECTRICITY REGULATORY COMMISSION

IN THE MATTER OF:

GVK Power (Goindwal Sahib) Limited ...Petitioner

Versus

Punjab State Power Corporation Limited ...Respondent

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GVK Power (Goindwal Sahib) Limited/Petitioner

Through

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Date: 29 December, 2017

BEFORE THE PUNJAB STATE ELECTRICITY REGULATORY COMMISSION, CHANDIGARH

IN

PETITION NO. 54 OF 2017

IN THE MATTER OF:

GVK Power (Goindwal Sahib) Limited
Paigah House, 156 – 159, Sardar Patel Road,
Secunderabad – 540 003 ...Petitioner

Versus

Punjab State Power Corporation Limited,
The Mall, Patiala (Punjab) ...Respondent

Application on behalf of the Petitioner for amendment of Petition No. 54 of 2017 pursuant to communication dated 27.10.2017 of this Hon'ble Commission

1. The present Application is being filed by GVK Power (Goindwal Sahib) Limited ("**Petitioner**") for amendment of Petition No. 54 of 2017 filed for determination of Tariff for supply of power to Punjab State Power Corporation Limited ("**PSPCL**").

2. It is submitted that in terms of communication dated 27.10.2017, this Hon'ble Commission had intimated certain defects in the Petition and directed the Petitioner to cure the defects and file the compliance report/requisite documents. The Petitioner is filing the compliance report along with this amendment application in furtherance thereof.

3. One of the objections raised by this Hon'ble Commission was with respect to the formats/forms filed along with Petition No. 54 of 2017. The Petitioner seeks liberty to allow amendment of Petition No. 54 of 2017 and submission of revised forms in compliance thereof.

Amendment of Petition No. 54 of 2017

4. It is submitted that the Index of the Petition be replaced by the following:-

Sr. No.	Particulars	Page Nos.
1.	Memo of Parties	A
2.	Petition for extension of SCOD till COD, for approval of completed Capital Cost and for determination of tariff for the Tariff Year 2016-2017 along with supporting Affidavit.	1-53
3.	***Annexure P-1:*** Copy of the MoU dated 08.02.2006	54-64

5. It is submitted that the title of the Petition be replaced by the following:-

"PETITION FOR EXTENSION OF SCOD TILL COD, FOR APPROVAL OF COMPLETED CAPITAL COST AD FOR DETERMINATION OF TARIFF FOR THE TARIFF YEAR 2016-17"

6. It is submitted that Paragraph 28 of the existing petition be replaced by the following paragraph:-

> *"28. On 01.02.2016, this Hon'ble Commission passed an Order in Petition Nos. 65 of 2013 and 33 of 2015 allowing the Petitioner to procure coal from alternate sources to supply power once the Project was commissioned. A copy of the Order dated 01.02.2016 is annexed hereto and marked as Annexure P-10".*

7. It is submitted that Paragraph 32 of the existing petition be replaced by the following paragraph:-

> *"32. It is submitted that thereafter, the capital cost has increased on account of the force majeure events as well as delay in commissioning which have been allowed by the Arbitral Award. The completed cost of the Project as on Project COD is Rs.4,441 Crores. The capital cost as on the Cut-Off Date (31.03.2019) is Rs. 4773 Crores which includes additional capital expenditure of Rs. 230 Crores and Rs. 102 Crores towards margin money for working capital."*

8. It is submitted that Paragraphs 87 to 105 be replaced with the following paragraphs numbered 87 to 106:-

> *"**Tariff proposal for Contract Year 2016-17***
>
> *87. It is submitted that in terms of the PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 (**"PSERC Tariff Regulations, 2005"**) and provisions of explanatory memorandum thereto, the Petitioner is filing the Tariff proposal along with requisite information / details of the Project as prescribed. The tariff formats, duly filled with details regarding Capital Expenditure, estimated Annual Fixed Charges, Energy charges, Generation Tariff are annexed hereto and marked as **Annexure P-16 (Colly)**.*
>
> *88. The petition is being filed for the period starting from the COD of Unit-1 of the project to the end of the year i.e. 31.03.2017. Accordingly, the following are the periods under consideration:*
>
> (a) *COD of unit-1 (05.04.2016) to COD of unit-2 i.e. 16.04.2016.*
>
> (b) *COD of unit-2 to 31.03.2017*
>
> *89. **Project cost:** The Petitioner submits that the total estimated cost of the project up to the cut-off date of 31.03.2019 (considering COD of the project as 16.04.2016) is INR 4773 Crores. The Project cost incurred till COD of the Project, i.e. 16.04.2016 is INR 4441 Crore. The facts pertinent to justify the said cost have been detailed in the preceding sections.*
>
> *90. **Debt Equity Ratio:** As mentioned in the preceding section, the financial closure of the Project was achieved in 2010 considering a capital cost of INR 3200 Crores and a debt equity ratio of 75:25. However, the Petitioner had reported time overrun of about 14 months and an expected COD of April 1, 2014 as against February 1, 2013 envisaged at the time of detailed appraisal. Consequent to this, the project cost was revised to INR 4000 Crores. The COD of the project got further delayed in the later course of time and the project finally achieved COD on 16.04.2016. These delays caused the project cost to increase up to INR 4441 Crores. The overall debt to equity ratio at the stage of project completion now stands at approximately 73.8:26.2. Accordingly, in terms of regulation 19 of the CERC (Terms and Conditions of Tariff) Regulations, 2014 (**"CERC Tariff Regulations, 2014"**), the actual debt equity ratio has been considered for computation of the normative loan and subsequently the tariff.*
>
> *91. **Depreciation:** The Petitioner submits that Regulation 27 of the PSERC*

*Tariff Regulations, 2005 allows depreciation up to 90% of capital cost of the power plant using straight line method. The gross fixed asset of the power plant for the purpose of depreciation is **INR 4383.54 Crores** (excluding working capital margin money from total project cost). The table below summarizes the category-wise gross fixed asset value and the corresponding depreciation rates as provided in the Appendix-II (Depreciation schedule) of the CERC Tariff Regulations, 2014.*

Table 1: Depreciation schedule

Asset particulars	Depreciation rate
Land (under full ownership)	0.00%
Building and roads	3.34%
Plant & Machinery	5.28%
Furniture and fixtures	6.33%
Office equipment	6.33%
Computers	15.00%
Vehicles	9.50%
Computer software	15.00%

92. Interest on loan capital: *The Petitioner's project has been funded by a consortium of 13 banks/ institutions, IDBI being the lead lender. The Petitioner submits that the weighted average rate of interest is 13.19% as on date of filing this petition which has been considered for calculating the interest cost on loan capital for the period between COD of the project and the remaining period of the year. The repayment of loan for tariff computation purposes is considered on a normative basis i.e. equal to annual depreciation in accordance with Regulation 26 of the PSERC Tariff Regulations, 2005.*

93. Working capital and interest on working capital: *In accordance with Regulation 28 of the CERC Tariff Regulations, 2014 the working capital for a coal/ lignite based power project includes the sum of cost of coal/ lignite for 2 months, cost of secondary fuel oil for 2 months, maintenance spares @ 20% of O&M expense, receivables equivalent to 2 months of Capacity Charge and Energy Charge and O&M equal to 1 month. The working capital interest rate applicable to the Petitioner is 12.80% and the same has been considered for calculating the working capital interest outgo. This rate is calculated as SBI Base rate as on unit-1 COD (05.04.2016) plus 350 basis points as specified in the CERC regulations.*

94. Operation & Maintenance expenses: *It is submitted that:*

a. *The Petitioner's plant is a coal-based power plant*

b. *Regulation 29 of the CERC Tariff Regulations stipulates Operation and Maintenance expenses for 200/210/250 MW sets at the rate of INR 27 Lakhs per MW for FY 2016-17.*

c. *The Petitioner submits that the water charges and capital spares are not included in the abovementioned O&M expenses. The same, if any, paid by the Petitioner shall be allowed as reimbursement at actuals.*

95. ***Secondary Fuel Oil:*** *Regulation 36 (D) of the CERC Tariff Regulations, 2014 stipulates specific oil consumption of 0.5 ml/kWh for a coal-based generating stations.*

a. *The Petition is based on the said specific oil consumption for calculating the quantum of fuel oil required*

b. *The cost of fuel oil is the weighted average landed cost of Light Diesel Oil ("LDO") and Heavy Fuel Oil ("HFO") which has been considered as under:*

Period-->	***05.04.2016 to 15.04.2016***	***16.04.2016 to 31.03.2017***
Weighted Average cost (Rs./kL)	*21,797*	*19,050*
Basis	*Weighted Average cost of LDO and HFO from electricity sale invoice of April-16*	*Weighted Average cost of LDO and HFO from electricity sale invoices of Jul-16 and Aug-16*

c. *The Gross Calorific Value for secondary fuel oil has been taken as the weighted average GCV of LDO and HFO shows as under:*

Period-->	***05.04.2016 to 15.04.2016***	***16.04.2016 to 31.03.2017***
Weighted Average GCV (kCal/L)	*10,267*	*10,114*
Basis	*Weighted Average GCV of LDO and HFO from electricity sale invoice of April-16*	*Weighted Average GCV of LDO and HFO from electricity sale invoices of Jul-16 and Aug-16*

It is prayed that this Hon'ble Commission allow the cost and the calorific value for computation of cost towards secondary fuel oil as detailed above in line with the PSERC Tariff Regulations, 2005.

96. ***Total capacity charge:*** *It is submitted that:*

(a) *The proposed Capacity Charge calculation for the period between COD of the Unit-1 and Unit-2 of the power plant, and the remaining period of the year is given in the table below:*

Table 2: Capacity charge (in INR Lakhs)

S. No.	Item	05.04.2016 to 15.04.2016	16.04.2016 to 31.03.2017
1.	Depreciation	13,569	21,022
2.	Interest on Loan	44,976	43,634
3.	Return on Equity	6,579	19,257
4.	Interest on Working Capital	4,674	7,718
5.	O & M Expenses	7,290	14,580
	Total	**77,087**	**106,212**

(b) *It is prayed that this Hon'ble Commission approve the Capacity Charge detailed above for the period under review.*

(c) *Regulation 30(4) of the CERC Tariff Regulations, 2014 provides the following in respect of incentive on capacity charge payable to the generating stations:*

> *"Incentive to a generating station or unit thereof shall be payable at a flat rate of 50 paise/kWh for ex-bus scheduled energy corresponding to scheduled generation in excess of ex-bus energy corresponding to Normative Annual Plant Load Factor (NAPLF) as specified in regulation 36 (B)."*

(d) *The plant of the Petitioner is eligible for incentive payment on a monthly basis if it achieves a PLF greater than 85% which is the normative PLF. The said incentive shall be payable in the form of additional recovery of Annual Fixed Charges (prorated on a monthly basis) over and above the Annual Fixed Charge approved by this Hon'ble Commission.*

(e) *Further, the Petitioner prays before this Hon'ble Commission to direct payment of Capacity Charge as per formulae provided in Regulation 30(2) of the CERC Tariff Regulations, 2014.*

97. ***Energy Charge:*** *It is submitted that:*

(a) *Energy Charge covers the cost of coal used in the power plant and is calculated for the Scheduled Energy. As mentioned above, the Petitioner is currently procuring coal through E-auction process. Moreover, in terms of the Arbitral Award, cancellation of the Captive Coal Mine(s) having held to be a force majeure and change in law event, the Petitioner ought to be compensated for the landed cost of coal including grade slippage, transit loss, transportation cost including rail and road, handling and liaising / testing charges and also transportation charges from Mine to the nearest Railway Siding of Coal India Ltd and its subsidiaries. Thus, it is prayed that this Hon'ble Commission approve the cost of coal as per the actuals.*

(b) *In accordance with Regulation 30(6)(a) of the CERC Tariff Regulations, 2014 the energy charge in Rupees per kWh is determined to three decimal places as per the following formulae:*

"ECR = {(GHR – SFC x CVSF) x LPPF / CVPF + LC x LPL} x 100 /

(100 – AUX)

Where,

AUX = Normative auxiliary energy consumption in percentage.

CVPF = Gross calorific value of primary fuel as fired, in kCal per kg, per litre or per standard cubic metre, as applicable.

CVSF = Calorific value of secondary fuel, in kCal per ml.

ECR = Energy charge rate, in Rupees per kWh sent out.

GHR = Gross station heat rate, in kCal per kWh.

LC = Normative limestone consumption in kg per kWh.

LPL = Weighted average landed price of limestone in Rupees per kg.

LPPF = Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month.

SFC = Specific fuel oil consumption, in ml per kWh."

(c) *Normative Auxiliary energy consumption: The Petitioner submits that the normative auxiliary energy consumption for Coal-based generating stations as per Regulation 36(E)(a) of the CERC Tariff Regulations, 2014 is 8.5% for a unit of 200 MW series. Further, for thermal generating stations with induced draft cooling towers, additional 0.5% is allowed. Thus, normative auxiliary consumption has been considered at 9% for the computation of energy charge.*

(d) *Fuel Transit & Handling Losses: In accordance with Regulation 30 (8) of the CERC Tariff Regulations, 2014 transit & handling loss of 0.8% is to be considered for calculating the loss of coal during inland transportation to the plant location. However, in terms of PSERC Tariff Regulations, 2005 and amendments thereto, the normative transit and handling loss to be taken @ 1% or actual whichever is lower and the same are considered @ 1% while computing the energy charge.*

(e) *Design Station Heat Rate: It is submitted that:*

(f) *The Guaranteed Heat Rate for the power plant under the EPC contract is 2221 Kcal/kWh, as detailed in Form-3 of this Petition.*

(g) *Regulation 36(C)(b) of the CERC Tariff Regulations, 2014 specifies that for tariff calculation, the design station heat rate is to be multiplied by a factor of 1.045 for a new coal based thermal power plant.*

(h) *Accordingly, the gross station heat rate of the Petitioner for tariff calculation purpose comes out to be 2321 kcal/kWh, which has been considered for Energy Charge calculation. It is prayed that this Hon'ble Commission approve the Gross Station Heat Rate of 2321 kcal/kWh.*

(i) ***GCV of coal:*** *For Energy Charge Rate calculation, the GCV of coal is computed as the weighted average GCV of coal as per the electricity sale invoices from April-2016 and Jul-Aug 2016 respectively for 01.04.2016 to 15.04.2016 and 16.04.2016 to 31.03.2017 as shown in the table below:*

Period-->	05.04.2016 to 15.04.2016	16.04.2016 to 31.03.2017
Weighted Average GCV (kCal/kg)	*3,789*	*4,420*
Basis	*Weighted Average GCV of coal from electricity sale invoice of April-16*	*Weighted Average GCV of coal from electricity sale invoices of Jul-16 and Aug-16*

(j) ***Landed price of coal:***

The landed price of coal is computed as the weighted average landed price of coal as per the electricity sale invoices from April-2016 and Jul-Aug 2016 respectively for 01.04.2016 to 15.04.2016 and 16.04.2016 to 31.03.2017 as shown in the table below:

Period-->	05.04.2016 to 15.04.2016	16.04.2016 to 31.03.2017
Weighted Average cost (Rs./MT)	*6,151*	*5,744*
Basis	*Weighted Average cost of coal from electricity sale invoice of April-16*	*Weighted Average cost of coal from electricity sale invoices of Jul-16 and Aug-16*

(k) *Based on the foregoing prices, the Energy Charge Rate of the Petitioner on Ex-bus basis comes out as shown in the table below:*

Computation of energy charge (INR/kWh)

Particulars	Unit	05.04.2016 to 15.04.2016	16.04.2016 to 31.03.2017
Gross station heat rate	*kCal/kWh*	*2,321*	*2,321*
Specific Fuel oil Consumption	*ml/kWh*	*0.5*	*0.5*
Landed price of secondary fuel	*Rs./ml*	*0.02*	*0.02*
GCV of Secondary Fuel	*kCal/ml*	*10.27*	*10.11*
Heat	*kCal/kWh*	*2,316*	*2,316*

contribution of Coal			
GCV of Primary Fuel	*kCal/kg*	*3,789*	*4,420*
Specific Coal consumption	*kg/kWh*	*0.61*	*0.52*
Landed price of primary fuel	*Rs./kg*	*6.15*	*5.74*
Auxiliary Consumption	*%*	*9.0%*	*9.0%*
Total Energy Charge	***INR/kWh***	***4.143***	***3.318***

98. It is prayed that this Hon'ble Commission approve the above basis of calculation of Energy Charge Rate (ECR) and allow the Petitioner to charge the Respondent, the energy charge on month to month basis based on the landed cost of fuel for the month on actual costs. The Petitioner requests that the above calculated energy charge rate of ***INR 3.318 /kWh*** *may be allowed for the remaining duration of the year for billing for the energy supplied to PSPCL which will be adjusted in the subsequent months for actual landed cost of fuel.*

99. Tariff of electricity from GVK Power (Goindwal Sahib) Plant: *The tariff of the Petitioner, comprising of Capacity Charge and Energy Charge for the year, is summarized below:*

Particulars	***Unit***	***05.04.2016 to 15.04.2016***	***16.04.2016 to 31.03.2017***
Capacity charge	*INR Lakhs*	***77,087 (Calculated on an annual basis for single Unit.)***	***106,212 (for the Power Station)***
Variable charge	*INR/kWh*	***4.143***	***3.318***

100. In the light of the above submissions, it is prayed that this Hon'ble Commission to kindly approve the capacity charge and the basis of calculation of energy charge of the Petitioner.

101. The Petitioner also prays that in addition to the above tariff, this Hon'ble Commission allow, as pass through, to the Respondent, at actuals, any cess, duty, tax, government levy, royalty etc. applicable to the Petitioner for supply of power from time to time.

102. The present petition is bona fide and is in accordance with law, and the same may be allowed.

103. The Petitioner has submitted a copy of this Petition to the PSPCL.

104. The Petitioner reserves its right to supplement, add to and alter its tariff proposal before the tariff is finally determined by this Hon'ble Commission. The Petitioner reserves its right to file any additional information/ submissions as may be necessary for the purposes of determination of tariff in the present petition. The submissions set out in this Petition supersede any submissions made previously.

105. In view of the foregoing, the Petitioner is filing Tariff Forms 1-35 in accordance with the PSERC Tariff Regulations, 2005 along with the present Petition. The said forms 1-35 are annexed hereto and marked as ***Annexure P-17 (Colly.).***

PRAYER

106. The Petitioner in the aforesaid facts and circumstances most humbly prays that this Hon'ble Commission may be pleased to:-

(a) *Admit the present petition and determine the tariff for supply of power.*

(b) *Determine the provisional tariff for supply of power to PSPCL pending determination of tariff.*

(c) *Approve the basis of calculation of Energy Charge Rate (ECR) as set out in paragraph 97(b).*

(d) *Allow the Petitioner to charge the Respondent, the energy charge on month to month basis based on the landed cost of fuel for the month on actual costs as set out in paragraph 97(j).*

(e) *Allow the Petitioner to claim as fuel price adjustment due to change in price of secondary fuel oil*

(f) *Allow payment of incentive for generation and supply beyond 85% of Plant Load Factor (PLF) as set out in paragraph 96(d).*

(g) *Allow pass through at actual any cess, duty, tax, government levy, royalty etc. applicable to the Petitioner for supply of power to the Respondent.*

(h) *Allow the recovery of the filing fees as and when paid to the Hon'ble Commission and also the publication expenses from the beneficiaries.*

(i) *Allow the completed capital cost of Rs. 4441 Crores (till COD)*

(j) *Allow additional capital expenditure of Rs. 230 Crore till Cut-Off Date*

(k) *To pass such order(s) as the Hon'ble Commission may deem fit in the circumstances and facts of the present petition."*

10. A copy of the amended petition is annexed hereto and marked as ***Annexure A-1.***

11. A copy of the original Petition along with Annexure P-1 to P-17 (Colly) is annexed hereto and marked as ***Annexure A-2.***

12. It is submitted that the amendment is pursuant to the directions and observations in the communication dated 27.10.2017 issued by this Hon'ble Commission. It is further submitted that the amendments are bona fide and are in the interest of determination of tariff. It is submitted that PSPCL has not filed any

response to the un-amended petition, therefore, no prejudice will be caused to PSPCL if the present amendment is allowed.

13. It is submitted that it is in the interests of justice that the present application be allowed.

PRAYER

14. In light of the above, the Petitioner therefore most humbly and respectfully pray that this Hon'ble Commission be pleased to:

(a) Allow the amendment of Petition No. 54 of 2017 in terms of the present Application;

(b) Take the amended Petition on record; and

(c) Pass any such other and further reliefs as this Hon'ble Commission deems just and proper in the nature and circumstances of the present case.

GVK Power (Goindwal Sahib) Limited/Petitioner

Through

J. Sagar Associates,
Advocates for the Petitioner
B-303, 3rd Floor, Ansal Plaza,
Hudco Place August Kranti Marg,
New Delhi – 110 049.

New Delhi
Dated: 29 December, 2017

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BEFORE THE PUNJAB STATE ELECTRICITY REGULATORY COMMISSION, CHANDIGARH

PETITION NO. 54 OF 2017

IN THE MATTER OF:

Application on behalf of the Petitioner for amendment of Petition No. 54 of 2017 pursuant to communication dated 27.10.2017 of this Hon'ble Commission

IN THE MATTER OF:

GVK Power (Goindwal Sahib) Limited
Paigah House, 156 – 159, Sardar Patel Road,
Secunderabad – 540 003 ...Petitioner

Versus

Punjab State Power Corporation Limited,
The Mall, Patiala (Punjab) ...Respondent

Affidavit

I Oliver Tyagi, Son of Shri. R. S. Tyagi, aged about 52 years, Resident of H-11, Uppal Marble Arch Apartments, Chandigarh the authorised representative of the Petitioner, do hereby solemnly affirm and state as follows:

1. I say that I am duly authorized and competent to affirm this Affidavit for and on behalf of the GVK Power (Goindwal Sahib) Limited and I am acquainted with the facts and circumstances of the present case. I say that I have read and understood the contents of the accompanying Application.

2. I state that the facts stated in the accompanying Application are true and correct to the best of my knowledge based on the records of the Petitioner and that the legal submissions made therein are based upon information received by me and believed to be true. The present Application has been drafted pursuant to my instructions and its contents are true and correct.

3. I say that the annexures, if any, annexed with the Petition are true copies of the original.

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4. I say that no similar Application or writ petition or suit or appeal regarding the mater respect of which this Petition is preferred is pending before any court or any other authority.

Deponent

Verification:

I, the deponent above named do hereby verify that the contents of my above affidavit are true to my knowledge and belief; no part of it is false and nothing material has been concealed there from.

Verified at Chandigarh on the 29th day of December, 2017

Deponent

N

BEFORE THE HON'BLE PUNJAB STATE ELECTRICITY REGULATORY COMMISSION

IN THE MATTER OF: *Petition for determination of Tariff under Sections 62 and 86 of the Electricity Act, 2003 read with (a) Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2005; (b) the Central Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2014; and (c) Amended and Restated Power Purchase Agreement dated 26.05.2009 executed between Petitioner (Goindwal Sahib) Limited and Punjab State Power Corporation Limited (formerly known as Punjab State Electricity Board)*

AND

IN THE MATTER OF:

GVK Power (Goindwal Sahib) Limited ...Petitioner

Versus

Punjab State Power Corporation Limited ...Respondent

MEMO OF PARTIES

GVK Power (Goindwal Sahib) Limited
Paigarh House,
156 – 159, Sardar Patel Road,
Secunderabad – 540 003 ...Petitioner

Versus

Punjab State Power Corporation Limited
The Mall, Patiala- 147001 (Punjab) ...Respondent

GVK Power (Goindwal Sahib) Limited/Petitioner

Through:

J. Sagar Associates
Advocates for the Petitioner
B-303, Ansal Plaza, HUDCO Place
August Kranti Marg
New Delhi 110049

Place:

Date:

Ann

BEFORE THE HON'BLE PUNJAB STATE ELECTRICITY REGULATORY COMMISSION

IN THE MATTER OF: *Petition for determination of Tariff under Sections 62 and 86 of the Electricity Act, 2003 read with (a) Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2005; (b) the Central Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2014; and (c) Amended and Restated Power Purchase Agreement dated 26.05.2009 executed between Petitioner (Goindwal Sahib) Limited and Punjab State Power Corporation Limited (formerly known as Punjab State Electricity Board)*

AND

IN THE MATTER OF:

GVK Power (Goindwal Sahib) Limited
Paigarh House,
156 – 159, Sardar Patel Road,
Secunderabad – 540 003 ...Petitioner

Versus

Punjab State Power Corporation Limited
The Mall, Patiala (Punjab) ...Respondent

AMENDED PETITION FOR EXTENSION OF SCOD TILL COD, FOR APPROVAL OF COMPLETED CAPITAL COST AND FOR DETERMINATION OF TARIFF FOR THE TARIFF YEAR 2016-2017

MOST RESPECTFULLY SHOWETH:

I. Conspectus of Petition

1. GVK Power (Goindwal Sahib) Limited ("**Petitioner**") is a Company incorporated under the provisions of the Companies Act, 1956 with the object of engaging in the business of establishing, maintaining and operating a 540 MW coal based thermal power Station at Goindwal Sahib in the State of Punjab (the "**Project**") and generation and supplying electricity from the said project entirely to the Punjab State Power Corporation Limited (**"PSPCL"/ "Respondent").**

2. The Petitioner entered into an Amended and Restated Power Purchase Agreement ("**Restated PPA**" / "**PPA**") on 26.05.2009 with the erstwhile PSEB for

the supply power from GVK's 2x270 MW Coal based Thermal Power Project ("**Project**"), conceptualizing the Project as a captive coal mine based Project.

3. This Hon'ble Commission, on 29.04.2008, passed an Order in Petition 4 of 2007 approving the Capital Cost of Rs. 2,622.487 crores as against the proposed Capital Cost of Rs. 2,987.86 crores claimed by the Petitioner.

4. On 08.04.2009, the Hon'ble Appellate Tribunal for Electricity ("***Tribunal***") passed its judgment in Appeal No. 104 of 2008 filed by the Petitioner challenging the findings of this Hon'ble Commission in its Order dated 29.04.2008. The Hon'ble Tribunal allowed the appeal of the Petitioner and approved the Capital Cost of Rs. 2,963.8 crores subject to correction in BHEL price & Forex fluctuations at actuals.

5. Thereafter, on 10.04.2017, an Arbitral Tribunal constituted by this Hon'ble Commission allowed extension of Scheduled Commercial Operation Date ("**SCOD**") till COD was actually achieved.

6. The present Petition is being filed for the determination of tariff for Contract Year 2016-2017 in respect of the supply of the entire capacity of the power generated by the Project to PSPCL, considering the completed capital cost of the Project as of 16.04.2016 which was the Commercial Operation Date ("**COD**") of the Project.

7. The present Petition is being filed under:-

(a) Section 62 read with Section 86 of the Act;

(b) Regulation 4 of the Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2005 ("**PSERC Tariff Regulation**");

(c) Article 11 read with Schedule 6 of the Restated PPA; and

(d) Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2014 ("**CERC Regulations**").

II. Description of the Parties

8. The Petitioner is a Company incorporated under the provisions of the

Companies Act, 1956 with the object of engaging in the business of establishing, maintaining and operating the Project and generation and supplying electricity from the said Project entirely to PSPCL. The registered office of the Petitioner is at Paigah House, 156 – 159, Sardar Patel Road, Secunderabad – 500 003.

9. The Respondent is the Punjab State Power Corporation Limited is a company registered under the Companies Act, 1956 and is a successor company of the erstwhile Punjab State Electricity Board. PSPCL has been entrusted with the responsibility of generation and distribution of power in the state of Punjab.

III. Factual Background

A. *Execution of Amended and Restated PPA and In Principle Approval of Capital Cost*

10. In 1996, the Government of Punjab ("***Punjab Government***") undertook an international competitive bidding process with the objective to select a party to establish and operate a coal fired Thermal Power project at Goindwal Sahib in the State of Punjab, and supply the entire electricity generated from the said power project was to be sold to PSEB.

11. Pursuant to the Competitive Bidding process initiated by the Government of Punjab, GVK Industries Limited, Hyderabad (**"GVK"**) was selected to build, own and operate the coal based generation station of capacity 2x250 MW at Goindwal Sahib. Subsequently, GVK and erstwhile PSEB executed a Power Purchase Agreement on 17.04.2000 providing for the terms, conditions, norms and parameters including tariff for the sale of electricity by Petitioner to PSEB. GVK thereupon incorporated GVK Power (Goindwal Sahib) Ltd. (the **"Petitioner"**) as a special purpose vehicle to develop the project.

12. Subsequently, negotiations were held between PSEB and Petitioner whereby PSEB sought better norms and parameters and tariff for the purchase of electricity from the Project consistent with the norms and parameters notified by the Central Electricity Regulatory Commission ("**Central Commission**") under its Tariff Regulations.

13. On 08.02.2006, pursuant to negotiations between the Petitioner and PSEB, a Memorandum of Understanding ("**MoU**") was executed revising certain norms and parameters for supply of power by GVK to PSEB, which:-

(a) Substantially reduced the tariff for generation of power; and

(b) Enhanced the capacity of the Project from 2x250 MW to 2x270 MW (+20%).

A copy of the MoU dated 08.02.2006 is annexed hereto and marked as ***Annexure P-1.***

14. On 29.04.2008, this Hon'ble Commission passed an Order in Petition 4 of 2007 approving the Capital Cost of Rs. 2, 622.487 crores as against the proposed Capital Cost of Rs. 2,987.86 crores by the Petitioner. A copy of the Order dated 29.04.2008 passed by this Hon'ble Commission in Petition No. 04 of 2007 is annexed hereto and marked as ***Annexure P-2.***

15. On 06.03.2009, this Hon'ble Commission, passed an Order in Petition No. 3 of 2007 approving the Restated PPA proposed to be entered into by PSEB and the Petitioner, pursuant to the MoU dated 08.02.2006 subject to certain amendments. A copy of the Order dated 06.03.2009 passed by this Hon'ble Commission in Petition No. 3 of 2007 is annexed hereto and marked as ***Annexure P-3.***

16. On 08.04.2009, the Hon'ble Tribunal passed its judgment in Appeal No. 104 of 2008 filed by the Petitioner challenging the findings of this Hon'ble Commission in its Order dated 29.04.2008. The Hon'ble Tribunal allowed the appeal of the Petitioner and approved the Capital Cost of Rs. 2,963.8 crores. A copy of the Order dated 08.04.2009 passed by the Hon'ble Tribunal in Appeal No. 104 of 2008 is annexed hereto and marked as ***Annexure P-4.***

17. On 19.05.2009, the Hon'ble Tribunal passed an interim order in the Petitioner's Appeal No. 70 of 2009, challenging the State Commission's Order dated 06.03.2009, permitting the Petitioner to execute the Amended PPA as per the Orders of the Hon'ble Commission without prejudice to the rights and contentions of the Petitioner in the Appeal. The execution of the PPA and implementation of the Project was subject to the outcome of the Appeal. A copy of the Order dated 19.05.2009 passed by the Hon'ble Tribunal in Appeal No. 70 of 2009 is annexed hereto and marked as ***Annexure P-5.***

18. Accordingly, on 26.05.2009, the Petitioner entered into the Amended and Restated PPA with the erstwhile PSEB for the supply of power from GVK's 2x270

MW Power Project.

A copy of the Restated PPA is annexed hereto and marked as ***Annexure P-6.***

19. On 13.01.2011, the Hon'ble Tribunal passed the final judgment in Appeal No. 70 of 2009 modifying the terms of the Restated PPA. A copy of the Judgment of the Hon'ble Tribunal in Appeal No. 70 of 2009 dated 13.01.2011 is annexed hereto and marked as ***Annexure P-7.***

B. Financial Closure, Delays in Project implementation and Extension of SCOD

20. It may be noted that in terms of Article-1 (being Definitions) of the Restated PPA the Schedule Commercial Operation Date ("**SCOD**") for Unit I of the Project was 36 months from the date of financial closure and for Unit II was 6 months thereafter.

21. The financial closure for the Project was achieved by Petitioner on 21.05.2010. Accordingly, Scheduled Commercial Operation Date for the first generating unit of 270 MW was 20.05.2013 and for the second generating unit of 270 MW was 20.11.2013 or such other date from time to time specified in accordance with the provisions of the PPA.

22. After the Petitioner commenced construction of the Project, there were significant delays in completion and achieving COD for the reasons beyond the control of the Petitioner. Eventually, the Petitioner filed the Petition Nos. 65 of 2013 and 33 of 2015 before this Hon'ble Commission seeking *inter alia* extension of SCOD.

23. Petition No. 65 of 2013 was filed seeking extension of the SCOD of the Project on account of the following Force Majeure and Change in Law events:-

(a) Delays in approvals pertaining to the Railway Siding at the Project site;

(b) Delays in approvals pertaining to the railway siding at the Tokisud Coal Mine;

(c) Delay in procurement of land for railway corridor;

(d) Delay in handing over forest land for Tokisud Coal Mine; and

(e) Delays in construction of the Project due to:-

(i) Poor soil conditions which required treatment using Vibro Compaction as per the Indian Standard Criteria for Earthquake Resistant Design of Structures.

(ii) Shortage of aggregates due to a ban imposed by the Punjab and Haryana High Court necessitating procurement from neighboring States.

(iii) Delay in supply of equipment by Bharat Heavy Electricals Ltd.

(iv) Increase in number of bays (i.e. from 4 to 6) at the request of PSPCL in respect of Switchyard.

24. Petition No. 33 of 2015 before this Hon'ble Commission seeking declaration of the following Change in Law and Force Majeure events in terms of Article 12 & 13 of the Restated PPA:

(a) Cancellation of the Coal Blocks (Tokisud and Seregarah Block) pursuant to the judgment dated 25.08.2014 of the Hon'ble Supreme Court in the case of ***Manohar Lal Sharma vs. The Principal Secretary & Ors.*** and the subsequent Order dated 24.09.2014; and

(b) Promulgation of the Coal Mines (Special Provisions) Second Ordinance, 2014 and the auction of the Tokisud Coal Block which has been allocated to Essar Power MP Limited.

25. On 12.08.2015, this Hon'ble Commission referred all disputes in relation to Force Majeure and Change in Law resulting in a delay of SCOD in Petition Nos. 65 of 2013 and 33 of 2015 to arbitration. A copy of the Order dated 12.08.2015 is annexed hereto and marked as ***Annexure P-8.***

26. Pursuant to the Order dated 12.08.2015, the Petitioner filed Claim Petition No. 1 (relating to Petition No. 65 of 2013) and Claim Petition No. 2 (relating to Petition No. 33 of 2015) before the Arbitral Tribunal.

27. On 10.04.2017, the Arbitral Tribunal passed unanimous awards in both claims in terms of which:-

(a) Some of the Claims in Petition No. 65 of 2013 were allowed and SCOD extended from 04.01.2010 to 25.06.2014.

(b) The Claims in Petition No. 33 of 2015 were allowed and SCOD extended from 24.08.2014 till COD was achieved.

Copies of the Arbitral Awards in Claim Petition Nos. 1 and 2 are annexed hereto and marked as ***Annexure P-9 (Colly.).***

C. Commissioning of the Project

28. On 01.02.2016, this Hon'ble Commission passed an Order in Petition Nos. 65 of 2013 and 33 of 2015 allowing the Petitioner to procure coal from alternate sources to supply power once the Project was commissioned. A copy of the Order dated 01.02.2016 is annexed hereto and marked as ***Annexure P-10.***

29. Pursuant to the aforesaid Order, the Petitioner declared COD of Unit 1 on 06.04.2016 and Unit 2 on 16.04.2016 using coal allocated to the Project for commissioning activities from Eastern Coal Fields and Central Coal Fields. Copies of the letters sent to the Respondent intimating declaration of COD and PSPCL's acceptance thereof are annexed hereto and marked as ***Annexure P-11 (Colly.).***

IV. Capital Cost of the Project

30. It is submitted that this Hon'ble Commission had vide its order dated 29.04.2008 in Petition No. 4 of 2007 granted in principle approval for the capital cost as Rs. 2,622.48. In terms of the said order, this Hon'ble Commission had held that the in principle approval was only a guiding factor and that the tariff would be based on the final project cost. The operative part of the Order dated 29.04.2008 is reproduced below:

> *"Regulations 20 and 37 of the Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2005 stipulate that in determining the cost of generation, the principles and methodologies specified by the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 (Regulations) are to be kept in view. Regulation 5 (3) of the latter Regulations provides that a generating company may make an application for determination of provisional tariff in advance of the anticipated date of completion of the project, based on capital expenditure actually incurred up to the date of making the application, duly audited and certified by the statutory auditors. Regulation 17 further provides that the actual expenditure incurred on completion of a project shall form the basis for*

determination of final tariff. The second proviso to Regulation 17 lays down that any person intending to establish, operate and maintain a generating station may make an application before the Commission for 'in principle' acceptance of the project capital cost and financing plan before taking up the project. The third proviso further provides that where the Commission has given 'in principle' acceptance to the estimates of project capital cost and financing plan, the same shall be the guiding factor for applying a prudence check on the actual capital expenditure. Evidently these provisions have been incorporated so as to reduce uncertainty regarding tariff on completion of a project which will help investors in achieving financial closure of the project.

In its Order dated 20.11.07, the Commission observed that one of the prayers of the petitioner relates to approval of the estimated project cost and considered it as a request for 'in principle' acceptance of the estimated capital cost and financing plan which is covered under the provisions of Regulation 17, referred to above. A careful perusal of this Regulation makes it apparent that 'in principle' acceptance to the estimates of project capital cost by the Commission has to be based on upto date supporting data so that the cost determined is as close as possible to the project cost finally incurred. This is specially relevant as this cost is to be the guiding factor for applying a prudence check on the actual capital cost with the latter having a direct bearing on the tariff to be determined. With a view to obtaining information of the project as required by this Regulation, the Commission sought further inputs from the petitioner who has, accordingly, submitted additional filings."

31. The Hon'ble Tribunal vide its judgment dated 08.04.2009, revised the in principle Capital Cost to Rs. 2,963.8 crores subject to the adjustments in the final value of the BTG contract with BHEL, and the USD and Euro component therein. The final cost of BTG contract was INR 1213.39 Crores and accordingly the final approved cost of the project computes to INR 3076.2 Crores. In terms of the said Judgment, the in principle capital cost was only an indicative assessment and the tariff would be based on the completed capital cost subject to prudency check.

32. It is submitted that thereafter, the capital cost has increased on account of the force majeure events as well as delay in commissioning which have been allowed by the Arbitral Award. The completed cost of the Project is **Rs.4,368.33 Crores.(date of computation)** The completed capital cost includes the expenses incurred till 31.03.2017 and also the amount provisioned to be incurred up to 31.03.2018 in accordance with Regulation 14 of the CERC Terms & Conditions of Tariff Regulations, 2014.

33. The completed cost of the project is an outcome of the four cost overruns during the construction period. The cost overruns and the corresponding revised projects costs are as under:

(a) Initially the Project Cost was approved by the Lenders – Rs. 2,400 Crores

(b) First cost overrun: INR 800 crores

(c) Second cost overrun: INR 122 crores

(d) Third cost overrun: INR 451 crores

(e) Fourth cost overrun: INR 200 crores

In all the final Project Cost approved by the lenders with SCOD in April, 2016 is Rs. 4,773 Crores.

The lender's independent engineer **("LE")**, Lahmeyer International (India) Private Limited approved all the above cost overruns after conducting appropriate due diligence of the basis of the increase in project cost as submitted by the Petitioner.

It may further be noted that the completed project cost is INR 4,383.54 crores as on the date of COD of the Plant which is 16.04.2016 and reflected in the Accounts for the FY ended 31.03.2017 which is lower than the cost approved by LE. This is because the approved costs were estimates as per the conditions prevailing then whereas the actual expenses incurred during the construction period was lower than the estimates. Also, some works are yet to be executed and the expenses towards these works have been included in the provisions for the ensuing financial year.

While the first cost overrun is mainly due to revisions in the scope of work of the BoP and Non-EPC contracts, the second, third and fourth costs overruns are primarily on account of increase in IDC and pre-operative expenses. The due diligence reports by the LE are annexed hereto and marked as ***Annexure P-12 (Colly.)***.

34. The summary of delays which have affected the Project are set out below:-

Table-2: Summary of Delays

S. No.	***Force Majeure Event***	***Start Date***	***End Date***	***Time over run***	***Allowed by Arbitral Tribunal***
1	Poor Soil	04.01.2010	22.07.2011	Effective	Yes

S. No.	*Force Majeure Event*	*Start Date*	*End Date*	*Time over run*	*Allowed by Arbitral Tribunal*
	conditions requiring vibro compaction			delay is 6 months	
2	Shortage of aggregates	17.05.2010	31.12.2010	Effective delay about 4 months	No
3	Supply of BHEL materials	18.02.2010	25.09.2013	Effective delay 8 months delay	No
4	Increase in number of bays from 4 numbers to 6 numbers	06.09.2010	Construction completed - 20.09.12. Commissioning pending due to non-availability of transmission lines to be provided by the Procurer	Effective delay about 6 months	No
5	Railway corridor land	25.05.2010	09.02.2013	33 months 15 days	Yes
6	**Railways approval (Goindwal Project Site)**				
A	DPR	29.07.2009	05.05.2011	19 Months	No
B	ESP	16.06.2011	22.02.2012	5 Months	No
C	SIP Drawing	05.07.2012	24.07.2013	9 Months	No
D	Station building drawing	20.06. 2012	24.02.2014	17 Months	No
E	Land Licensing Agreement	16.03.2012	23.01.2014	19 Months	Yes
7	**Railways approval(Tokisud Coal Mine Site Railway Siding)**				
A	ESP	22.09.2009	11.05.2011	16 Months	
B	Box Culverts Drawing	04.01.2012	22.02.2013	10 Months	No
C	SIP Drawing	08.07.2012	21.11.2012	1 Months	No
D	Station Building	17.08.2012	10.05.2013	6 Months	No
E	Cost Estimates	12.03.2012	11.12.2013	18 Months	No
	Tokisud Land				
8	Land License Agreement	18.05.2011	25.06.2014	34 Months	Yes
9	CA land of 271.66 Acres acquired in Giridh District, Jharkhand	03.11.2009	12.06.2013	Effective Delay 24 Months	Yes
10	CA land of 99.67 Ac. Acquired in Hazaribagh District, Jharkhand	22.03.2011	18.09.2013	Effective Delay 24 Months	Yes

S. No.	*Force Majeure Event*	*Start Date*	*End Date*	*Time over run*	*Allowed by Arbitral Tribunal*
Fuel Supply Related Delays					
11.	Cancellation of the captive coal block	24.09.2014	01.02.2016	Effective Delay 15 Months	Yes

35. The summary of increase in capital cost is set out below:-

TABLE -3: Summary of increase in capital cost

Sl. No.	Item	Original estimate of GVK at the time of submission of Petition	Approved by PSERC	Approved by APTEL	Expenses incurred till COD of the Project i.e. 16.04.2016
1.	Land	75.61	109.35	109.35	123.77
2.	Rehabilitation & resettlement	5.00	5.00	5.00	-
3.	Prelim expenses (investigation and site development)	0.25	0.25	0.25	0.25
4.	Boiler-Turbine Generator Package	857.50	1,070.58 (including Taxes & Duties)	1,070.58 (See Note-1)	1,166.48
5.	Balance of Plant	444.87	1,005.00 * (including Taxes & Duties)	955.00 (See Note-2)	927.40
6.	Engineering, erection, civil works	624.13	Included in BTG BOP contracts	Included in BTG BOP contracts	Included in BTG / BOP contracts

Sl. No.	Item	Original estimate of GVK at the time of submission of Petition	Approved by PSERC	Approved by APTEL	Expenses incurred till COD of the Project i.e. 16.04.2016
7.	Taxes & Duties	245.52	Included in BTG BOP contracts	Included in BTG BOP contracts	Included in BTG / BOP contracts
8.	Recommended Spares under BTG and BOP Package	During the course of proceedings provided relevant clarifications & requested for approval of Rs. 39.65 Crores	Included in BTG and BOP Contracts	39.65	13.79
9.	Non EPC (including site grading & Ash pond, payments to Railway Contractor)	86.00	86.00	86.00	337.31
10.	Site grading & Ash pond		-	49.00	Included as part of Non EPC in point (9)
11.	Start-up Expenses	15.00	Set off against sale of infirm power	15.00	71.29
12.	Power & water for construction	12.00	Included in BTG & BOP contracts and Non EPC works	12.00	Included as part of Pre-operative Expenses in point (14)
13.	Consultancy & engineering	7.50	7.50	7.50	Included as part of Pre-operative

Sl. No.	Item	Original estimate of GVK at the time of submission of Petition	Approved by PSERC	Approved by APTEL	Expenses incurred till COD of the Project i.e. 16.04.2016
					Expenses in point (14)
14.	Pre-operative expenses	50.00	15.00	50.00	279.69
15.	Operator training & mobilization	5.00	5.00	5.00	Included as part of Pre-operative Expenses in point (14)
16.	Insurance	11.44	11.44	11.44	Included as part of Pre-operative Expenses in point (14)
17.	Capital Cost excluding IDC, Financing Charges & Contingency	2,439.82	2,315.12	2,415.77	2848.70
18.	Interest During Construction	365.19	286.36	365.19 (See Notes 3 & 4)	1,474.84
19.	Financing charges	70.00	16.00	70.00	31.99
20.	Contingency	66.85	5.00	66.85	28
21.	Estimated Project Capital Cost excluding WCM	2,941.86	2,622.48	2,917.81	4,383.54

Sl. No.	Item	Original estimate of GVK at the time of submission of Petition	Approved by PSERC	Approved by APTEL	Expenses incurred till COD of the Project i.e. 16.04.2016
22.	Working Capital Margin	46.00	Pass through in tariff	46.00	107.52
23.	Estimated Project Capital Cost	2,987.86	2,622.48	**2,963.81#**	**4,491.06**

Notes:

*# It may please be noted that APTEL had approved the project cost of INR 2963.81 Crores subject to the adjustments in the final value of the BTG contract with BHEL, and the USD and Euro component therein. The final cost of BTG contract was **INR 1213.39 Crores** and accordingly the final approved cost of the project computes to **INR 3076.2 Crores**.*

V. Legal Framework

36. It is submitted that the tariff for the Project is to be determined under Section 62 read with Section 86(1)(b) of the Electricity Act. Moreover, in terms of the Restated PPA, the tariff is to be determined by this Hon'ble Commission. This Hon'ble Commission has issued the Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2005 ("**PSERC Tariff Regulations**") amendments from time to time. The following provisions of the PSERC Tariff Regulations are relevant for the present petition:-

(a) Regulation 4 in terms of which this Hon'ble Commission will be guided by the principles set out in Section 61 of the Electricity Act while determining tariff.

(b) Regulation 20 in terms of which this Hon'ble Commission shall be guided by the principles and methodologies of the Hon'ble Central Electricity Regulation Commission ("**Central Commission**").

(c) Regulation 37 in terms of which the components of generation tariff shall be as laid down in tariff regulations issued by the Central Commission.

37. It is submitted that in light of the foregoing, the tariff is to be determined in accordance with the CERC (Terms & Conditions of Tariff) Regulations, 2014. The following provisions are relevant:-

(a) Regulation 9 in terms of which the capital cost shall, *inter alia*, include:-

(i) Expenditure incurred up to COD.

(ii) Interest during construction and financing charges on loans.

(iii) Increase in cost of contract packages as approved by the Commission.

(iv) Interest during construction and incidental expenditure including such additional amounts incurred due to delays beyond the control of the generating company.

(b) Regulation 11 in terms of which increase in interest during construction and incidental expenditure on account of factors beyond the control of the generating company is to be allowed as part of capital cost subject to prudency check.

(c) Regulation 12 in terms of which force majeure and change in law have been treated as uncontrollable factors.

38. In light of the foregoing, it is submitted that the Petitioner is entitled to:-

(a) Actual expenditure incurred as on COD.

(b) Interest during construction and incidental expenditure including pre-operating expenses including such amounts which it has incurred for reasons beyond its control.

VI. Capital Cost Components

A. <u>Increase in Cost of Land</u>

39. There has been an increase of Rs. 14.42 Crores in the cost of land on

account of:-

(a) Acquiring land for the railway siding and water pipeline; and

(b) Acquiring land in the main project area in order to ensure that land was contiguous.

The increase in cost is set out below:-

Item	APTEL Approved (2009) (INR Cr.)	Actuals (INR Cr.)	Cost Overrun (INR Cr.)
Land	109.35	123.77	14.42

40. The Petitioner has acquired 1114.13 Acres. Out of the said extent, 715 acres of land was designated for the main project area whereas the balance 359.73 acres was for the expansion project proposed at the time of obtaining in principle approval.

41. The Petitioner purchased 54 acres of land (being part of the main plant area) at a cost of INR 2.60 Crores, in the year 1999. The remaining extent of land admeasuring 1051 Acres, 9 Kanals and 29 Marlas was awarded to the Petitioner by the Government of Punjab by means of two Awards issued under the Land Acquisition Act, 1894 dated 12.08.2008 and 15.07.2011 respectively. Copies of the said Awards are attached herewith as ***Annexure P-13 (Colly)***.

42. On 29.04.2008, the Hon'ble Commission passed an Order allowing only an extent of land admeasuring 715 Acres for setting up of the Project. The Petitioner is not claiming the cost of additional land demarcated for the expansion project.

43. It is submitted that 715 acres of land does not include the land required for developing water pipelines and Railway siding which was an additional 37.987 acres. The water pipeline and railway siding are essential components of the Project.

44. The land admeasuring 37 Acres, 7 Kanals and 18 Marlas for the railway siding and the water pipeline was acquired by Government of Punjab vide Award

dated 15.07.2011.

45. The District Level Price Fixation Committee held a meeting under the Chairmanship of the Deputy Commissioner, Tarn Taran District for fixing the rates of the land being acquired for the Project. The rates have been duly approved by the Government of Punjab vide letter no. 10/268/06-PB/6-4146 dated 30.12.2010. The total value of the said land comes out to **INR 12.1 Crores**. The detailed breakup of the price and area of the land is presented in the table below:

Table 1

S. No.	Village	Acres	Kanals	Marlas	Price (INR/Ac.)	Total Cost in INR Cr.
1.	Khadur Sahib	18	6	17	25,00,000	6.67
2.	Hansawala	1	3	4	20,00,000	0.40
3.	Hothian	12	3	17	20,00,000	3.53
4.	Biharipur	5	2	0	20,00,000	1.49
Total		**37**	**7**	**18**	-	**12.1**

46. Although the land award came in July 2011, the Petitioner received the Land Possession Certificate only on 03.04.2013. This delay was caused because the farmers of the villages namely Hansawala, Hothian and Biharipur had demanded parity in terms of the price of land as that of the Khadur Sahib village. For this, the Petitioner had to make an additional payment of **INR 1.35 Crores** on 08.06.2012 and INR 60,000 on 05.10.2012. Proof of additional payments of Rs. 1.35 Crores and Rs. 60,000 respectively made by the Petitioner are annexed hereto and marked as ***Annexure P-14.***

47. Apart from the above costs, the Petitioner had directly purchased 6.73

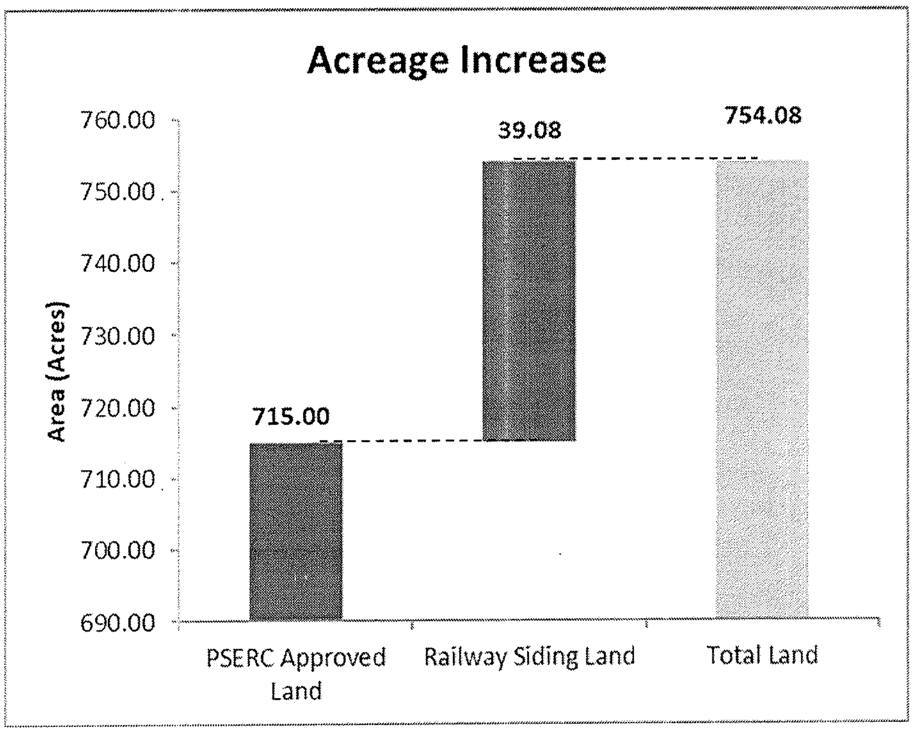
Acres and 1.09 Acres of land which was missing in the award for main plant and railway siding respectively. This land was acquired so as to have a contiguous land for the Project to avoid any interruptions from the farmers at a later stage such as seeking right of way for water pipelines etc. A total of **INR 1.4 Crores** was incurred towards the purchase of this land.

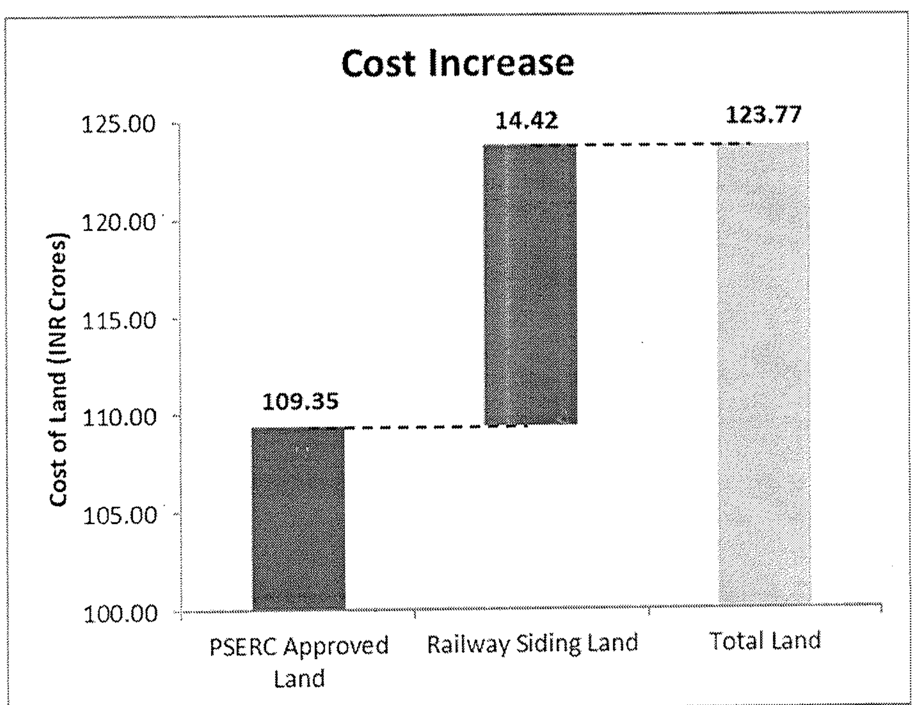
48. The table below shows a comparison of the originally approved and actual acreage and cost. The detailed breakup of the cost and area of land purchased has been attached hereto and marked as *Annexure P-13 (Colly).*

Table-2: Cost and Acreage increase in Land

S. No	Item	Area (Acres)		Cost (INR Crores)		
		APTEL approved (2009)	Actuals	APTEL approved (2009)	Actuals	Overrun
1.	Main plant land	715.00	715	109.35	109.35	0
2.	Railway Siding and water corridor land	0.00	39.08	0.00	14.42	14.42
	Total	**715.00**	**754.08**	**109.35**	**123.77**	**14.42**

49. The itemized increase in the acreage and the cost of the land procured has been represented graphically in the figures below:





50. The cost overrun in relation to land is towards the land acquired for the railway siding, water pipeline and contiguous land. It is prayed that this expenditure be allowed.

B. ***Increase in the cost towards Non-EPC Works***

Item	APTEL Approved (2009) (INR Cr.)	Actuals (INR Cr.)	Cost Overrun (INR Cr.)
Non-EPC Works (including site grading & Ash pond, payments to Railway Contractor)	135.00	337.20	202.20

51. A sum of INR 135 Crores has been approved by the Hon'ble APTEL under this head. The breakup of the original cost allotment and the corresponding cost overrun has been summarized in the table below:

Table 3

S. No.	Item	APTEL Approved (2009) (INR Cr.)	Actuals (INR Cr.)	Cost Overrun (INR Cr.)
1.	Site grading	21.94	63.62	41.68
2.	Ash pond bund	34.24	48.83	14.59
3.	Residential colony	35.03	61.08	26.05
4.	Railway siding of power plant and payment to railways	15.04	103.33	88.29
5.	Compound wall, pump	10.86	10.87	0.01

S. No.	Item	APTEL Approved (2009) (INR Cr.)	Actuals (INR Cr.)	Cost Overrun (INR Cr.)
	house, fire station etc.			
6.	Workshop, storage shed, security office etc. (Site development works)	8.58	18.60	10.02
7.	Administration building	0.98	0.98	0.00
8.	Green belt	2.03	2.03	0.00
9.	Plant Enabling work and other Miscellaneous work	6.31	6.31	0.00
10.	Service building	-	19.04	19.04
11.	Vibro-compaction	0	2.51	2.51
Total		135.00	337.20	202.20

52. The cost overrun in the non-EPC works has been mainly because of increase in scope of work. The details of the increase in cost under each head is described in the following sections:

Site grading

53. A provision of INR 21.94 Crores was made in original project cost towards

site grading work for estimated quantities of two million CuM at unit rate of Rs.130 per Cum. PLL appointed Cengrs Geotechnica Pvt. Ltd. as the geotechnical engineering consultant for the Project. Due to poor soil condition in the Project area, vibro-compaction method was suggested by the geotechnical consultant to prevent liquefaction. Vibro-compaction was carried out in main plant and non-plant area. It resulted in settlement of soil by about 1.2 m to 1.75 m in various areas which in turn increased the site grading work.

Table 4

S. No.	Particulars	Original	Revised
1.	Rate (INR / CuM)	130.00	130.00
2.	Quantity (Mn. CuM)	2.00	5.80
3.	Vibro-compaction (INR Cr.)	0.00	2.51
Total (Lump sum amount) in INR Crores		**21.94**	**66.13**

54. Since poor soil condition has been held to be a force majeure event, the increase in cost of site grading being a direct consequence of such event ought to be allowed.

Ash Pond Bund

55. Initially the project envisaged construction of ash pond bund of 10 m in height and 56 m in bottom width. The ash pond bund height was kept same but the bottom width was increased from 56 m to 64 m. The bund base width had to be increased due to poor bearing capacity of the existing soil strata of bund area. The pond area was also increased due to return water pond and settling ponds. Some part of the bund area was removed and refilled due to poor soil condition. Further, the LDPE lining area was increased due to increase in bed area and side slopes, lining in still pond and return water pond. The breakup of cost originally approved and finally incurred is as shown below:-

Table 5

		Original			Revised		
S. No.	**Particulars**	**Unit Rate (INR / Unit)**	**Quantity. (Units)**	**Cost (INR Crores)**	**Unit Rate (INR / Unit)**	**Quantity. (Units)**	**Cost (INR Crores)**
1.	Bund work (CuM)	130	1,200,000	15.60	130	1,889,000	24.56
2.	Ash pond LDPE Lining (Sq. Mt.)	350	630,000	22.05	350	868,500	30.40
3.	Rock Toe (CuM)	2500	11,700	2.93	2500	11,700	2.93
Total Cost (Less discount @ 15.625%) in INR Cr.		**34.24**			**48.83**		

Residential Colony

56. The cost of township was originally estimated at INR 35 Crores. This was awarded on arms length basis as reviewed and opined by the LE. Though the work has been awarded on fixed priced basis to GPTSL, the Petitioner has approved revision of unit rate for township work due to the following reasons:

(a) Increase in foundation cost as it had adopted (G+1) structural configuration (against (G+2) proposed earlier) on account of poor soil condition,

(b) Increase in steel & cement price,

(c) Increase in cost of sand & Hard Broken Granite material (used for foundation work) as Punjab Government has imposed ban on local quarrying; and

(d) Overall increase in construction cost.

57. The details of original and revised rate for major township work are as under:

Table 6

S. No.	Particulars	Unit	Quantity (Units)	Original Rate (INR / unit)	Revised Rate (INR / unit)	Cost Overrun (INR Crores)
1.	Colony (G + 1)	Sq. Mt.	17,193	17,000	27,350	15.02
2.	Electrical works in colony buildings	Units	183	120,000	212,000	1.42
3.	Colony electrical supply, distribution system	Lump sum		2,500,000	31,250,000	2.43
4.	6.6 kv/415v Transformer	Nos	2.00	200,000	1,120,000	0.16
5.	Building for incoming and outgoing feed panels	Sq. Mt.	139.41	12,000	38,450	0.31
6.	Water supply and Sewage system for colony supporting	KL	100	50,000	308,750	2.19

S. No.	Particulars	Unit	Quantity (Units)	Original Rate (INR / unit)	Revised Rate (INR / unit)	Cost Overrun (INR Crores)
	100 KL capacity					
7.	Colony roads with 7m Width	Sq. Mt.	56,000	1,500	2,075	2.71
8.	Colony covered parking area	Sq. Mt.	1,500	1,500	6,675	0.65
9.	Street Lighting	Nos.	60	85,000	315,000	1.17
Total Cost Overrun (Lump-sum)						**26.05**

Plant side Railway Siding and Payment to railways

58. As per original construction plan, to handle three rakes per day, it was proposed to lay seven lines (aggregating to 7.5 km) in the plant yard and lead line of about 3.75 km outside the plant boundary. Accordingly, the cost of railway siding was estimated at **INR 15.04 Crores** (2009 price level) which included cost of survey, earthwork, blanketing material, cost of laying lead line & tracks inside plant yard etc. However, on account of various force majeure events, the cost incurred by the Petitioner towards development of the railway siding at the plant increased to **INR 103.33 Crores.**

59. The contractor / sub-contractor were unable to commence the railway siding work due to delay in receipt of possession of land required for lead track and approvals from Railways. This has been held to be a force majeure event.

60. Since the work was delayed, there was an increase in construction cost which necessitated revision of rates agreed in the work order with GPTSL. Further, due to non-availability of suitable grade material in Punjab, blanketing

material was sourced from nearby states viz. Jammu & Kashmir and Himachal Pradesh. The main heads under which the Petitioner had to incur additional expenses are described in the sub-sections listed below:

Construction of Lead Line

61. The cost of railway siding, at the time of original appraisal, included cost of grading material, earthwork, broad-gauge lead track of 3.52 km length, service road etc. was approved to the extent of INR 5.32 crores. The length of the lead line 5.4 km included 3.75 km outside the plant boundary and balance 1.65 km inside the plant boundary up to railway Weigh Bridge. Further, the lead line was coming in about 10 meter deep cutting near the plant boundary. The gradient of 1 in 150 approved by Railways increased the cutting area and length of lead line. Due to uniform sandy strata, RCC retaining wall was constructed at both sides of rail track. The farmers who had parted with the land demanded additional structures in lead line like service road, culverts, siphons, drain pipes etc. Consequently, the cost of constructing lead line has increased on account of i) increase in length of lead line from 3.52 km to 5.4 km, ii) increase in sleeper density from 1540 per km to 1660 per km as stipulated by railways, iii) construction of retaining wall, iv) increase in cost of blanketing material, v) construction of additional structures in lead line such as service road, culverts, siphons, drain pipes etc., as insisted by the farmers who had parted with the land and vi) increase in overall cost due to delay in commencement of railway siding work. The broad break-up of increased cost is as shown in the table below:

Table-7: Construction of Lead Line at Railway Siding

S. No.	Particulars	Increased Cost (INR Crores)
1.	Blanketing material	9.40
2.	Earthwork	7.30
3.	Laying of track of about 5.4 km	8.40

S. No.	Particulars	Increased Cost (INR Crores)
4.	Retaining wall	7.10
5.	Provision of road diversion	0.60
6.	Other associated work	2.70
7.	Total cost of Lead Line Less : post discount @ 15.625% rounded off to	35.3 9 5.53
Increase in the cost of construction of lead line (INR crores)		**29.86**

Development of Khadur Sahib Railway Station

62. In terms of Railways approval dated 05.05.2011, entire capital cost of the new crossing station including staff quarters, loop lines, signaling, electrification and other infrastructure was to be borne by the Petitioner.

63. The Khadur Sahib station had only a main line and no loops were available for the purpose of crossing / stabling of rakes. The Northern Railways, while approving the DPR, stipulated conversion of the Khadur Sahib station into a three lines block station and mandated construction of **nine** lines inside the plant of various lengths aggregating to **9.02 km**, with simultaneous reception & dispatch facilities and construction of rail level platforms. In terms of the Railways approval dated May 5, 2011, entire capital cost of the new crossing station including staff quarters, loop lines, signaling, electrification and other infrastructure was to be borne by the Petitioner.

64. The cost incurred in the development of Khadur Sahib Railway Station which was not envisaged in original construction plan is **INR 38.81 Crores**. The broad break-up of cost is as under:

Table-8: Development of Khadur Sahib Railway Station

S. No.	Particulars	Cost incurred (INR Crores)
1.	Blanketing material	3.20
2.	Laying of track of about 3.8 km	8.70
3.	Supply and laying of Signaling & Telecommunication System	11.20
4.	Station building & quarters	1.90
5.	Railway Colony	9.60
6.	Other miscellaneous work	4.40
	Total	**38.81**

Payment to Railways

65. The Petitioner has remitted a sum of **INR 26 Crores** to Indian Railways for notification of the Khadur Sahib Railway Station and also for facilitating "Y" connection from the main line at Khadur Sahib Railway Station as per the agreement with Railways. This amount also includes an amount of **INR 24 Crores** paid by the Petitioner towards the deployment of manpower and maintenance as demanded by the Railways. The said amount is equivalent to a year's salaries of the personnel deployed and the estimated annual maintenance cost of the railway siding.

Table-9: Payment to Railways

S. No.	Particulars	Cost incurred (INR Crores)
1.	Codel Charges paid against ROB @ 2% on estimated cost	0.56
2.	Cost of deployment of manpower & Maintenance as per the demand from Railways	23.93
3.	Cost of vehicles, plotters, computers and other equipment provided to Railways	0.29
4.	Electricity connections required for railway operations	0.03
5.	Monthly electricity charges till handing over of Railway Line	0.05
6.	Others	0.06
	Total	**24.92**

Service Building

66. Originally the cost of service building of INR 36.88 Crores was included in the scope of works entrusted to the BoP contractor i.e. Punj Lloyd (PLL). During the course of implementation, it was excluded from the scope of PLL and awarded to GPTSL for **INR 19.04 Crores**, which resulted in the increase of the non-EPC cost but an overall savings of INR 18 Crores in the project cost.

Site Development Works

67. Apart from the above mentioned costs incurred by the Petitioner, there have been additional expenses which, inter alia includes miscellaneous expenses towards plant enabling works. The Plant enabling works included 7 meters wide plant roads to facilitate the movement of the site grading vehicles as the site is a sandy and very loose terrain, digging of trap drain along the western boundary of plant about 5 km to divert the surface run-off from the existing villages of Hanswala, Hotian and Pindian, storm water discharge pipeline work, hydrogen shed works and dozer shed works The total additional cost incurred by the Petitioner as against that approved by the Hon'ble APTEL in 2009 is **INR 10.52 Crores.**

S. No.	Particulars	Cost incurred (INR Crores)
1.	Plant Roads 7 mts wide	7.53
2.	Storm water Discharge Pipe Line Work	2.50
3.	Hydrogen Shed works	0.21
4.	Dozer Shed works	0.28
	Total	**10.52**

68. The Petitioner, therefore, humbly requests the Hon'ble Commission to approve the above mentioned additional expenditures in full as the entire cost overrun has happened on account of either increase in the scope of work or increase in the unit rate due to the events which were beyond the control of the Petitioner.

A. *Increase in Preliminary and Pre-operative Expenses*

Item	APTEL Approved (2009) (INR Cr.)	Actuals (INR Cr.)	Cost Overrun (INR Cr.)
Prelim and Pre-operative expenses	105.94	266.30	160.36

69. The preliminary and pre-operative expenses mainly include the costs incurred towards salaries and wages of the employees, administrative expenses, operator training & mobilization, start-up fuel requirement, power & water for construction, consultancy & engineering services and insurance. This increase in preliminary & pre-operative expenses is due to the time and cost overrun of the Project which was on account of Force Majeure and Change in Law events. Since the Petitioner's claim for extension of SCOD has been granted, these expenses ought to be allowed. The cost overrun associated with each of the said heads is as shown in the table below:

Table 10

S. No.	Item	APTEL Approved (2009) (INR Cr.)	Actuals (INR Cr.)	Cost Overrun (INR Cr.)
	Salaries, Wages and Admin	50.00	163.59	113.59
	Rehabilitation & Resettlement	5.00	5.00	0.00
	Operator training & mobilization	5.00	5.00	0.00
	Start-up Expenses	15.00	31.64	16.64

S. No.	Item	APTEL Approved (2009) (INR Cr.)	Actuals (INR Cr.)	Cost Overrun (INR Cr.)
	Power & water for construction	12.00	32.57	20.57
	Consultancy & engineering	7.50	12.13	4.63
	Insurance	11.44	16.37	4.93
Total		**105.94**	**266.30**	**160.36**

70. The cost overrun in the prelim and pre-operative expenses has been both on account of time overrun as well as increase in the unit rates of the components involved. The details of the cost increase are presented in the following sections:

Pre-operative Expenses

71. The pre-operative expenses include the salaries and wages of the employees, administrative expenses and expenses incurred towards operator mobilization and training. The Hon'ble APTEL vide its order dated 08.04.2009 had allowed the originally envisaged cost of INR 55 Crores in full.

72. The cost overrun in the pre-operative expenses is due to extra salaries and allowances that the Petitioner had to pay for the time overrun period of 45 months. The delay and associated cost being beyond the control of the Petitioner, hence it is requested to the Hon'ble Commission to approve the Pre-operative expenses in full.

Start-up Fuel Expenses

73. APTEL vide its order dated 08.04.2009 had allowed the Start-up Expenses as requested by the Petitioner amounting to INR 15 Crores, required for the purchase of oil required for synchronization to the grid and coal required at the

time of commissioning.

74. A provision of INR 15 Crores was made in original Project cost towards start-up fuel expenses.

75. The coal and secondary fuel requirements declared at the time of original appraisal were only estimates / provisional in nature. Due to the delay in the operations of the Tokisud coal mine, the Petitioner had requested Ministry of Power (MoP) to allocate coal for testing and commissioning activities, for which MoP had requested Ministry of Coal (MoC), vide its office memorandum dated July 24, 2013, for allocation of 1.5 lakh MT of coal (0.5 lakh MT of carpet coal and 1 lakh MT of start-up coal) for testing and commissioning of first unit of Goindwal Sahib power project. The competent authority at CIL vide letter Ref. no. CIL/S&M/MOU-Power/40, dated 30.01.2014 had allocated the said amount of coal to the Petitioner for carpeting and trial run.

76. The amount of coal allocated by MoC was not actually provided to The Petitioner at the time of trial run. Consequently, the Petitioner had to procure coal from alternate source. The details of startup expenses and the revenue recovered from sale of infirm power are presented in the table below:

Table 11

S. No.	Item	Actual quantity	Price INR / unit	Total Cost (INR Crores)
	LDO (KL)	3,127	52,925.75	16.55
	HFO (KL)	2,085	25,156.87	5.25
	Coal purchased from CCL (out of the 1.5 L ton allocated coal)	72,654.20	5,779.22	41.98
	Coal purchased from Godavari Commodities (to make up the shortfall in allocated coal)	10,675.80	5,970.02	6.37

S. No.	Item	Actual quantity	Price INR / unit	Total Cost (INR Crores)
	Expenses incurred due to vessel diversion			1.1
	Total fuel cost	-	-	**71.25**
	Less: Infirm power recovery	-	-	39.61
Total cost (net of recovery)				**31.64**

Power and Water for Construction

77. APTEL vide its order dated 08.04.2009 had allowed the cost of Power & Water for Construction as INR 12 Crores. At the time of approving the cost in this regard, the Hon'ble APTEL had noted that this is in the nature of actual expenses and will be allowed by this Hon'ble Commission subject to prudency check. It has also been noted by the Hon'ble APTEL that the BTG and BOP packages do not cover the entire expenses for development of infrastructure.

At the time of in principle approval, the cost was taken assuming supply of power under permanent connection. However, PSPCL has billed at the temporary consumer tariff. Further, the energy consumption has increased on account of i) higher dewatering to control water seepages as project site has high ground water table, ii) additional scope of work viz. extra piling, railway siding, coal handling, ash handling area and extended project schedule. Consequently, there is an increase of Rs. 20 Crores in the expenses towards power and water. Since these are in the nature of actual expenses, it is submitted that the same may be allowed. The detailed breakup of the cost of power is presented in the table below:

Table 12

		Projected at the time of Financial Closure		Actuals Consumption	
S. No.	Description	Quantity	Amount (INR Cr.)	Quantity	Amount (INR Cr.)
	Receiving substation & distribution network	66/11/0.4 15 kV	3	Actual total amount paid towards power and water during construction	
	Energy Cost for Non EPC	13 Million kWh	9		
	Estimated Energy Cost for balance period	0	0		
	Start-up Energy Cost to PSEB @ Rs.3/-	360000 kWh	0.11		
	Total		**12.11**		**32.57**

78. The actual cost of power and water during the construction period is INR 32.57 Crores. The Petitioner humbly requests the Hon'ble Commission to allow the additional cost of **INR 20.46 Crores** towards Power & Water for Construction in full as part of the Project cost.

Consultancy and Engineering Costs

79. The Hon'ble Commission vide its order dated 29.04.2008 had allowed the cost of Consultancy & Engineering at INR 7.50 Crores. However, due to the increase in manpower cost etc., Tata Consulting Engineers Limited (the owner's engineer) has increased the manpower cost along with the number of people required for the said Project. This also includes the Service Tax payable on the same. Thus the revised cost of consultancy & engineering is **INR 12.13 Crores**.

The work orders dated 28.09.2007 issued to TCE Consulting Engineers Limited, the Owner's Engineer is attached hereto and marked as ***Annexure P-15 (Colly.)***. The Petitioner humbly requests the Hon'ble Commission to kindly allow this increased cost of **INR 4.63 Crores** as part of the Project capital cost in full.

Insurance: The CAR policy had to be extended on account of Force Majeure Events and Change in Law from time to time. The COD of the Project was postponed due to the above events. Hence, the policy had to be extended till COD which is a requirement of the lenders. Thus, this overrun on account of the above of Rs. 5.12 Crores may kindly be allowed by the Hon'ble Commission.

B. ***<u>Increase in Interest during Construction</u>***

Item	APTEL Approved (2009) (INR Cr.)	Actuals (INR Cr.)	Cost Overrun (INR Cr.)
Interest during Construction	367.74	1474.84	1107.10

80. The Hon'ble APTEL vide its order dated 08.04.2009 had approved an amount of **INR 365.19 Crores** towards interest during construction as originally submitted by the Petitioner stating that it will be allowed as per the financing documents. Accordingly, the revised approved cost towards IDC computed was **INR 367.74 Crores.**

81. The originally approved Project cost of INR 3,200 Crores was to be funded in a Debt: Equity ratio of 75:25 and the amount of INR 2,400 Crores was borrowed from a consortium of 13 banks, IDBI Bank being the lead lender. Since then, the debt component of the Project has increased from INR 2,400 Crores to INR 3,332.16 Crores till the COD. The debt increase has been financed through a second, third and fourth rupee term loan. The table below summarizes the details for originally approved IDC and actual IDC (consisting of original loan and cost overrun loan):

Table 13: Summary of IDC Overrun

Particulars	Original	Actual	
Project Cost (INR Crores)	3200	4383.54	
Debt Component (INR Crores)	2400	**Original Cost**	**Cost Overrun**
		2400	932.16
Interest Rate (p.a.)	11.25%	13.40%	12.94%
Time (Months)	36	72	30
IDC (INR Crores)	367.74	1379.01	95.83
IDC Overrun (INR Crores)		**1107.10**	

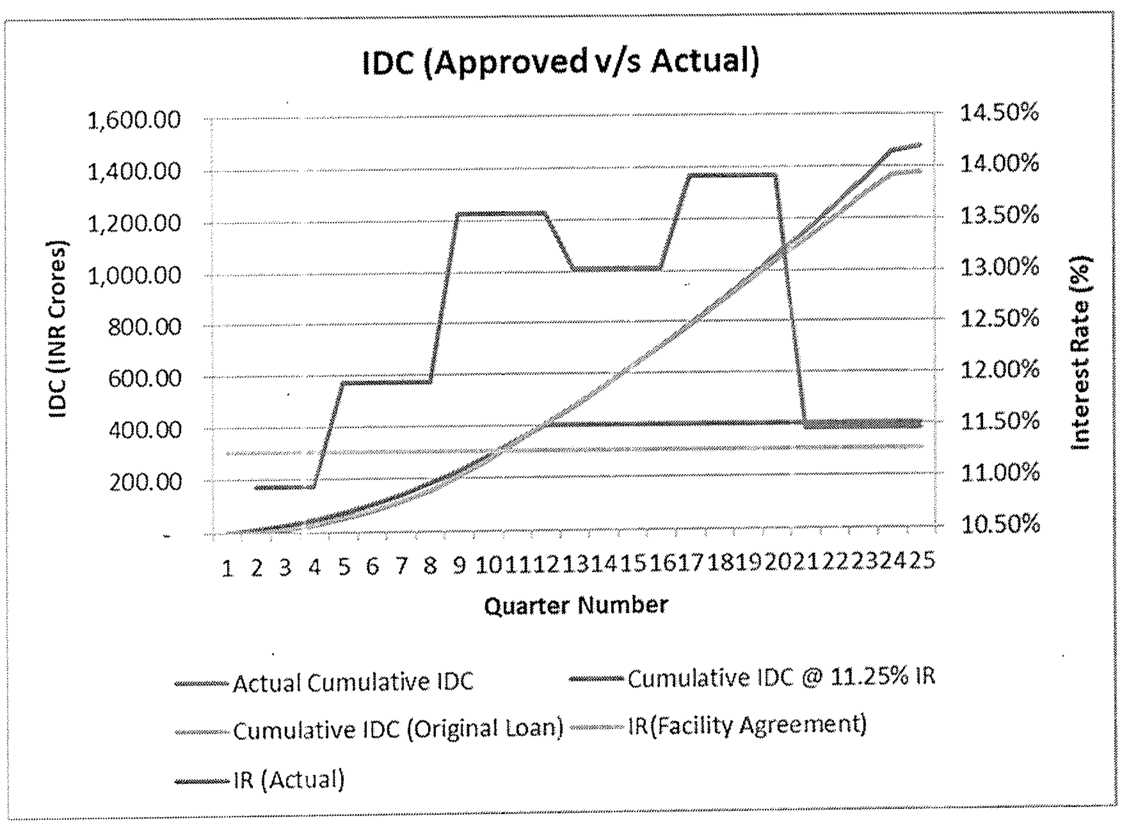
82. As per the Facility agreement dated 01.02.2010, the Interest rate at the time of signing the agreement was 11.25% p.a. It was to be revised on every interest reset date which was fixed as 2nd of February every year. The interest rate, dependent on the prevailing IDBI BPLR / Base rate, underwent a significant variation between the financial closure and the COD of the Project. The interest rate revisions are listed in the table below:

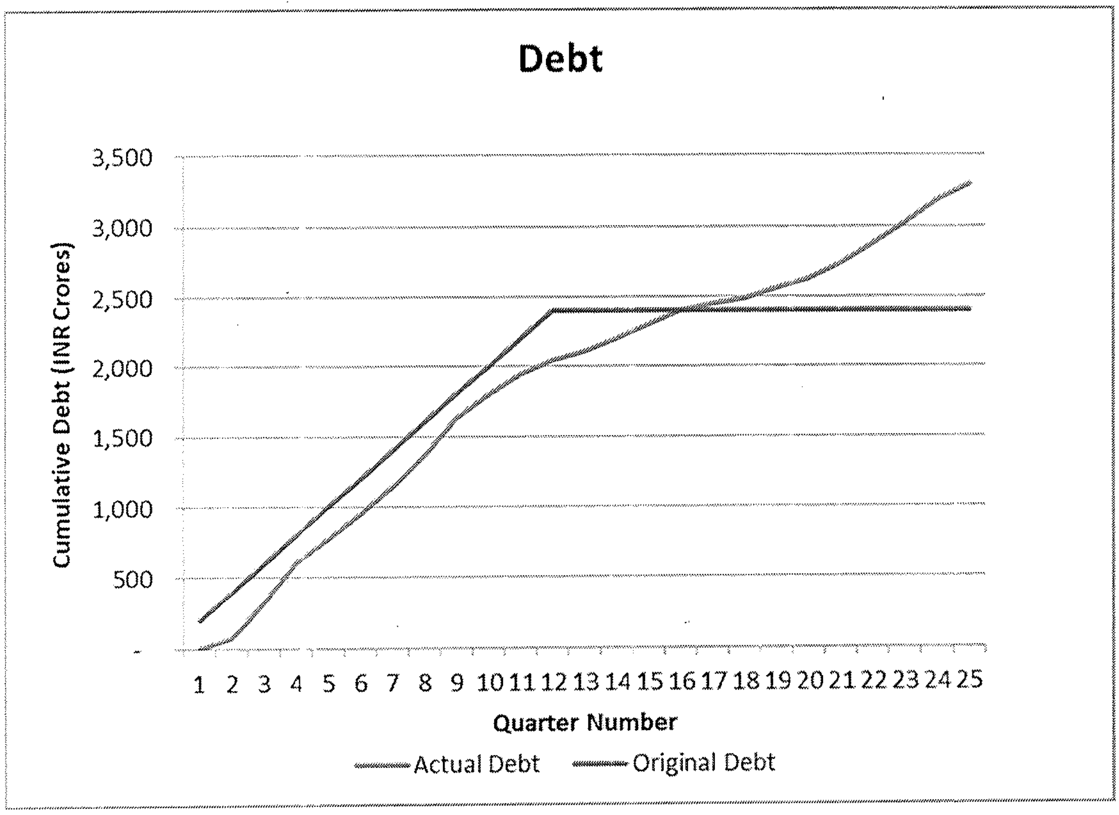
Table 14: Interest Rate variation during Construction Period

Date of Interest Rate reset	Interest rate (p.a.)
Financial Closure	11.25 %
01.02.2011	12.50 %
01.02.2012	13.75 %

Date of Interest Rate reset	Interest rate (p.a.)
01.02.2013	13.25 %
01.02.2014	13.25 %
01.02.2015	13.50 %

83. The following figure shows a comparison of approved IDC versus the actual IDC buildup during the construction period. The approved IDC considers a uniform quarterly drawdown of the debt component of INR 2,400 Crores at a constant interest rate of 11.25% p.a. for a period of 12 quarters (or 36 months which was the scheduled project completion duration). The actual IDC buildup is as per the actual quarterly loan drawdown and IDC amount incurred. The figure below gives the IDC comparison graph compares the original and actual debt drawdown.





84. The key inferences from the above figures are described below:

(a) The IDC buildup for the first 12 quarters (i.e. the original project completion timeline) is similar in case of original and actual project scenarios. The impact of higher interest rates during this period is nullified to some extent by the deceleration in debt drawdown of the project, on account of slow progress of the project.

(b) However, the difference between the actual IDC and original IDC grows sharply after the 12th quarter, indicating the impact of time overrun. The fact that a second loan was taken does not have any impact on the increase in IDC as is evident from the narrow difference in actual cumulative IDC and cumulative IDC (original loan) represented by the blue and dark blue curves.

(c) **Thus, there has been significant increase in IDC due to time overrun which is on account of the change in law and force majeure events described in the preceding sections.**

85. It can thus be concluded that there has been overrun in the interest during construction due to the delay in achieving COD of the Project on account of the change in law and Force Majeure events presented in the preceding sections. The time over-run on these counts have been allowed by the Arbitral

Tribunal. Therefore, the increase in IDC ought to be allowed.

86. Apart from this delay, there have been fluctuations in the interest rate during this entire construction period which is as per the Facility Agreement. The delay as well the interest rate fluctuations were completely uncontrollable for the Petitioner and hence, the Petitioner requests the Hon'ble Commission to approve the amount of **INR 1474.84 Crores** incurred towards IDC in full.

Tariff proposal for Contract Year 2016-17

87. It is submitted that in terms of the PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 (**"PSERC Tariff Regulations, 2005"**) and provisions of explanatory memorandum thereto, the Petitioner is filing the Tariff proposal along with requisite information / details of the Project as prescribed. The tariff formats, duly filled with details regarding Capital Expenditure, estimated Annual Fixed Charges, Energy charges, Generation Tariff are annexed hereto and marked as ***Annexure P-16 (Colly)***.

88. The petition is being filed for the period starting from the COD of Unit-1 of the project to the end of the year i.e. 31.03.2017. Accordingly, the following are the periods under consideration:

(a) COD of unit-1 (05.04.2016) to COD of unit-2 i.e. 16.04.2016.

(b) COD of unit-2 to 31.03.2017

89. **Project cost:** The Petitioner submits that the total estimated cost of the project up to the cut-off date of 31.03.2019 (considering COD of the project as 16.04.2016) is INR 4773 Crores. The Project cost incurred till COD of the Project, i.e. 16.04.2016 is INR 4441 Crore. The facts pertinent to justify the said cost have been detailed in the preceding sections.

90. **Debt Equity Ratio:** As mentioned in the preceding section, the financial closure of the Project was achieved in 2010 considering a capital cost of INR 3200 Crores and a debt equity ratio of 75:25. However, the Petitioner had reported time overrun of about 14 months and an expected COD of April 1, 2014 as against February 1, 2013 envisaged at the time of detailed appraisal. Consequent to this, the project cost was revised to INR 4000 Crores. The COD of the project got further delayed in the later course of time and the project finally

achieved COD on 16.04.2016. These delays caused the project cost to increase up to INR 4441 Crores. The overall debt to equity ratio at the stage of project completion now stands at approximately 73.8:26.2. Accordingly, in terms of regulation 19 of the CERC (Terms and Conditions of Tariff) Regulations, 2014 (**"CERC Tariff Regulations, 2014"**), the actual debt equity ratio has been considered for computation of the normative loan and subsequently the tariff.

91. **Depreciation:** The Petitioner submits that Regulation 27 of the PSERC Tariff Regulations, 2005 allows depreciation up to 90% of capital cost of the power plant using straight line method. The gross fixed asset of the power plant for the purpose of depreciation is **INR 4383.54 Crores** (excluding working capital margin money from total project cost). The table below summarizes the category-wise gross fixed asset value and the corresponding depreciation rates as provided in the Appendix-II (Depreciation schedule) of the CERC Tariff Regulations, 2014.

Table 15: Depreciation schedule

Asset particulars	Depreciation rate
Land (under full ownership)	0.00%
Building and roads	3.34%
Plant & Machinery	5.28%
Furniture and fixtures	6.33%
Office equipment	6.33%
Computers	15.00%
Vehicles	9.50%
Computer software	15.00%

92. **Interest on loan capital:** The Petitioner's project has been funded by a consortium of 13 banks/ institutions, IDBI being the lead lender. The Petitioner submits that the weighted average rate of interest is 13.19% as on date of filing this petition which has been considered for calculating the interest cost on loan capital for the period between COD of the project and the remaining period of the year. The repayment of loan for tariff computation purposes is considered on a normative basis i.e. equal to annual depreciation in accordance with Regulation 26 of the PSERC Tariff Regulations, 2005.

93. **Working capital and interest on working capital:** In accordance with Regulation 28 of the CERC Tariff Regulations, 2014 the working capital for a coal/ lignite based power project includes the sum of cost of coal/ lignite for 2 months, cost of secondary fuel oil for 2 months, maintenance spares @ 20% of O&M expense, receivables equivalent to 2 months of Capacity Charge and Energy Charge and O&M equal to 1 month. The working capital interest rate applicable to the Petitioner is 12.80% and the same has been considered for calculating the working capital interest outgo. This rate is calculated as SBI Base rate as on unit-1 COD (05.04.2016) plus 350 basis points as specified in the CERC regulations.

94. Operation & Maintenance expenses: It is submitted that:

(a) The Petitioner's plant is a coal-based power plant

(b) Regulation 29 of the CERC Tariff Regulations stipulates Operation and Maintenance expenses for 200/210/250 MW sets at the rate of INR 27 Lakhs per MW for FY 2016-17.

(c) The Petitioner submits that the water charges and capital spares are not included in the abovementioned O&M expenses. The same, if any, paid by the Petitioner shall be allowed as reimbursement at actuals.

94. **Secondary Fuel Oil:** Regulation 36 (D) of the CERC Tariff Regulations, 2014 stipulates specific oil consumption of 0.5 ml/kWh for a coal-based generating stations.

(a) The Petition is based on the said specific oil consumption for calculating the quantum of fuel oil required

(b) The cost of fuel oil is the weighted average landed cost of Light Diesel Oil ("LDO") and Heavy Fuel Oil ("HFO") which has been considered as under:

Period-->	**05.04.2016 to 15.04.2016**	**16.04.2016 to 31.03.2017**
Weighted Average cost (Rs./kL)	21,797	19,050
Basis	Weighted Average cost of LDO and HFO from electricity sale invoice of April-16	Weighted Average cost of LDO and HFO from electricity sale invoices of Jul-16 and Aug-16

(c) The Gross Calorific Value for secondary fuel oil has been taken as the weighted average GCV of LDO and HFO shows as under:

Period-->	**05.04.2016 to 15.04.2016**	**16.04.2016 to 31.03.2017**
Weighted Average GCV (kCal/L)	10,267	10,114
Basis	Weighted Average GCV of LDO and HFO from electricity sale invoice of April-16	Weighted Average GCV of LDO and HFO from electricity sale invoices of Jul-16 and Aug-16

It is prayed that this Hon'ble Commission allow the cost and the calorific value for computation of cost towards secondary fuel oil as detailed above in line with the PSERC Tariff Regulations, 2005.

95. **Total capacity charge:** It is submitted that:

(a) The proposed Capacity Charge calculation for the period between COD of the Unit-1 and Unit-2 of the power plant, and the remaining period of the year is given in the table below:

Table 16: Capacity charge (in INR Lakhs)

S. No.	Item	05.04.2016 to 15.04.2016	16.04.2016 to 31.03.2017
1.	Depreciation	13,569	21,022
2.	Interest on Loan	44,976	43,634
3.	Return on Equity	6,579	19,257
4.	Interest on Working Capital	4,674	7,718
5.	O & M Expenses	7,290	14,580
	Total	**77,087**	**106,212**

(b) It is prayed that this Hon'ble Commission approve the Capacity Charge detailed above for the period under review.

(c) Regulation 30(4) of the CERC Tariff Regulations, 2014 provides the following in respect of incentive on capacity charge payable to the generating stations:

> *"Incentive to a generating station or unit thereof shall be payable at a flat rate of 50 paise/kWh for ex-bus scheduled energy corresponding to scheduled generation in excess of ex-bus energy corresponding to Normative Annual Plant Load Factor (NAPLF) as specified in regulation 36 (B)."*

(d) The plant of the Petitioner is eligible for incentive payment on a monthly basis if it achieves a PLF greater than 85% which is the normative PLF. The said incentive shall be payable in the form of additional recovery of Annual Fixed Charges (prorated on a monthly basis) over and above the Annual Fixed Charge approved by this Hon'ble Commission.

(e) Further, the Petitioner prays before this Hon'ble Commission to direct payment of Capacity Charge as per formulae provided in Regulation 30(2) of the CERC Tariff Regulations, 2014.

96. **Energy Charge:** It is submitted that:

(a) Energy Charge covers the cost of coal used in the power plant and is calculated for the Scheduled Energy. As mentioned above, the Petitioner is currently procuring coal through E-auction process. Moreover, in terms of the Arbitral Award, cancellation of the Captive Coal Mine(s) having held to be a force majeure and change in law event, the Petitioner ought to be compensated for the landed cost of coal including grade slippage, transit loss, transportation cost including rail and road, handling and liaising / testing charges and also transportation charges from Mine to the nearest Railway Siding of Coal India Ltd and its subsidiaries. Thus, it is prayed that this Hon'ble Commission approve the cost of coal as per the actuals.

(b) In accordance with Regulation 30(6)(a) of the CERC Tariff Regulations, 2014 the energy charge in Rupees per kWh is determined to three decimal places as per the following formulae:

> *"ECR = {(GHR – SFC x CVSF) x LPPF / CVPF + LC x LPL} x 100 / (100 – AUX)*
>
> *Where,*
>
> *AUX = Normative auxiliary energy consumption in percentage.*
>
> *CVPF = Gross calorific value of primary fuel as fired, in kCal per kg, per litre or per standard cubic metre, as applicable.*
>
> *CVSF = Calorific value of secondary fuel, in kCal per ml.*
>
> *ECR = Energy charge rate, in Rupees per kWh sent out.*
>
> *GHR = Gross station heat rate, in kCal per kWh.*
>
> *LC = Normative limestone consumption in kg per kWh.*
>
> *LPL = Weighted average landed price of limestone in Rupees per kg.*
>
> *LPPF = Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month.*
>
> *SFC = Specific fuel oil consumption, in ml per kWh."*

(c) **Normative Auxiliary energy consumption:** The Petitioner submits that the normative auxiliary energy consumption for Coal-based generating stations as per Regulation 36(E)(a) of the CERC Tariff Regulations, 2014 is 8.5% for a unit of 200 MW series. Further, for thermal generating stations with induced draft cooling towers, additional 0.5% is allowed. Thus, normative auxiliary consumption has been considered at 9% for the computation of energy charge.

(d) **Fuel Transit & Handling Losses:** In accordance with Regulation 30 (8) of the CERC Tariff Regulations, 2014 transit & handling loss of 0.8% is to be considered for calculating the loss of coal during inland transportation to the plant location. However, in terms of PSERC Tariff Regulations, 2005 and amendments thereto, the normative transit and handling loss to be taken @ 1% or actual whichever is lower and the same are considered @ 1% while computing the energy charge.

(e) **Design Station Heat Rate:** It is submitted that:

(f) The Guaranteed Heat Rate for the power plant under the EPC contract is 2221 Kcal/kWh, as detailed in Form-3 of this Petition.

(g) Regulation 36(C)(b) of the CERC Tariff Regulations, 2014 specifies that for tariff calculation, the design station heat rate is to be multiplied by a factor of 1.045 for a new coal based thermal power plant.

(h) Accordingly, the gross station heat rate of the Petitioner for tariff calculation purpose comes out to be 2321 kcal/kWh, which has been considered for Energy Charge calculation. It is prayed that this Hon'ble Commission approve the Gross Station Heat Rate of 2321 kcal/kWh.

(i) **GCV of coal:** For Energy Charge Rate calculation, the GCV of coal is computed as the weighted average GCV of coal as per the electricity sale invoices from April-2016 and Jul-Aug 2016 respectively for 01.04.2016 to 15.04.2016 and 16.04.2016 to 31.03.2017 as shown in the table below:

Period-->	**05.04.2016 to 15.04.2016**	**16.04.2016 to 31.03.2017**
Weighted Average GCV	3,789	4,420

Period-->	05.04.2016 to 15.04.2016	16.04.2016 to 31.03.2017
(kCal/kg)		
Basis	Weighted Average GCV of coal from electricity sale invoice of April-16	Weighted Average GCV of coal from electricity sale invoices of Jul-16 and Aug-16

(j) **Landed price of coal:** The landed price of coal is computed as the weighted average landed price of coal as per the electricity sale invoices from April-2016 and Jul-Aug 2016 respectively for 01.04.2016 to 15.04.2016 and 16.04.2016 to 31.03.2017 as shown in the table below:

Period-->	05.04.2016 to 15.04.2016	16.04.2016 to 31.03.2017
Weighted Average cost (Rs./MT)	6,151	5,744
Basis	Weighted Average cost of coal from electricity sale invoice of April-16	Weighted Average cost of coal from electricity sale invoices of Jul-16 and Aug-16

(k) Based on the foregoing prices, the Energy Charge Rate of the Petitioner on Ex-bus basis comes out as shown in the table below:

Computation of energy charge (INR/kWh)

Particulars	Unit	05.04.2016 to 15.04.2016	16.04.2016 to 31.03.2017
Gross station heat rate	kCal/kWh	2,321	2,321
Specific Fuel oil Consumption	ml/kWh	0.5	0.5
Landed price of secondary fuel	Rs./ml	0.02	0.02
GCV of Secondary Fuel	kCal/ml	10.27	10.11
Heat contribution of Coal	kCal/kWh	2,316	2,316
GCV of Primary Fuel	kCal/kg	3,789	4,420
Specific Coal consumption	kg/kWh	0.61	0.52
Landed price of primary fuel	Rs./kg	6.15	5.74
Auxiliary Consumption	%	9.0%	9.0%
Total Energy Charge	**INR/kWh**	**4.143**	**3.318**

97. It is prayed that this Hon'ble Commission approve the above basis of calculation of Energy Charge Rate (ECR) and allow the Petitioner to charge the Respondent, the energy charge on month to month basis based on the landed cost of fuel for the month on actual costs. The Petitioner requests that the above calculated energy charge rate of **INR 3.318 /kWh** may be allowed for the remaining duration of the year for billing for the energy supplied to PSPCL which will be adjusted in the subsequent months for actual landed cost of fuel.

98. **Tariff of electricity from GVK Power (Goindwal Sahib) Plant:** The tariff of the Petitioner, comprising of Capacity Charge and Energy Charge for the year, is summarized below:

Particulars	**Unit**	**05.04.2016 to 15.04.2016**	**16.04.2016 to 31.03.2017**
Capacity charge	INR Lakhs	**77,087 (Calculated on an annual basis for single Unit.)**	**106,212 (for the Power Station)**
Variable charge	INR/kWh	**4.143**	**3.318**

99. In the light of the above submissions, it is prayed that this Hon'ble Commission to kindly approve the capacity charge and the basis of calculation of energy charge of the Petitioner.

100. The Petitioner also prays that in addition to the above tariff, this Hon'ble Commission allow, as pass through, to the Respondent, at actuals, any cess, duty, tax, government levy, royalty etc. applicable to the Petitioner for supply of power from time to time.

101. The present petition is bona fide and is in accordance with law, and the same may be allowed.

102. The Petitioner has submitted a copy of this Petition to the PSPCL.

103. The Petitioner reserves its right to supplement, add to and alter its tariff proposal before the tariff is finally determined by this Hon'ble Commission. The Petitioner reserves its right to file any additional information/ submissions as may be necessary for the purposes of determination of tariff in the present petition. The submissions set out in this Petition supersede any submissions made previously.

104. In view of the foregoing, the Petitioner is filing Tariff Forms 1-35 in accordance with the PSERC Tariff Regulations, 2005 along with the present Petition. The said forms 1-35 are annexed hereto and marked as ***Annexure P-17.***

PRAYER

105. The Petitioner in the aforesaid facts and circumstances most humbly prays that this Hon'ble Commission may be pleased to:-

(a) Admit the present petition and determine the tariff for supply of power.

(b) Determine the provisional tariff for supply of power to PSPCL pending determination of tariff.

(c) Approve the basis of calculation of Energy Charge Rate (ECR) as set out in paragraph 97(b).

(d) Allow the Petitioner to charge the Respondent, the energy charge on month to month basis based on the landed cost of fuel for the month on actual costs as set out in paragraph 97(j).

(e) Allow the Petitioner to claim as fuel price adjustment due to change in price of secondary fuel oil

(f) Allow payment of incentive for generation and supply beyond 85% of Plant Load Factor (PLF) as set out in paragraph 96(d).

(g) Allow pass through at actual any cess, duty, tax, government levy, royalty etc. applicable to the Petitioner for supply of power to the Respondent.

(h) Allow the recovery of the filing fees as and when paid to the Hon'ble Commission and also the publication expenses from the beneficiaries.

(i) Allow the completed capital cost of Rs. 4441 Crores (till COD)

(j) Allow additional capital expenditure of Rs. 230 Crore till Cut-Off Date

(k) To pass such order(s) as the Hon'ble Commission may deem fit in the circumstances and facts of the present petition.

GVK Power (Goindwal Sahib) Limited/Petitioner

Through

J. Sagar Associates
Advocates for the Petitioner
B-303, 3rd Floor, Ansal Plaza
Hudco Place, August Kranti Marg
New Delhi - 110 049

Date: 29th December, 2017

BEFORE THE HON'BLE PUNJAB STATE ELECTRICITY REGULATORY COMMISSION

IN THE MATTER OF:

GVK Power (Goindwal Sahib) Limited ...Petitioner

Versus

Punjab State Power Corporation Limited ...Respondent

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GVK Power (Goindwal Sahib) Limited/Petitioner

Through

J. Sagar Associates
Advocates for the Petitioner
B-303, 3rd Floor, Ansal Plaza
Hudco Place, August Kranti Marg
New Delhi – 110 049

Date: 29 December, 2017

A

BEFORE THE HON'BLE PUNJAB STATE ELECTRICITY REGULATORY COMMISSION

IN THE MATTER OF: *Petition for determination of Tariff under Sections 62 and 86 of the Electricity Act, 2003 read with (a) Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2005; (b) the Central Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2014; and (c) Amended and Restated Power Purchase Agreement dated 26.05.2009 executed between Petitioner (Goindwal Sahib) Limited and Punjab State Power Corporation Limited (formerly known as Punjab State Electricity Board)*

AND

IN THE MATTER OF:

GVK Power (Goindwal Sahib) Limited …Petitioner

Versus

Punjab State Power Corporation Limited …Respondent

MEMO OF PARTIES

GVK Power (Goindwal Sahib) Limited
Paigarh House,
156 – 159, Sardar Patel Road,
Secunderabad – 540 003 …Petitioner

Versus

Punjab State Power Corporation Limited
The Mall, Patiala- 147001 (Punjab) …Respondent

GVK Power (Goindwal Sahib) Limited/Petitioner

Through:

J. Sagar Associates
Advocates for the Petitioner
B-303, Ansal Plaza, HUDCO Place
August Kranti Marg
New Delhi 110049

Place:

Date:

BEFORE THE HON'BLE PUNJAB STATE ELECTRICITY REGULATORY COMMISSION

IN THE MATTER OF: *Petition for determination of Tariff under Sections 62 and 86 of the Electricity Act, 2003 read with (a) Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2005; (b) the Central Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2014; and (c) Amended and Restated Power Purchase Agreement dated 26.05.2009 executed between Petitioner (Goindwal Sahib) Limited and Punjab State Power Corporation Limited (formerly known as Punjab State Electricity Board)*

AND

IN THE MATTER OF:

GVK Power (Goindwal Sahib) Limited
Paigarh House,
156 – 159, Sardar Patel Road,
Secunderabad – 540 003 …Petitioner

Versus

Punjab State Power Corporation Limited
The Mall, Patiala (Punjab) …Respondent

PETITION FOR DETERMINATION OF TARIFF FOR THE TARIFF YEAR 2016-2017

MOST RESPECTFULLY SHOWETH:

I. Conspectus of Petition

1. GVK Power (Goindwal Sahib) Limited ("**Petitioner**") is a Company incorporated under the provisions of the Companies Act, 1956 with the object of engaging in the business of establishing, maintaining and operating a 540 MW coal based thermal power Station at Goindwal Sahib

in the State of Punjab (the "**Project**") and generation and supplying electricity from the said project entirely to the Punjab State Power Corporation Limited ("**PSPCL**"/ "**Respondent").**

2. The Petitioner entered into an Amended and Restated Power Purchase Agreement ("**Restated PPA**" / "**PPA**") on 26.05.2009 with the erstwhile PSEB for the supply power from GVK's 2x270 Project, conceptualizing the Project as a captive coal mine based Project.

3. This Hon'ble Commission, on 29.04.2008, passed an Order in Petition 4 of 2007 approving the Capital Cost of Rs. 2,622.487 crores as against the proposed Capital Cost of Rs. 2,987.86 crores claimed by the Petitioner.

4. On 08.04.2009, the Hon'ble Appellate Tribunal for Electricity ("***Tribunal***") passed its judgment in Appeal No. 104 of 2008 filed by the Petitioner challenging the findings of this Hon'ble Commission in its Order dated 29.04.2008. The Hon'ble Tribunal allowed the appeal of the Petitioner and approved the Capital Cost of Rs. 2,963.8 crores subject to correction in BHEL price & Forex fluctuations at actuals.

5. Thereafter, on 10.04.2017, an Arbitral Tribunal constituted by this Hon'ble Commission allowed extension of Scheduled Commercial Operation Date ("**SCOD**") till COD was actually achieved.

6. The present Petition is being filed for the determination of tariff for Financial Year 2016-2017 in respect of the supply of the entire capacity of the power generated by the Project to PSPCL, considering the completed capital cost of the Project as of 16.04.2016 which was the Commercial Operation Date ("**COD**") of the Project.

7. The present Petition is being filed under:-

(a) Section 62 read with Section 86 of the Act;

(b) Regulation 4 of the Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2005 ("**PSERC Tariff Regulation**"); and

(c) Article 11 read with Schedule 6 of the Restated PPA.

II. Description of the Parties

8. The Petitioner is a Company incorporated under the provisions of the Companies Act, 1956 with the object of engaging in the business of establishing, maintaining and operating the Project and generation and supplying electricity from the said Project entirely to PSPCL. The registered office of the Petitioner Paigarh House, 156 – 159, Sardar Patel Road, Secunderabad – 540 003.

9. The Respondent is the Punjab State Power Corporation Limited is a company registered under the Companies Act, 1956 and is a successor company of the erstwhile Punjab State Electricity Board. PSPCL has been entrusted with the responsibility of generation and distribution of power in the state of Punjab.

III. Factual Background

A. Execution of Amended and Restated PPA and In Principle Approval of Capital Cost

10. In 1996, the Government of Punjab ("***Punjab Government***") undertook an international competitive bidding process with the objective to select a party to establish and operate a coal fired Thermal Power project at Goindwal Sahib in the State of Punjab, and supply the entire electricity generated from the said power project was to be sold to PSEB.

11. Pursuant to the Competitive Bidding process initiated by the Government of Punjab, GVK Industries Limited, Hyderabad (**"GVK"**) was selected to build, own and operate the coal based generation station of capacity 2x250 MW at Goindwal Sahib. Subsequently, GVK and erstwhile PSEB executed a Power Purchase Agreement on 17.04.2000 providing for the terms, conditions, norms and parameters including tariff for the sale of electricity by Petitioner to PSEB. GVK thereupon incorporated GVK Power (Goindwal Sahib) Ltd. (the **"Petitioner"**) as a special purpose vehicle to develop the project.

12. Subsequently, negotiations were held between PSEB and Petitioner whereby PSEB sought better norms and parameters and tariff for the purchase of electricity from the Project consistent with the norms and parameters notified by the Central Electricity Regulatory

Commission ("**Central Commission**") under its Tariff Regulations.

13. On 08.02.2006, pursuant to negotiations between the Petitioner and PSEB, a Memorandum of Understanding ("**MoU**") was executed revising certain norms and parameters for supply of power by GVK to PSEB, which:-

(a) Substantially reduced the tariff for generation of power.

(b) Enhanced the capacity of the Project from 2x250 MW to 2x270 MW (+20%).

A copy of the MoU dated 08.02.2006 is annexed hereto and marked as **Annexure P-1.**

14. On 29.04.2008, this Hon'ble Commission passed an Order in Petition 4 of 2007 approving the Capital Cost of Rs. 2, 622.487 crores as against the proposed Capital Cost of Rs. 2,987.86 crores by the Petitioner. A copy of the Order dated 29.04.2008 passed by this Hon'ble Commission in Petition No. 04 of 2007 is annexed hereto and marked as **Annexure P-2.**

15. On 06.03.2009, this Hon'ble Commission, passed an Order in Petition No. 3 of 2007 approving the Restated PPA proposed to be entered into by PSEB and the Petitioner, pursuant to the MoU dated 08.02.2006 subject to certain amendments. A copy of the Order dated 06.03.2009 passed by this Hon'ble Commission in Petition No. 3 of 2007 is annexed hereto and marked as **Annexure P-3.**

16. On 08.04.2009, the Hon'ble Tribunal passed its judgment in Appeal No. 104 of 2008 filed by the Petitioner challenging the findings of this Hon'ble Commission in its Order dated 29.04.2008. The Hon'ble Tribunal allowed the appeal of the Petitioner and approved the Capital Cost of Rs. 2,963.8 crores. A copy of the Judgment dated 08.04.2009 passed by the Hon'ble Tribunal in Appeal No. 104 of 2008 is annexed hereto and marked as **Annexure P-4**

17. On 19.05.2009, the Hon'ble Tribunal passed an interim order in the Petitioner's Appeal 70 of 2009, challenging the State Commission's Order dated 06.03.2009, permitting the Petitioner to execute the Amended PPA as per the Orders of the Hon'ble Commission without prejudice to the rights and contentions of the Petitioner in the Appeal.

The execution of the PPA and implementation of the Project was subject to the outcome of the Appeal. A copy of the Order dated 19.05.2009 passed by the Hon'ble Tribunal in Appeal No. 70 of 2009 is annexed hereto and marked as **Annexure P-5**

18. Accordingly, on 26.05.2009, the Petitioner entered into the Restated PPA with the erstwhile PSEB for the supply of power from GVK's 2x270 MW Power Project.

A copy of the Restated PPA is annexed hereto and marked as **Annexure P-6**

19. On 13.01.2011, the Hon'ble Tribunal passed the final judgment in Appeal No. 70 of 2009 modifying the terms of the Restated PPA. A copy of the Judgment of the Hon'ble Tribunal in Appeal No. 70 of 2009 dated 13.01.2011 is annexed hereto and marked as **Annexure P-7**

B. Financial Closure, Delays in Project implementation and Extension of SCOD

20. It may be noted that in terms of Article-1 (being Definitions) of the Restated PPA the Schedule Commercial Operation Date ("**SCOD**") for Unit I of the Project was 36 months from the date of financial closure and for Unit II was 6 months thereafter.

21. The financial closure for the Project was achieved by Petitioner on 21.05.2010. Accordingly Scheduled Commercial Operation Date for the first generating unit of 270 MW was 20.05.2013 and for the second generating unit of 270 MW was 20.11.2013 or such other date from time to time specified in accordance with the provisions of the PPA.

22. After the Petitioner commenced construction of the Project, there were significant delays in completion and COD. The Petitioner filed the Petition Nos. 65 of 2013 and 33 of 2015 before this Hon'ble Commission seeking *inter alia* extension of SCOD.

23. Petition No. 65 of 2013 was filed seeking extension of the SCOD of the Project on account of the following Force Majeure and Change in Law events:-

(a) Delays in approvals pertaining to the Railway Siding at the Project site;

(b) Delays in approvals pertaining to the railway siding at the Tokisud Coal Mine;

(c) Delay in procurement of land for railway corridor;

(d) Delay in handing over forest land for Tokisud Coal Mine; and

(e) Delays in construction of the Project due to:-

  (i) Poor soil conditions which required treatment using Vibro Compaction as per the Indian Standard Criteria for Earthquake Resistant Design of Structures.

  (ii) Shortage of aggregates due to a ban imposed by the Punjab and Haryana High Court necessitating procurement from neighboring States.

  (iii) Delay in supply of equipment by Bharat Heavy Electricals Ltd.

  (iv) Increase in number of bays (i.e. from 4 to 6) at the request of PSPCL in respect of Switchyard.

24. Petition No. 33 of 2015 before this Hon'ble Commission seeking declaration of the following Change in Law and Force Majeure events in terms of Article 12 & 13 of the Restated PPA:

(a) Cancellation of the Coal Blocks (Tokisud and Seregarah Block) pursuant to the judgment dated 25.08.2014 of the Hon'ble Supreme Court in the case of ***Manohar Lal Sharma vs. The Principal Secretary & Ors.*** and the subsequent Order dated 24.09.2014; and

(b) Promulgation of the Coal Mines (Special Provisions) Second Ordinance, 2014 and the auction of the Tokisud Coal Block which has been allocated to Essar Power MP Limited.

25. On 12.08.2015, this Hon'ble Commission referred all disputes in relation to Force Majeure and Change in Law resulting in a delay of SCOD in Petition Nos. 65 of 2013 and 33 of 2015 to arbitration. A copy of the Order dated 12.08.2015 is annexed hereto and marked as **Annexure P-8**

26. Pursuant to the Order dated 12.08.2015, the Petitioner filed Claim Petition No. 1 (relating to Petition No. 65 of 2013) and Claim Petition

No. 2 (relating to Petition No. 33 of 2015) before the Arbitral Tribunal.

27. On 10.04.2017, the Arbitral Tribunal passed unanimous awards in both claims in terms of which:-

(a) Some of the Claims in Petition No. 65 of 2013 were allowed and SCOD extended from 04.01.2010 to 25.06.2014.

(b) The Claims in Petition No. 33 of 2015 were allowed and SCOD extended from 24.08.2014 till COD was achieved.

Copies of the Arbitral Awards in Claim Petition Nos. 1 and 2 are annexed hereto and marked as **Annexure P-9 (Colly.).**

C. Commissioning of the Project

28. On 08.12.2015, this Hon'ble Commission passed an Order in Petition Nos. 65 of 2013 and 33 of 2015 allowing the Petitioner to procure coal from alternate sources to supply power once the Project was commissioned. A copy of the Order dated 08.12.2015 is annexed hereto and marked as **Annexure P-10**.

29. Pursuant to the aforesaid Order, the Petitioner declared COD of Unit 1 on 06.04.2016 and Unit 2 on 16.04.2016 using coal allocated to the Project for commissioning activities from Eastern Coal Fields and Central Coal Fields. Copies of the letters sent to the Respondent intimating declaration of COD and PSPCL's acceptance thereof are annexed hereto and marked as **Annexure-11 (Colly.)**.

IV. Capital Cost of the Project

30. It is submitted that this Hon'ble Commission had vide its order dated 29.04.2008 in Petition No. 4 of 2007 granted in principle approval for the capital cost as Rs. 2,622.48. In terms of the said order, this Hon'ble Commission had held that the in principle approval was only a guiding factor and that the tariff would be based on the final project cost. The operative part of the Order dated 29.04.2008 is reproduced below:

> *"Regulations 20 and 37 of the Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2005 stipulate that in determining the cost of generation, the principles and methodologies specified by the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 (Regulations) are to be kept in view.*

Regulation 5 (3) of the latter Regulations provides that a generating company may make an application for determination of provisional tariff in advance of the anticipated date of completion of the project, based on capital expenditure actually incurred up to the date of making the application, duly audited and certified by the statutory auditors. Regulation 17 further provides that the actual expenditure incurred on completion of a project shall form the basis for determination of final tariff. The second proviso to Regulation 17 lays down that any person intending to establish, operate and maintain a generating station may make an application before the Commission for 'in principle' acceptance of the project capital cost and financing plan before taking up the project. The third proviso further provides that where the Commission has given 'in principle' acceptance to the estimates of project capital cost and financing plan, the same shall be the guiding factor for applying a prudence check on the actual capital expenditure. Evidently these provisions have been incorporated so as to reduce uncertainty regarding tariff on completion of a project which will help investors in achieving financial closure of the project.

In its Order dated 20.11.07, the Commission observed that one of the prayers of the petitioner relates to approval of the estimated project cost and considered it as a request for 'in principle' acceptance of the estimated capital cost and financing plan which is covered under the provisions of Regulation 17, referred to above. A careful perusal of this Regulation makes it apparent that 'in principle' acceptance to the estimates of project capital cost by the Commission has to be based on upto date supporting data so that the cost determined is as close as possible to the project cost finally incurred. This is specially relevant as this cost is to be the guiding factor for applying a prudence check on the actual capital cost with the latter having a direct bearing on the tariff to be determined. With a view to obtaining information of the project as required by this Regulation, the Commission sought further inputs from the petitioner who has, accordingly, submitted additional filings."

31. The Hon'ble Tribunal vide its judgment dated 08.04.2009, revised the in principle Capital Cost to Rs. 2,963.8 crores subject to the adjustments in the final value of the BTG contract with BHEL, and the USD and Euro component therein. The final cost of BTG contract was INR 1213.39 Crores and accordingly the final approved cost of the project computes to INR 3076.2 Crores. In terms of the said Judgment, the in principle capital cost was only an indicative assessment and the tariff would be based on the completed capital cost subject to prudency check.

32. It is submitted that thereafter, the capital cost has increased on account of the force majeure events as well as delay in commissioning which have been allowed by the Arbitral Award. The completed cost of the Project is **Rs.4,368.33 Crores.** The completed capital cost includes the expenses incurred till 31.03.2017 and also the amount provisioned to be incurred up to 31.03.2018 in accordance with Regulation 14 of the CERC Terms & Conditions of Tariff Regulations, 2014.

33. The completed cost of the project is an outcome of the four cost overruns during the construction period. The cost overruns and the corresponding revised projects costs are as under:

(a) Initially the Project Cost was approved by the Lenders – Rs. 2,400 Crores

(b) First cost overrun: INR 800 crores

(c) Second cost overrun: INR 122 crores

(d) Third cost overrun: INR 451 crores

(e) Fourth cost overrun: INR 200 crores

In all the final Project Cost approved by the lenders with SCOD in April, 2016 is Rs. 4,773 Crores.

The lender's independent engineer **("LE")**, Lahmeyer International (India) Private Limited approved all the above cost overruns after conducting appropriate due diligence of the basis of the increase in project cost as submitted by the Petitioner.

It may further be noted that the completed project cost is INR 4,383.54 crores as on the date of COD of the Plant which is 16.04.2016 and reflected in the Accounts for the FY ended 31.03.2017 which is lower than the cost approved by LE. This is because the approved costs were estimates as per the conditions prevailing then whereas the actual expenses incurred during the construction period was lower than the estimates. Also, some works are yet to be executed and the expenses towards these works have been included in the provisions for the ensuing financial year.

While the first cost overrun is mainly due to revisions in the scope of work of the BoP and Non-EPC contracts, the second, third and fourth costs overruns are primarily on account of increase in IDC and pre-operative expenses. The copies of the due diligence reports prepared by the Lender's Engineer, Lahmeyer International (India) Pvt Ltd. are annexed hereto and marked as **Annexure P-12 (Colly.)**.

34. The summary of delays which have affected the Project are set out below:-

Table-2: Summary of Delays

S. No.	***Force Majeure Event***	***Start Date***	***End Date***	***Time over run***	***Allowed by Arbitral Tribunal***
1	Poor Soil conditions requiring vibro compaction	04.01.2010	22.07.2011	Effective delay is 6 months	Yes
2	Shortage of aggregates	17.05.2010	31.12.2010	Effective delay about 4 months	No
3	Supply of BHEL materials	18.02.2010	25.09.2013	Effective delay 8 months delay	No
4	Increase in number of bays from 4 numbers to 6 numbers	06.09.2010	Construction completed - 20.09.12. Commissioning pending due to non-availability of transmission lines to be provided by the Procurer	Effective delay about 6 months	No
5	Railway corridor land	25.05.2010	09.02.2013	33 months 15 days	Yes

S. No.	***Force Majeure Event***	***Start Date***	***End Date***	***Time over run***	***Allowed by Arbitral Tribunal***
6	**Railways approval (Goindwal Project Site)**				
A	DPR	29.07.2009	05.05.2011	19 Months	No
B	ESP	16.06.2011	22.02.2012	5 Months	No
C	SIP Drawing	05.07.2012	24.07.2013	9 Months	No
D	Station building drawing	20.06. 2012	24.02.2014	17 Months	No
E	Land Licensing Agreement	16.03.2012	23.01.2014	19 Months	Yes
7	**Railways approval(Tokisud Coal Mine Site Railway Siding)**				
A	ESP	22.09.2009	11.05.2011	16 Months	
B	Box Culverts Drawing	04.01.2012	22.02.2013	10 Months	No
C	SIP Drawing	08.07.2012	21.11.2012	1 Months	No
D	Station Building	17.08.2012	10.05.2013	6 Months	No
E	Cost Estimates	12.03.2012	11.12.2013	18 Months	No
Tokisud Land					
8	Land License Agreement	18.05.2011	25.06.2014	34 Months	Yes
9	CA land of 271.66 Acres acquired in Giridh District, Jharkhand	03.11.2009	12.06.2013	Effective Delay 24 Months	Yes
10	CA land of 99.67 Ac. Acquired in Hazaribagh District,	22.03.2011	18.09.2013	Effective Delay 24 Months	Yes

S. No.	*Force Majeure Event*	*Start Date*	*End Date*	*Time over run*	*Allowed by Arbitral Tribunal*
	Jharkhand				
Fuel Supply Related Delays					
11.	Cancellation of the captive coal block	24.09.2014	01.02.2016	Effective Delay 15 Months	Yes

35. The summary of increase in capital cost is set out below:-

TABLE -3: Summary of increase in capital cost

Sl. No.	Item	Original estimate of GVK at the time of submission of Petition	Approved by PSERC	Approved by APTEL	Expenses incurred till COD of the Project i.e. 16.04.2016
1.	Land	75.61	109.35	109.35	123.77
2.	Rehabilitation & resettlement	5.00	5.00	5.00	-
3.	Prelim expenses (investigation and site development)	0.25	0.25	0.25	0.25
4.	Boiler-Turbine Generator Package	857.50	1,070.58 (including Taxes & Duties)	1,070.58 (See Note-1)	1,166.48
5.	Balance of Plant	444.87	1,005.00 * (including Taxes & Duties)	955.00 (See Note-2)	927.40
6.	Engineering, erection, civil works	624.13	Included in BTG BOP contracts	Included in BTG BOP contracts	Included in BTG / BOP contracts
7.	Taxes & Duties	245.52	Included in BTG BOP contracts	Included in BTG BOP contracts	Included in BTG / BOP contracts
8.	Recommended Spares under	During the course of	Included in BTG and BOP	39.65	13.79

Sl. No.	Item	Original estimate of GVK at the time of submission of Petition	Approved by PSERC	Approved by APTEL	Expenses incurred till COD of the Project i.e. 16.04.2016
	BTG and BOP Package	proceedings provided relevant clarifications & requested for approval of Rs. 39.65 Crores	Contracts		
9.	Non EPC (including site grading & Ash pond, payments to Railway Contractor)	86.00	86.00	86.00	337.31
10.	Site grading & Ash pond		-	49.00	Included as part of Non EPC in point (9)
11.	Start-up Expenses	15.00	Set off against sale of infirm power	15.00	71.29
12.	Power & water for construction	12.00	Included in BTG & BOP contracts and Non EPC works	12.00	Included as part of Pre-operative Expenses in point (14)
13.	Consultancy & engineering	7.50	7.50	7.50	Included as part of Pre-operative Expenses in point (14)
14.	Pre-operative expenses	50.00	15.00	50.00	279.69
15.	Operator training & mobilization	5.00	5.00	5.00	Included as part of Pre-operative Expenses in point (14)
16.	Insurance	11.44	11.44	11.44	Included as part of Pre-operative Expenses in

Sl. No.	Item	Original estimate of GVK at the time of submission of Petition	Approved by PSERC	Approved by APTEL	Expenses incurred till COD of the Project i.e. 16.04.2016
					point (14)
17.	Capital Cost excluding IDC, Financing Charges & Contingency	2,439.82	2,315.12	2,415.77	2848.70
18.	Interest During Construction	365.19	286.36	365.19 (See Notes 3 & 4)	1,474.84
19.	Financing charges	70.00	16.00	70.00	31.99
20.	Contingency	66.85	5.00	66.85	28
21.	Estimated Project Capital Cost excluding WCM	2,941.86	2,622.48	2,917.81	4,383.54
22.	Working Capital Margin	46.00	Pass through in tariff	46.00	107.52
23.	Estimated Project Capital Cost	2,987.86	2,622.48	**2,963.81#**	**4,491.06**

Notes:

*# It may please be noted that APTEL had approved the project cost of INR 2963.81 Crores subject to the adjustments in the final value of the BTG contract with BHEL, and the USD and Euro component therein. The final cost of BTG contract was **INR 1213.39 Crores** and accordingly the final approved cost of the project computes to **INR 3076.2 Crores**.*

V. Legal Framework

36. It is submitted that the tariff for the Project is to be determined under Section 62 read with Section 86(1)(b) of the Electricity Act. Moreover, in terms of the Restated PPA, the tariff is to be determined by this Hon'ble Commission. This Hon'ble Commission has issued the Punjab State Electricity Regulatory Commission (Terms and Conditions

for Determination of Tariff) Regulations, 2005 ("**PSERC Tariff Regulations**"). The following provisions of the PSERC Tariff Regulations are relevant for the present petition:-

(a) Regulation 4 in terms of which this Hon'ble Commission will be guided by the principles set out in Section 61 of the Electricity Act while determining tariff.

(b) Regulation 20 in terms of which this Hon'ble Commission shall be guided by the principles and methodologies of the Hon'ble Central Electricity Regulation Commission ("**Central Commission**").

(c) Regulation 37 in terms of which the components of generation tariff shall be as laid down in tariff regulations issued by the Central Commission.

37. It is submitted that in light of the foregoing, the tariff is to be determined in accordance with the CERC (Terms & Conditions of Tariff) Regulations, 2014. The following provisions are relevant:-

(a) Regulation 9 in terms of which the capital cost shall, *inter alia*, include:-

   i. expenditure incurred up to COD.

   ii. Interest during construction and financing charges on loans.

   iii. Increase in cost of contract packages as approved by the Commission.

   iv. Interest during construction and incidental expenditure including such additional amounts incurred due to delays beyond the control of the generating company.

(b) Regulation 11 in terms of which increase in interest during construction and incidental expenditure on account of factors beyond the control of the generating company is to be allowed as part of capital cost subject to prudency check.

(c) Regulation 12 in terms of which force majeure and change in law have been treated as uncontrollable factors.

38. In light of the foregoing, it is submitted that the Petitioner is entitled to:-

(a) Actual expenditure incurred as on COD.

(b) Interest during construction and incidental expenditure including pre-operating expenses including such amounts which it has incurred for reasons beyond its control.

VI. Capital Cost Components

A. <u>Increase in Cost of Land</u>

39. There has been an increase of Rs. 14.42 Crores in the cost of land on account of:-

(a) Acquiring land for the railway siding and water pipeline; and

(b) Acquiring land in the main project area in order to ensure that land was contiguous.

The increase in cost is set out below:-

Item	**APTEL Approved (2009) (INR Cr.)**	**Actuals (INR Cr.)**	**Cost Overrun (INR Cr.)**
Land	109.35	123.77	14.42

40. The Petitioner has acquired 1114.13 Acres. Out of the said extent, 715 acres of land was designated for the main project area whereas the balance 359.73 acres was for the expansion project proposed at the time of obtaining in principle approval.

41. The Petitioner purchased 54 acres of land (being part of the main plant area) at a cost of INR 2.60 Crores, in the year 1999. The remaining extent of land admeasuring 1051 Acres, 9 Kanals and 29 Marlas was awarded to the Petitioner by the Government of Punjab by means of two Awards issued under the Land Acquisition Act, 1894 dated 12.08.2008 and 15.07.2011 respectively. Copies of the said Awards are attached herewith as **Annexure P-13 (Colly)**.

42. On 29.04.2008, the Hon'ble Commission passed an Order allowing only an extent of land admeasuring 715 Acres for setting up of the Project. The Petitioner is not claiming the cost of additional land demarcated for the expansion project.

43. It is submitted that 715 acres of land does not include the land required for developing water pipelines and Railway siding which was an additional 37.987 acres. The water pipeline and railway siding are essential components of the Project.

44. The land admeasuring 37 Acres, 7 Kanals and 18 Marlas for the railway siding and the water pipeline was acquired by Government of Punjab vide the abovementioned Award dated 15.07.2011**.**

45. The District Level Price Fixation Committee held a meeting under the Chairmanship of the Deputy Commissioner, Tarn Taran District for fixing the rates of the land being acquired for the Project. The rates have been duly approved by the Government of Punjab vide letter no. 10/268/06-PB/6-4146 dated 30.12.2010. The total value of the said land comes out to **INR 12.1 Crores**. The detailed breakup of the price and area of the land is presented in the table below:

Table 1

S. No.	Village	Acres	Kanals	Marlas	Price (INR/Ac.)	Total Cost in INR Cr.
1.	Khadur Sahib	18	6	17	25,00,000	6.67
2.	Hansawala	1	3	4	20,00,000	0.40
3.	Hothian	12	3	17	20,00,000	3.53
4.	Biharipur	5	2	0	20,00,000	1.49
Total		**37**	**7**	**18**	**-**	**12.1**

46. Although the land award came in July 2011, the Petitioner received the Land Possession Certificate only on 03.04.2013. This delay was caused because the farmers of the villages namely Hansawala, Hothian and Biharipur had demanded parity in terms of the price of land as that of the Khadur Sahib village. For this, the Petitioner had to make an additional payment of **INR 1.35 Crores** on 08.06.2012 and INR 60,000 on 05.10.2012. Proof of additional payments of Rs. 1.35 Crores and Rs. 60,000 respectively made by the Petitioner are annexed hereto and marked as **Annexure P-14.**

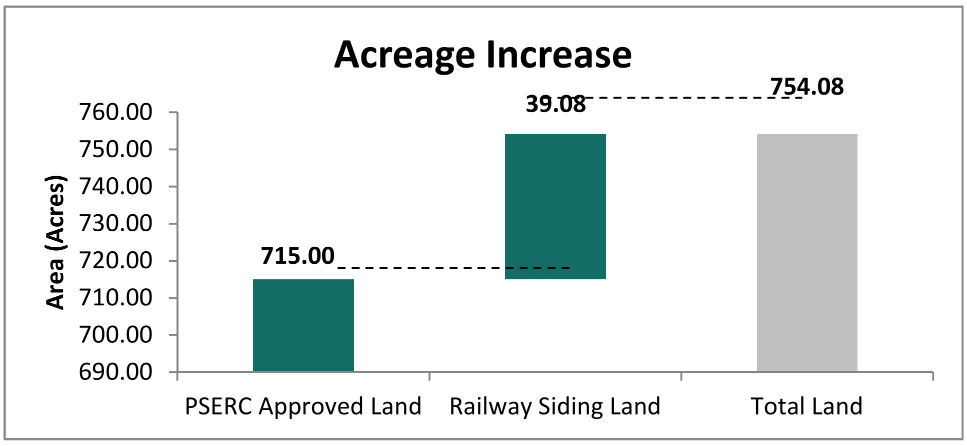
47. Apart from the above costs, the Petitioner had directly purchased 6.73 Acres and 1.09 Acres of land which was missing in the award for main plant and railway siding respectively. This land was acquired so as to have a contiguous land for the Project to avoid any interruptions from the farmers at a later stage such as seeking right of way for water pipelines etc. A total of **INR 1.4 Crores** was incurred towards the purchase of this land.

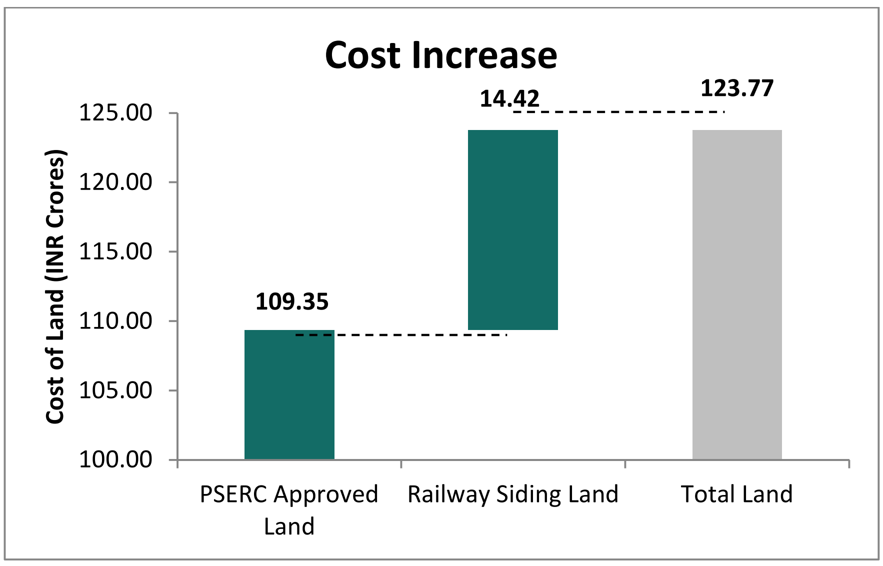
48. The table below shows a comparison of the originally approved and actual acreage and cost. The detailed breakup of the cost and area of land purchased is available at Annexure P-13 (Colly).

Table-2: Cost and Acreage increase in Land

S. No.	**Item**	**Area (Acres)**		**Cost (INR Crores)**		
		APTEL approved (2009)	**Actuals**	**APTEL approved (2009)**	**Actuals**	**Overrun**
1.	Main plant land	715.00	715	109.35	109.35	0
2.	Railway Siding and water corridor land	0.00	39.08	0.00	14.42	14.42
Total		**715.00**	**754.08**	**109.35**	**123.77**	**14.42**

49. The itemized increase in the acreage and the cost of the land procured has been represented graphically in the figures below:





50. The cost overrun in relation to land is towards the land acquired for the railway siding, water pipeline and contiguous land. It is prayed that this expenditure be allowed.

B. <u>Increase in the cost towards Non-EPC Works</u>

Item	APTEL Approved (2009) (INR Cr.)	Actuals (INR Cr.)	Cost Overrun (INR Cr.)
Non-EPC Works (including site grading & Ash pond, payments to Railway Contractor)	135.00	337.20	202.20

51. A sum of INR 135 Crores has been approved by the Hon'ble APTEL under this head. The breakup of the original cost allotment and the corresponding cost overrun has been summarized in the table below:

Table 3

S. No.	Item	APTEL Approved (2009) (INR Cr.)	Actuals (INR Cr.)	Cost Overrun (INR Cr.)
1.	Site grading	21.94	63.62	41.68
2.	Ash pond bund	34.24	48.83	14.59
3.	Residential colony	35.03	61.08	26.05
4.	Railway siding of power plant and payment to railways	15.04	103.33	88.29
5.	Compound wall, pump house, fire station etc.	10.86	10.87	0.01
6.	Workshop, storage shed, security office etc. (Site development works)	8.58	18.60	10.02
7.	Administration building	0.98	0.98	0.00
8.	Green belt	2.03	2.03	0.00
9.	Plant Enabling work and other Miscellaneous work	6.31	6.31	0.00
10.	Service building	-	19.04	19.04
11.	Vibro-compaction	0	2.51	2.51
Total		135.00	337.20	202.20

52. The cost overrun in the non-EPC works has been mainly because of increase in scope of work. The details of the increase in cost under each head is described in the following sections:

Site grading

53. A provision of INR 21.94 Crores was made in original project cost towards site grading work for estimated quantities of two million CuM at

unit rate of Rs.130 per Cum. PLL appointed Cengrs Geotechnica Pvt. Ltd. as the geotechnical engineering consultant for the Project. Due to poor soil condition in the Project area, vibro-compaction method was suggested by the geotechnical consultant to prevent liquefaction. Vibro-compaction was carried out in main plant and non-plant area. It resulted in settlement of soil by about 1.2 m to 1.75 m in various areas which in turn increased the site grading work.

Table 4

S. No.	Particulars	Original	Revised
1.	Rate (INR / CuM)	130.00	130.00
2.	Quantity (Mn. CuM)	2.00	5.80
3.	Vibro-compaction (INR Cr.)	0.00	2.51
Total (Lump sum amount) in INR Crores		**21.94**	**66.13**

54. Since poor soil condition has been held to be a force majeure event, the increase in cost of site grading being a direct consequence of such event ought to be allowed.

Ash Pond Bund

55. Initially the project envisaged construction of ash pond bund of 10 m in height and 56 m in bottom width. The ash pond bund height was kept same but the bottom width was increased from 56 m to 64 m. The bund base width had to be increased due to poor bearing capacity of the existing soil strata of bund area. The pond area was also increased due to return water pond and settling ponds. Some part of the bund area was removed and refilled due to poor soil condition. Further, the LDPE lining area was increased due to increase in bed area and side slopes, lining in still pond and return water pond. The breakup of cost originally approved and finally incurred is as shown below:-

Table 5

S. No.	Particulars	Original			Revised		
		Unit Rate (INR / Unit)	Quantity. (Units)	Cost (INR Crores)	Unit Rate (INR / Unit)	Quantity. (Units)	Cost (INR Crores)
1.	Bund work (CuM)	130	1,200,000	15.60	130	1,889,000	24.56
2.	Ash pond LDPE Lining (Sq. Mt.)	350	630,000	22.05	350	868,500	30.40
3.	Rock Toe (CuM)	2500	11,700	2.93	2500	11,700	2.93
Total Cost (Less discount @ 15.625%) in INR Cr.		**34.24**			**48.83**		

Residential Colony

56. The cost of township was originally estimated at INR 35 Crores. This was awarded on arms length basis as reviewed and opined by the LE. Though the work has been awarded on fixed priced basis to GPTSL, the Petitioner has approved revision of unit rate for township work due to the following reasons:

(a) Increase in foundation cost as it had adopted (G+1) structural configuration (against (G+2) proposed earlier) on account of poor soil condition,

(b) Increase in steel & cement price,

(c) Increase in cost of sand & Hard Broken Granite material (used for foundation work) as Punjab Government has imposed ban on local quarrying; and

(d) Overall increase in construction cost.

57. The details of original and revised rate for major township work are as under:

Table 6

S. No.	Particulars	Unit	Quantity (Units)	Original Rate (INR / unit)	Revised Rate (INR / unit)	Cost Overrun (INR Crores)
1.	Colony (G + 1)	Sq. Mt.	17,193	17,000	27,350	15.02
2.	Electrical works in colony buildings	Units	183	120,000	212,000	1.42
3.	Colony electrical supply, distribution system	Lump sum		2,500,000	31,250,000	2.43
4.	6.6 kv/415v Transformer	Nos	2.00	200,000	1,120,000	0.16
5.	Building for incoming and outgoing feed panels	Sq. Mt.	139.41	12,000	38,450	0.31
6.	Water supply and Sewage system for colony supporting 100 KL capacity	KL	100	50,000	308,750	2.19
7.	Colony roads with 7m Width	Sq. Mt.	56,000	1,500	2,075	2.71
8.	Colony covered parking area	Sq. Mt.	1,500	1,500	6,675	0.65
9.	Street Lighting	Nos.	60	85,000	315,000	1.17
Total Cost Overrun (Lump-sum)						**26.05**

Plant side Railway Siding and Payment to railways

58. As per original construction plan, to handle three rakes per day, it was proposed to lay seven lines (aggregating to 7.5 km) in the plant yard and lead line of about 3.75 km outside the plant boundary. Accordingly, the cost of railway siding was estimated at **INR 15.04 Crores** (2009 price level) which included cost of survey, earthwork,

blanketing material, cost of laying lead line & tracks inside plant yard etc. However, on account of various force majeure events, the cost incurred by the Petitioner towards development of the railway siding at the plant increased to **INR 103.33 Crores**.

59. The contractor / sub-contractor were unable to commence the railway siding work due to delay in receipt of possession of land required for lead track and approvals from Railways. This has been held to be a force majeure event.

60. Since the work was delayed, there was an increase in construction cost which necessitated revision of rates agreed in the work order with GPTSL. Further, due to non-availability of suitable grade material in Punjab, blanketing material was sourced from nearby states viz. Jammu & Kashmir and Himachal Pradesh. The main heads under which the Petitioner had to incur additional expenses are described in the sub-sections listed below:

Construction of Lead Line

61. The cost of railway siding, at the time of original appraisal, included cost of grading material, earthwork, broad-gauge lead track of 3.52 km length, service road etc. was approved to the extent of INR 5.32 crores. The length of the lead line 5.4 km included 3.75 km outside the plant boundary and balance 1.65 km inside the plant boundary up to railway Weigh Bridge. Further, the lead line was coming in about 10 meter deep cutting near the plant boundary. The gradient of 1 in 150 approved by Railways increased the cutting area and length of lead line. Due to uniform sandy strata, RCC retaining wall was constructed at both sides of rail track. The farmers who had parted with the land demanded additional structures in lead line like service road, culverts, siphons, drain pipes etc. Consequently, the cost of constructing lead line has increased on account of i) increase in length of lead line from 3.52 km to 5.4 km, ii) increase in sleeper density from 1540 per km to 1660 per km as stipulated by railways, iii) construction of retaining wall, iv) increase in cost of blanketing material, v) construction of additional structures in lead line such as service road, culverts, siphons, drain pipes etc., as insisted by the farmers who had parted with the land and vi) increase in overall cost due to delay in commencement of railway

siding work. The broad break-up of increased cost is as shown in the table below:

Table-7: Construction of Lead Line at Railway Siding

S. No.	Particulars	Increased Cost (INR Crores)
1.	Blanketing material	9.40
2.	Earthwork	7.30
3.	Laying of track of about 5.4 km	8.40
4.	Retaining wall	7.10
5.	Provision of road diversion	0.60
6.	Other associated work	2.70
7.	Total cost of Lead Line Less : post discount @ 15.625% rounded off to	35.3 9 5.53
Increase in the cost of construction of lead line (INR crores)		**29.86**

Development of Khadur Sahib Railway Station

62. In terms of Railways approval dated 05.05.2011, entire capital cost of the new crossing station including staff quarters, loop lines, signaling, electrification and other infrastructure was to be borne by the Petitioner.

63. The Khadur Sahib station had only a main line and no loops were available for the purpose of crossing / stabling of rakes. The Northern Railways, while approving the DPR, stipulated conversion of the Khadur Sahib station into a three lines block station and mandated construction of **nine** lines inside the plant of various lengths aggregating to **9.02 km**, with simultaneous reception & dispatch facilities and construction of rail level platforms. In terms of the Railways approval dated May 5, 2011, entire capital cost of the new crossing station including staff quarters, loop lines, signaling, electrification and other infrastructure was to be

borne by the Petitioner.

64. The cost incurred in the development of Khadur Sahib Railway Station which was not envisaged in original construction plan is **INR 38.81 Crores**. The broad break-up of cost is as under:

Table-8: Development of Khadur Sahib Railway Station

S. No.	Particulars	Cost incurred (INR Crores)
1.	Blanketing material	3.20
2.	Laying of track of about 3.8 km	8.70
3.	Supply and laying of Signaling & Telecommunication System	11.20
4.	Station building & quarters	1.90
5.	Railway Colony	9.60
6.	Other miscellaneous work	4.40
Total		**38.81**

Payment to Railways

65. The Petitioner has remitted a sum of **INR 26 Crores** to Indian Railways for notification of the Khadur Sahib Railway Station and also for facilitating "Y" connection from the main line at Khadur Sahib Railway Station as per the agreement with Railways. This amount also includes an amount of **INR 24 Crores** paid by the Petitioner towards the deployment of manpower and maintenance as demanded by the Railways. The said amount is equivalent to a year's salaries of the personnel deployed and the estimated annual maintenance cost of the railway siding.

Table-9: Payment to Railways

S. No.	Particulars	Cost incurred (INR Crores)
1.	Codel Charges paid against ROB @ 2% on estimated cost	0.56
2.	Cost of deployment of manpower &	23.93

S. No.	Particulars	Cost incurred (INR Crores)
	Maintenance as per the demand from Railways	
3.	Cost of vehicles, plotters, computers and other equipment provided to Railways	0.29
4.	Electricity connections required for railway operations	0.03
5.	Monthly electricity charges till handing over of Railway Line	0.05
6.	Others	0.06
Total		**24.92**

Service Building

66. Originally the cost of service building of INR 36.88 Crores was included in the scope of works entrusted to the BoP contractor i.e. Punj Lloyd (PLL). During the course of implementation, it was excluded from the scope of PLL and awarded to GPTSL for **INR 19.04 Crores**, which resulted in the increase of the non-EPC cost but an overall savings of INR 18 Crores in the project cost.

Site Development Works

67. Apart from the above mentioned costs incurred by the Petitioner, there have been additional expenses which, inter alia includes miscellaneous expenses towards plant enabling works. The Plant enabling works included 7 meters wide plant roads to facilitate the movement of the site grading vehicles as the site is a sandy and very loose terrain, digging of trap drain along the western boundary of plant about 5 km to divert the surface run-off from the existing villages of Hanswala, Hotian and Pindian, storm water discharge pipeline work, hydrogen shed works and dozer shed works The total additional cost incurred by the Petitioner as against that approved by the Hon'ble APTEL in 2009 is **INR 10.52 Crores**.

S. No.	Particulars	Cost incurred (INR Crores)
1.	Plant Roads 7 mts wide	7.53
2.	Storm water Discharge Pipe Line Work	2.50
3.	Hydrogen Shed works	0.21
4.	Dozer Shed works	0.28
Total		**10.52**

68. The Petitioner, therefore, humbly requests the Hon'ble Commission to approve the above mentioned additional expenditures in full as the entire cost overrun has happened on account of either increase in the scope of work or increase in the unit rate due to the events which were beyond the control of the Petitioner.

C. <u>Increase in Preliminary and Pre-operative Expenses</u>

Item	APTEL Approved (2009) (INR Cr.)	Actuals (INR Cr.)	Cost Overrun (INR Cr.)
Prelim and Pre-operative expenses	105.94	266.30	160.36

69. The preliminary and pre-operative expenses mainly include the costs incurred towards salaries and wages of the employees, administrative expenses, operator training & mobilization, start-up fuel requirement, power & water for construction, consultancy & engineering services and insurance. This increase in preliminary & pre-operative expenses is due to the time and cost overrun of the Project which was on account of Force Majeure and Change in Law events. Since the Petitioner's claim for extension of SCOD has been granted, these expenses ought to be allowed. The cost overrun associated with each of the said heads is as shown in the table below:

Table 10

S. No.	Item	APTEL Approved (2009) (INR Cr.)	Actuals (INR Cr.)	Cost Overrun (INR Cr.)
1.	Salaries, Wages and Admin	50.00	163.59	113.59
2.	Rehabilitation & Resettlement	5.00	5.00	0.00
3.	Operator training & mobilization	5.00	5.00	0.00
4.	Start-up Expenses	15.00	31.64	16.64
5.	Power & water for construction	12.00	32.57	20.57
6.	Consultancy & engineering	7.50	12.13	4.63
7.	Insurance	11.44	16.37	4.93
Total		**105.94**	**266.30**	**160.36**

70. The cost overrun in the prelim and pre-operative expenses has been both on account of time overrun as well as increase in the unit rates of the components involved. The details of the cost increase are presented in the following sections:

Pre-operative Expenses

71. The pre-operative expenses include the salaries and wages of the employees, administrative expenses and expenses incurred towards operator mobilization and training. The Hon'ble APTEL vide its order dated 08.04.2009 had allowed the originally envisaged cost of INR 55 Crores in full.

72. The cost overrun in the pre-operative expenses is due to extra salaries and allowances that the Petitioner had to pay for the time

overrun period of 45 months. The delay and associated cost being beyond the control of the Petitioner, hence it is requested to the Hon'ble Commission to approve the Pre-operative expenses in full.

Start-up Fuel Expenses

73. APTEL vide its order dated 08.04.2009 had allowed the Start-up Expenses as requested by the Petitioner amounting to INR 15 Crores, required for the purchase of oil required for synchronization to the grid and coal required at the time of commissioning.

74. A provision of INR 15 Crores was made in original Project cost towards start-up fuel expenses.

75. The coal and secondary fuel requirements declared at the time of original appraisal were only estimates / provisional in nature. Due to the delay in the operations of the Tokisud coal mine, the Petitioner had requested Ministry of Power (MoP) to allocate coal for testing and commissioning activities, for which MoP had requested Ministry of Coal (MoC), vide its office memorandum dated July 24, 2013, for allocation of 1.5 lakh MT of coal (0.5 lakh MT of carpet coal and 1 lakh MT of start-up coal) for testing and commissioning of first unit of Goindwal Sahib power project. The competent authority at CIL vide letter Ref. no. CIL/S&M/MOU-Power/40, dated 30.01.2014 had allocated the said amount of coal to the Petitioner for carpeting and trial run.

76. The amount of coal allocated by MoC was not actually provided to The Petitioner at the time of trial run. Consequently, the Petitioner had to procure coal from alternate source. The details of startup expenses and the revenue recovered from sale of infirm power are presented in the table below:

Table 11

S. No.	Item	Actual quantity	Price INR / unit	Total Cost (INR Crores)
1.	LDO (KL)	3,127	52,925.75	16.55
2.	HFO (KL)	2,085	25,156.87	5.25
3.	Coal purchased	72,654.20	5,779.22	41.98

S. No.	Item	Actual quantity	Price INR / unit	Total Cost (INR Crores)
	from CCL (out of the 1.5 L ton allocated coal)			
4.	Coal purchased from Godavari Commodities (to make up the shortfall in allocated coal)	10,675.80	5,970.02	6.37
5.	Expenses incurred due to vessel diversion			1.1
6.	**Total fuel cost**	**-**	**-**	**71.25**
7.	Less: Infirm power recovery	-	-	39.61
Total cost (net of recovery)				**31.64**

Power and Water for Construction

77. APTEL vide its order dated 08.04.2009 had allowed the cost of Power & Water for Construction as INR 12 Crores. At the time of approving the cost in this regard, the Hon'ble APTEL had noted that this is in the nature of actual expenses and will be allowed by this Hon'ble Commission subject to prudency check. It has also been noted by the Hon'ble APTEL that the BTG and BOP packages do not cover the entire expenses for development of infrastructure.

At the time of in principle approval, the cost was taken assuming supply of power under permanent connection. However, PSPCL has billed at the temporary consumer tariff. Further, the energy consumption has increased on account of i) higher dewatering to control water seepages as project site has high ground water table, ii) additional scope of work viz. extra piling, railway siding, coal handling, ash handling area and extended project schedule. Consequently, there is an increase of Rs. 20 Crores in the expenses towards power and water. Since these are in the nature of actual expenses, it is submitted that the same may be allowed. The detailed breakup of the cost of power is presented in the table below:

Table 12

<table>
<tr><th></th><th></th><th colspan="2">Projected at the time of Financial Closure</th><th colspan="2">Actuals Consumption</th></tr>
<tr><th>S. No.</th><th>Description</th><th>Quantity</th><th>Amount (INR Cr.)</th><th>Quantity</th><th>Amount (INR Cr.)</th></tr>
<tr><td>1.</td><td>Receiving substation & distribution network</td><td>66/11/0.4 15 kV</td><td>3</td><td colspan="2" rowspan="4">Actual total amount paid towards power and water during construction</td></tr>
<tr><td>2.</td><td>Energy Cost for Non EPC</td><td>13 Million kWh</td><td>9</td></tr>
<tr><td>3.</td><td>Estimated Energy Cost for balance period</td><td>0</td><td>0</td></tr>
<tr><td>4.</td><td>Start-up Energy Cost to PSEB @ Rs.3/-</td><td>360000 kWh</td><td>0.11</td></tr>
<tr><td colspan="3">Total</td><td>12.11</td><td></td><td>32.57</td></tr>
</table>

78. The actual cost of power and water during the construction period is INR 32.57 Crores. The Petitioner humbly requests the Hon'ble Commission to allow the additional cost of **INR 20.46 Crores** towards Power & Water for Construction in full as part of the Project cost.

Consultancy and Engineering Costs

79. The Hon'ble Commission vide its order dated 29.04.2008 had allowed the cost of Consultancy & Engineering at INR 7.50 Crores. However, due to the increase in manpower cost etc., Tata Consulting Engineers Limited (the owner's engineer) has increased the manpower cost along with the number of people required for the said Project. This

also includes the Service Tax payable on the same. Thus the revised cost of consultancy & engineering is **INR 12.13 Crores**. The work orders dated 28.09.2007 issued to TCE Consulting Engineers Limited, the Owners' Engineer is attached hereto and marked as **Annexure P-15 (Colly.)**. The Petitioner humbly requests the Hon'ble Commission to kindly allow this increased cost of **INR 4.63 Crores** as part of the Project capital cost in full.

Insurance: The CAR policy had to be extended on account of Force Majeure Events and Change in Law from time to time. The COD of the Project was postponed due to the above events. Hence, the policy had to be extended till COD which is a requirement of the lenders. Thus, this overrun on account of the above of Rs. 5.12 Crores may kindly be allowed by the Hon'ble Commission.

D. <u>Increase in Interest during Construction</u>

Item	APTEL Approved (2009) (INR Cr.)	Actuals (INR Cr.)	Cost Overrun (INR Cr.)
Interest during Construction	367.74	1474.84	1107.10

80. The Hon'ble APTEL vide its order dated 08.04.2009 had approved an amount of **INR 365.19 Crores** towards interest during construction as originally submitted by the Petitioner stating that it will be allowed as per the financing documents. Accordingly, the revised approved cost towards IDC computed was **INR 367.74 Crores**.

81. The originally approved Project cost of INR 3,200 Crores was to be funded in a Debt: Equity ratio of 75:25 and the amount of INR 2,400 Crores was borrowed from a consortium of 13 banks, IDBI Bank being the lead lender. Since then, the debt component of the Project has increased from INR 2,400 Crores to INR 3,332.16 Crores till the COD. The debt increase has been financed through a second, third and fourth rupee term loan. The table below summarizes the details for originally approved IDC and actual IDC (consisting of original loan and cost overrun loan):

Table 13: Summary of IDC Overrun

<table>
<tr><th>Particulars</th><th>Original</th><th colspan="2">Actual</th></tr>
<tr><td>Project Cost (INR Crores)</td><td>3200</td><td colspan="2">4383.54</td></tr>
<tr><td rowspan="2">Debt Component (INR Crores)</td><td rowspan="2">2400</td><td>Original Cost</td><td>Cost Overrun</td></tr>
<tr><td>2400</td><td>932.16</td></tr>
<tr><td>Interest Rate (p.a.)</td><td>11.25%</td><td>13.40%</td><td>12.94%</td></tr>
<tr><td>Time (Months)</td><td>36</td><td>72</td><td>30</td></tr>
<tr><td>IDC (INR Crores)</td><td>367.74</td><td>1379.01</td><td>95.83</td></tr>
<tr><td colspan="2">IDC Overrun (INR Crores)</td><td colspan="2">1107.10</td></tr>
</table>

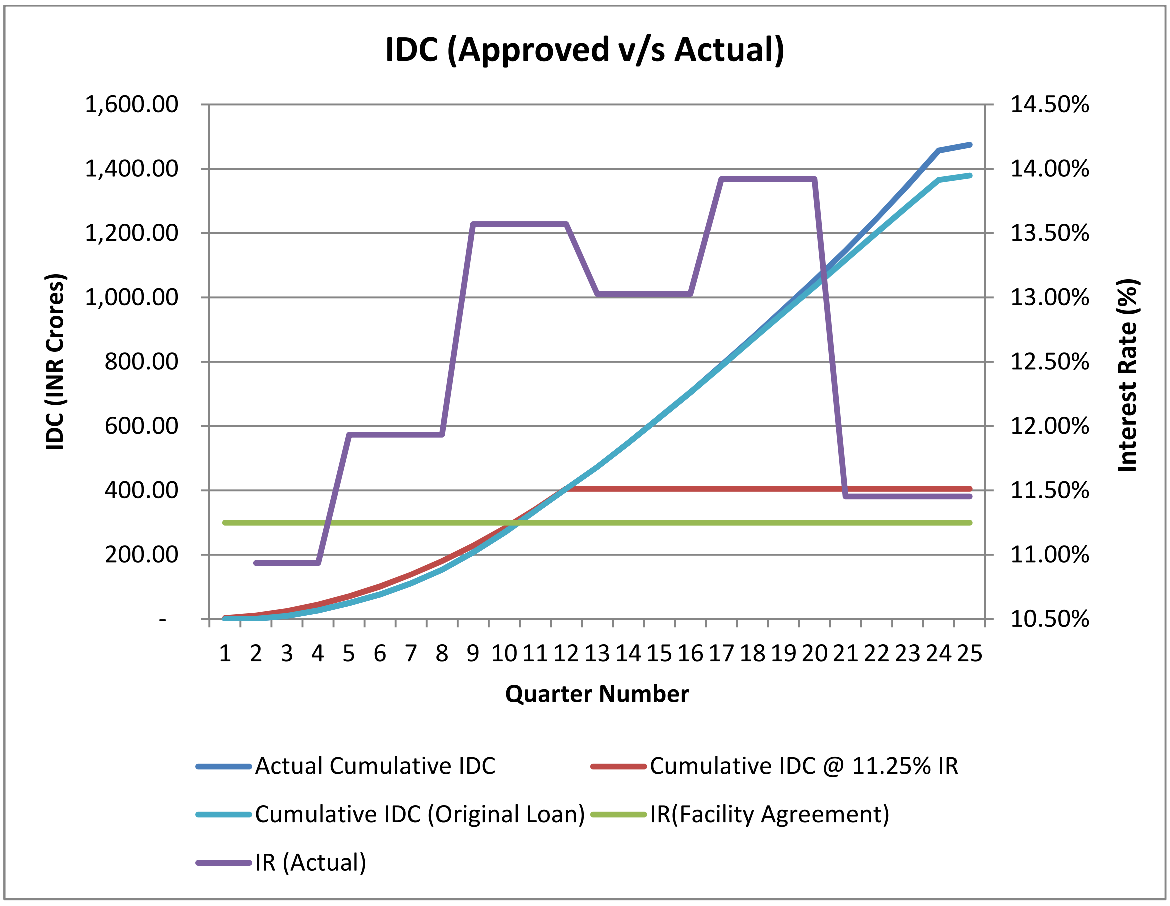
82. As per the Facility agreement dated 01.02.2010, the Interest rate at the time of signing the agreement was 11.25% p.a. It was to be revised on every interest reset date which was fixed as 2nd of February every year. The interest rate, dependent on the prevailing IDBI BPLR / Base rate, underwent a significant variation between the financial closure and the COD of the Project. The interest rate revisions are listed in the table below:

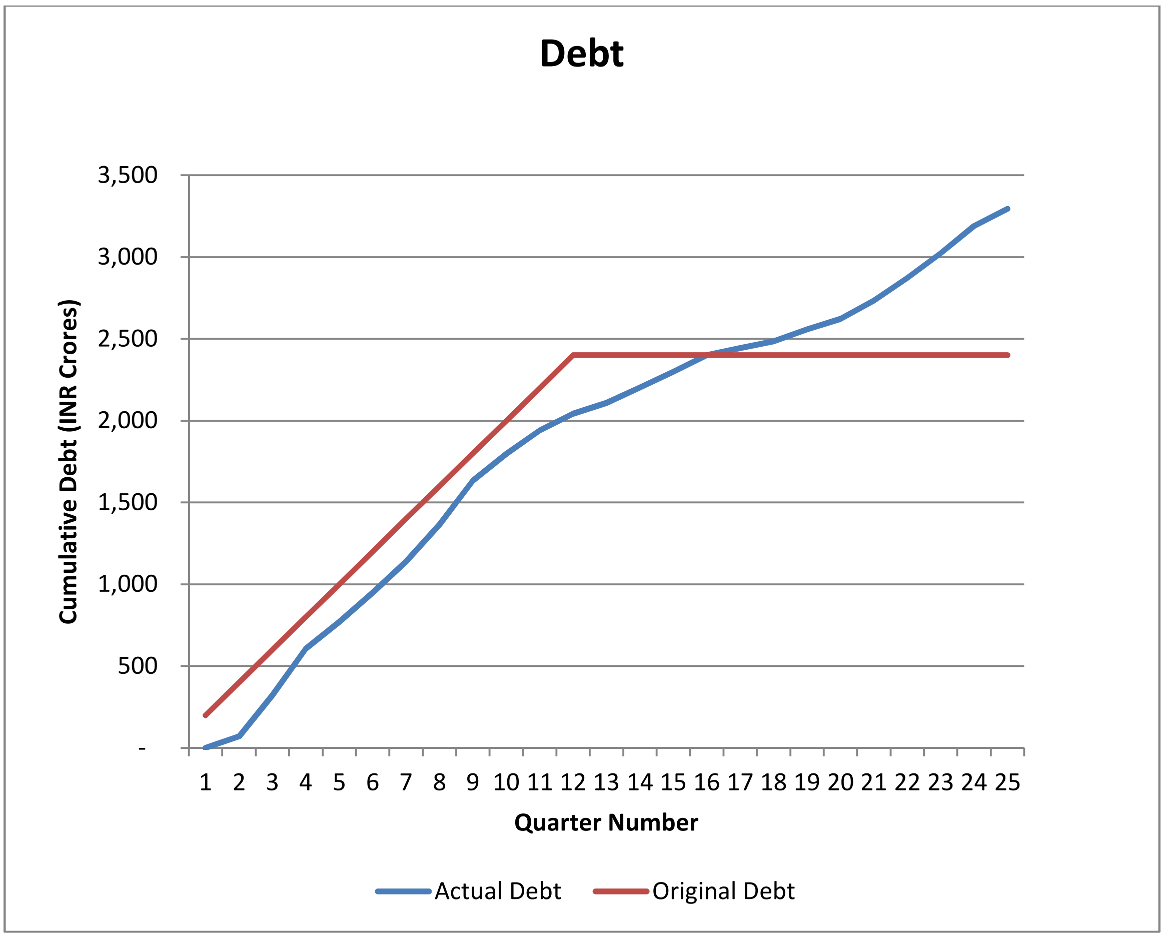
Table 14: Interest Rate variation during Construction Period

Date of Interest Rate reset	Interest rate (p.a.)
Financial Closure	11.25 %
01.02.2011	12.50 %
01.02.2012	13.75 %
01.02.2013	13.25 %
01.02.2014	13.25 %
01.02.2015	13.50 %

83. The following figure shows a comparison of approved IDC versus the actual IDC buildup during the construction period. The approved IDC considers a uniform quarterly drawdown of the debt component of INR

2,400 Crores at a constant interest rate of 11.25% p.a. for a period of 12 quarters (or 36 months which was the scheduled project completion duration). The actual IDC buildup is as per the actual quarterly loan drawdown and IDC amount incurred. The figure below gives the IDC comparison graph compares the original and actual debt drawdown.





84. The key inferences from the above figures are described below:

(a) The IDC buildup for the first 12 quarters (i.e. the original project completion timeline) is similar in case of original and actual project scenarios. The impact of higher interest rates during this period is nullified to some extent by the deceleration in debt drawdown of the project, on account of slow progress of the project.

(b) However, the difference between the actual IDC and original IDC grows sharply after the 12th quarter, indicating the impact of time overrun. The fact that a second loan was taken does not have any impact on the increase in IDC as is evident from the narrow difference in actual cumulative IDC and cumulative IDC (original loan) represented by the blue and dark blue curves.

(c) Thus, there has been significant increase in IDC due to time overrun which is on account of the change in law and force majeure events described in the preceding sections.

85. It can thus be concluded that there has been overrun in the interest during construction due to the delay in achieving COD of the

Project on account of the change in law and Force Majeure events presented in the preceding sections. The time over-run on these counts have been allowed by the Arbitral Tribunal. Therefore, the increase in IDC ought to be allowed.

86. Apart from this delay, there have been fluctuations in the interest rate during this entire construction period which is as per the Facility Agreement. The delay as well the interest rate fluctuations were completely uncontrollable for the Petitioner and hence, the Petitioner requests the Hon'ble Commission to approve the amount of **INR 1474.84 Crores** incurred towards IDC in full.

Tariff proposal

87. It is submitted that in terms of the Tariff Regulations and provisions of explanatory memorandum thereto, the Petitioner is filing the Tariff proposal along with requisite information / details of the Project as prescribed. The tariff formats, duly filled with details regarding Capital Expenditure, estimated Annual Fixed Charges, Energy charges, Generation Tariff are annexed hereto and marked as **Annexure P-16 (Colly)**.

88. The petition is being filed for the period starting from the COD of unit-1 of the project to the end of the current control period i.e. 31.03.2019. Accordingly, the following are the periods under consideration:

(a) COD of unit-1 (05.04.2016) to COD of unit-2 i.e. 16.04.2016.

(b) COD of unit-2 to 31.03.2017

(c) FY 2018 i.e. 01.04.2017 to 31.03.2018; and

(d) FY 2019 i.e. 01.04.2018 to 31.03.2019

89. ***Project cost:*** The Petitioner submits that the total estimated cost of the project up to the cut-off date of 31.03.2019 (considering COD of the project as 16.04.2016) is INR 4496.18 Crores. The facts pertinent to justify the said cost have been detailed in the preceding sections.

90. ***Debt Equity Ratio:*** As mentioned in the preceding section, the financial closure of the Project was achieved in 2010 considering a capital cost of INR 3200 Crores and a debt equity ratio of 75:25.

However, the Petitioner had reported time overrun of about 14 months and an expected COD of April 1, 2014 as against February 1, 2013 envisaged at the time of detailed appraisal. Consequent to this, the project cost was revised to INR 4000 Crores. The COD of the project got further delayed in the later course of time and the project finally achieved COD on 16.04.2016. These delays caused the project cost to increase up to INR 4496.18 Crores. The overall debt to equity ratio at the stage of project completion now stands at approximately 74:26. Accordingly, in terms of regulation 19 of the CERC (Terms and Conditions of Tariff) Regulations, 2014, the actual debt equity ratio has been considered for computation of the normative loan and subsequently the tariff.

91. ***Depreciation:*** The Petitioner submits that Regulation 27 of the Tariff Regulations allows depreciation up to 90% of capital cost of the power plant using straight line method. The gross fixed asset of the power plant for the purpose of depreciation is **INR 4383.54 Crores** (excluding working capital margin money from total project cost). The table below summarizes the category-wise gross fixed asset value and the corresponding depreciation rates as provided in the Appendix-II (Depreciation schedule) of the Tariff Regulations.

Table 15: Depreciation schedule

Asset particulars	Depreciation rate
Land (under full ownership)	0.00%
Building and roads	3.34%
Plant & Machinery	5.28%
Furniture and fixtures	6.33%
Office equipment	6.33%
Computers	15.00%
Vehicles	9.50%
Computer software	15.00%

92. ***Interest on loan capital:*** The Petitioner's project has been funded by a consortium of 13 banks/ institutions, IDBI being the lead

lender. The Petitioner submits that the weighted average rate of interest is 13.19% as on date of filing this petition which has been considered for calculating the interest cost on loan capital for the period between COD of the project and the final year of the control period. The interest expenses have been computed separately for the four different periods of the remaining part of the Control Period as listed above. The repayment of loan for tariff computation purposes is considered on a normative basis i.e. equal to annual depreciation in accordance with Regulation 26 of the Tariff Regulations.

93. ***Working capital and interest on working capital:*** In accordance with Regulation 28 of the Tariff Regulations, the working capital for a coal/ lignite based power project includes the sum of cost of coal/ lignite for 2 months, cost of secondary fuel oil for 2 months, maintenance spares @ 20% of O&M expense, receivables equivalent to 2 months of Capacity Charge and Energy Charge and O&M equal to 1 month. The working capital interest rate applicable to the Petitioner is 12.80% and the same has been considered for calculating the working capital interest outgo. This rate is calculated as SBI Base rate as on unit-1 COD (05.04.2016) plus 350 basis points as specified in the CERC regulations.

94. ***Operation & Maintenance expenses:*** It is submitted that:

(a) The Petitioner's plant is a coal-based power plant

(b) Regulation 29 of the Tariff Regulations stipulates Operation and Maintenance expenses for 200/210/250 MW sets at the rate of INR 27 Lakhs per MW for FY 2016-17, INR 28.79 Lakhs per MW for FY 2017-18 and INR 30.51 Lakhs per MW for FY 2018-19.

(c) The same have been used for computation of the O&M expenses for the remaining years of the Control Period.

95. ***Secondary Fuel Oil:*** Regulation 36 (D) of the Tariff Regulations stipulates specific oil consumption of 0.5 ml/kWh for a coal-based generating stations.

(a) The Petition is based on the said specific oil consumption for calculating the quantum of fuel oil required

(b) The cost of fuel oil is the weighted average landed cost of Light

Diesel Oil ("LDO") and Heavy Fuel Oil ("HFO") which has been considered as under:

Period-->	**05.04.2016 to 15.04.2016**	**16.04.2016 to 31.03.2017**	**2017-18**	**2018-19**
Wtg. Avg. cost (Rs./kL)	21,797	19,050	19,870	19,870
Basis	Wtg. Avg. cost of LDO and HFO from electricity sale invoice of April-16	Wtg. Avg. cost of LDO and HFO from electricity sale invoices of Jul-16 and Aug-16	Wtd. Avg. cost of LDO and HFO from the latest three months purchase invoices	

(c) The Gross Calorific Value for secondary fuel oil has been taken as the weighted average GCV of LDO and HFO shows as under:

Period-->	**05.04.2016 to 15.04.2016**	**16.04.2016 to 31.03.2017**	**2017-18**	**2018-19**
Wtg. Avg. GCV (kCal/L)	10,267	10,114	9,914	9,914
Basis	Wtg. Avg. GCV of LDO and HFO from electricity sale invoice of April-16	Wtg. Avg. GCV of LDO and HFO from electricity sale invoices of Jul-16 and Aug-16	Wtd. Avg. GCV of LDO and HFO from the latest three months purchase invoices	

(d) The Petitioner requests the Hon'ble Commission to allow the cost and the calorific value for computation of cost towards secondary fuel oil.

96. ***Total capacity charge:*** It is submitted that:

(a) The proposed Capacity Charge calculation for the period between COD of the Unit-1 and Unit-2 of the power plant, and the remaining years of the Control Period is given in the table below:

Table 16: Capacity charge (in INR Lakhs)

S. No.	Item	05.04.2016 to 15.04.2016	16.04.2016 to 31.03.2017	2017-18	2018-19
1.	Depreciation	13,569	21,022	21,022	21,022
2.	Interest on Loan	44,976	43,634	40,919	38,146
3.	Return on Equity	6,579	19,257	19,257	19,257
4.	Interest on Working Capital	4,674	7,718	7,794	8,077
5.	O & M Expenses	7,290	14,580	15,499	16,475
Total		**77,087**	**106,212**	**104,491**	**102,978**

(b) The Petitioner requests this Hon'ble Commission to approve the above Capacity Charge for the period under review.

(c) Regulation 30(4) of the Tariff Regulations provides the following in respect of incentive on capacity charge payable to the generating stations:

> *"Incentive to a generating station or unit thereof shall be payable at a flat rate of 50 paise/kWh for ex-bus scheduled energy corresponding to scheduled generation in excess of ex-bus energy corresponding to Normative Annual Plant Load Factor (NAPLF) as specified in regulation 36 (B)."*

(d) The plant of the Petitioner is eligible for incentive payment on a monthly basis if it achieves a PLF greater than 85% which is the normative PLF. The said incentive shall be payable in the form of additional recovery of Annual Fixed Charges (prorated on a monthly basis) over and above the Annual Fixed Charge approved by the Hon'ble Commission.

97. ***Energy Charge:*** It is submitted that:

(a) Energy Charge covers the cost of coal used in the power plant and is calculated for the Ex Power Plant energy. As mentioned above, the Petitioner is currently procuring coal through E-auction process. Moreover, in terms of the Arbitral Award, cancellation of the Tokisud Coal Block having held to be a force majeure and change in law event, the Petitioner ought to be compensated for the landed cost of coal including grade slippage, transit loss, transportation cost including rail and road, handling and liaising / testing charges and also transportation charges from Mine to the nearest Railway Siding of CCL. Thus, the Hon'ble Commission is requested to approve the cost of coal as per the actuals.

(b) In accordance with Regulation 30(6)(a) of the Tariff Regulations, the energy charge in Rupees per kWh is determined to three decimal places as per the following formulae:

> *"ECR = {(GHR – SFC x CVSF) x LPPF / CVPF + LC x LPL} x 100 / (100 – AUX)*
>
> *Where,*
>
> *AUX = Normative auxiliary energy consumption in percentage.*
>
> *CVPF = Gross calorific value of primary fuel as fired, in kCal per kg, per litre or per standard cubic metre, as applicable.*
>
> *CVSF = Calorific value of secondary fuel, in kCal per ml.*
>
> *ECR = Energy charge rate, in Rupees per kWh sent out.*
>
> *GHR = Gross station heat rate, in kCal per kWh.*
>
> *LC = Normative limestone consumption in kg per kWh.*
>
> *LPL = Weighted average landed price of limestone in Rupees per kg.*
>
> *LPPF = Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month.*
>
> *SFC = Specific fuel oil consumption, in ml per kWh."*

(c) Normative Auxiliary energy consumption: The Petitioner submits that the normative auxiliary energy consumption for Coal-based generating stations as per Regulation 36(E)(a) of Tariff Regulations is 8.5% for a unit of 200 MW series. Further, for thermal generating stations with induced draft cooling towers, additional 0.5% is allowed. Thus, normative auxiliary consumption has been considered at 9% for the computation of energy charge.

(d) Fuel Transit Losses: In accordance with Regulation 30 (8) of the Tariff Regulations, transit loss of 0.8% is considered for calculating the loss of coal during inland transportation to the plant location.

(e) Design Station Heat Rate: It is submitted that:

(f) The Guaranteed Heat Rate for the power plant under the EPC contract is 2221 Kcal/kWh, as detailed in Form-3 of this Petition.

(g) Regulation 36(C)(b) of the Tariff Regulations specifies that for tariff calculation, the design station heat rate is to be multiplied by a factor of 1.045 for a new coal based thermal power plant.

(h) Accordingly, the gross station heat rate of the Petitioner for tariff calculation purpose comes out to be 2321 kcal/kWh, which has been considered for Energy Charge calculation. The Petitioner requests the Hon'ble Commission to approve the Gross Station Heat Rate of 2321 kcal/kWh.

(i) GCV of coal: For Energy Charge Rate calculation, the GCV of domestic coal procured via E-auction is taken as the weighted average "as received and billed" (ARB basis) GCV of the coal as per the last three invoices prior to filing this petition (February-2017, May-2017 and June-2017) for the years 2017-18 and 2018-19. This works out to 3960 kCal/kg.

For the other two periods of the control period, GCV of coal is computed as the weighted average GCV of coal as per the electricity sale invoices from April-2016 and Jul-Aug 2016 respectively for 01.04.2016 to 15.04.2016 and 16.04.2016 to 31.03.2017 as shown in the table below:

Period-->	**05.04.2016 to 15.04.2016**	**16.04.2016 to 31.03.2017**	**2017-18**	**2018-19**
Wtg. Avg. GCV (kCal/kg)	3,789	4,420	3,960	3,960
Basis	Wtg. Avg. GCV of coal from electricity sale invoice of April-16	Wtg. Avg. GCV of coal from electricity sale invoices of Jul-16 and Aug-16	Wtd. Avg. GCV of coal from the latest three months purchase invoices	

(j) Landed price of coal: The landed price of coal for computation of energy charge has been taken as the weighted average landed price of coal as per the last three invoices prior to filing this petition. This computes to INR 5248 per MT for the years 2017-18 and 2018-19.

For the other two periods of the control period, landed price of coal is computed as the weighted average landed price of coal as per the electricity sale invoices from April-2016 and Jul-Aug 2016 respectively for 01.04.2016 to 15.04.2016 and 16.04.2016 to 31.03.2017 as shown in the table below:

Period-->	**05.04.2016 to 15.04.2016**	**16.04.2016 to 31.03.2017**	**2017-18**	**2018-19**
Wtg. Avg. cost (Rs./MT)	6,151	5,744	5,248	5,248
Basis	Wtg. Avg. cost of coal from electricity sale invoice of April-16	Wtg. Avg. cost of coal from electricity sale invoices of Jul-16 and Aug-16	Wtd. Avg. cost of coal from the latest three months purchase invoices	

The cost components of the landed price of coal in the latest three invoices are presented in the tables below:

Table: Breakup of landed price of coal (Jun-17) [Piparwar area]

S. No.	**Item**	**Rate (INR/MT)**	**Basis**
1.	ROM Price	2123	-
2.	Royalty	NA	-
3.	Stowing Excise Duty	NA	-
4.	Sizing Charges	NA	-
5.	Surface transportation	78.72	Distance range 3-10 km
Total price at pithead (A)		**2201.72**	
6.	Central Excise duty	132.1	6% of total price at pithead

S. No.	Item	Rate (INR/MT)	Basis
7.	Clean Environment Cess	NA	-
8.	Central Sales Tax	46.7	2% of [(A) + Central Excise Duty + Clean Environment Cess]
Total price of coal		**2380.5**	
9.	Railway base freight	1990.4	For distance of 1534 km as per Corrigendum no. 14 (dated 22.08.2016) to Railways Rates Circular 8 of 2015 dated 16.03.2015
10.	Busy season surcharge (BSS)	298.6	15% of base freight as per Circular No. TCR/1078/2015/14 dated 20th July 2015 issued by Ministry of Railways
11.	Development surcharge (DS)	114.4	5% of (base freight plus BSS) as per Circular No. TCR/1078/2015/14 dated 20th July 2015 issued by Ministry of Railways
12.	Coal Terminal surcharge (CTS)	110.0	INR 55 per MT each at loading and unloading terminal: *As per Corrigendum no. 14 to Railways Rates Circular No. 8 of 2015 dated 22nd August 2016*
Landed price of coal at plant (Excluding service tax)		**4893.9**	

Table: Breakup of landed price of coal (May-17) - Washed Coal

[Bachra coal mine]

S. No.	Item	Rate (INR/MT)	Basis
1.	ROM Price	2123	-

S. No.	Item	Rate (INR/MT)	Basis
2.	Royalty	NA	-
3.	Stowing Excise Duty	NA	-
4.	Sizing Charges	NA	-
5.	Surface transportation	78.7	Distance range 3-10 km
Total price at pithead (A)		**2201.7**	
6.	Central Excise duty	132.1	6% of total price at pithead
7.	Clean Environment Cess	NA	-
8.	Central Sales Tax	46.7	2% of [(A) + Central Excise Duty + Clean Environment Cess]
Total price of coal		**2380.5**	
9.	Railway base freight	1990.4	For distance of 1534 km as per Corrigendum no. 14 (dated 22.08.2016) to Railways Rates Circular 8 of 2015 dated 16.03.2015
10.	Busy season surcharge (BSS)	298.6	15% of base freight as per Circular No. TCR/1078/2015/14 dated 20th July 2015 issued by Ministry of Railways
11.	Development surcharge (DS)	114.4	5% of (base freight plus BSS) as per Circular No. TCR/1078/2015/14 dated 20th July 2015 issued by Ministry of Railways
12.	Coal Terminal surcharge (CTS)	110.0	INR 55 per MT each at loading and unloading terminal: *As per Corrigendum no. 14 to Railways Rates Circular No. 8 of 2015 dated 22nd August 2016*
Landed price of coal at		**4893.9**	

S. No.	Item	Rate (INR/MT)	Basis
plant (Excluding service tax)			

Table: Breakup of landed price of coal (Feb-17) [Ashok (KD Old) project]

S. No.	Item	Rate (INR/MT)	Basis
1.	ROM Price	1078	E-auction price of G10 grade coal GCV 4301-4600 kCal/kg
2.	Royalty	199.2	14% Royalty plus 30% of Royalty to be paid to District Mineral Foundation plus 2% of Royalty to be contributed to National Mineral Exploration Trust
3.	Stowing Excise Duty	10	-
4.	Sizing Charges	79	Limited to 100 mm
5.	Surface transportation	116	Charges for distance from 10 to 20 km
Total price at pithead (A)		**1482.2**	
6.	Central Excise duty	88.9	6% of total price at pithead
7.	Clean Environment Cess	400	As per Union Budget 2016-17
8.	Central Sales Tax	39.4	2% of [(A) + Central Excise Duty + Clean Environment Cess]
Total price of coal		**2010.6**	
9.	Railway base freight	1984.9	For distance of 1526 km as per Corrigendum no. 14 (dated 22.08.2016) to Railways Rates Circular 8 of 2015 dated 16.03.2015

S. No.	Item	Rate (INR/MT)	Basis
10.	Busy season surcharge (BSS)	297.7	15% of base freight as per Circular No. TCR/1078/2015/14 dated 20th July 2015 issued by Ministry of Railways
11.	Development surcharge (DS)	114.1	5% of (base freight plus BSS) as per Circular No. TCR/1078/2015/14 dated 20th July 2015 issued by Ministry of Railways
12.	Coal Terminal surcharge (CTS)	110	INR 55 per MT each at loading and unloading terminal: *As per Corrigendum no. 14 to Railways Rates Circular No. 8 of 2015 dated 22nd August 2016*
Landed price of coal at plant (Excluding service tax)		**4517.2**	

(k) Based on the foregoing prices, the Energy Charge Rate of the Petitioner on Ex-Power Plant basis comes out as shown in the table below:

Computation of energy charge (INR/kWh)

Particulars	Unit	05.04.2016 to 15.04.2016	16.04.2016 to 31.03.2017	2017-18	2018-19
Gross station heat rate	kCal/kWh	2,321	2,321	2,321	2,321
Specific Fuel oil Consumption	ml/kWh	0.5	0.5	0.5	0.5
Landed price of secondary fuel	Rs./ml	0.02	0.02	0.02	0.02
CV of	kCal/ml	10.27	10.11	9.91	9.91

Particulars	Unit	05.04.2016 to 15.04.2016	16.04.2016 to 31.03.2017	2017-18	2018-19
Secondary Fuel					
Heat contribution of Coal	kCal/kWh	2,316	2,316	2,316	2,316
CV of Primary Fuel	kCal/kg	3,789	4,420	3,960	3,960
Specific Coal consumption	kg/kWh	0.61	0.52	0.58	0.58
Landed price of primary fuel	Rs./kg	6.15	5.74	5.25	5.25
Auxiliary Consumption	%	9.0%	9.0%	9.0%	9.0%
Total Energy Charge	**INR/kWh**	**4.143**	**3.318**	**3.384**	**3.384**

98. The Petitioner requests the Hon'ble Commission to approve the above basis of calculation of Energy Charge Rate (ECR) and allow the Petitioner to charge the Respondent, the energy charge on month to month basis based on the landed cost of fuel for the month on actual costs. The Petitioner requests that the above calculated energy charge rate of **INR 3.384 /kWh** may be allowed for the remaining duration of the control period for billing for the energy supplied to PSPCL which will be adjusted in the subsequent months for actual landed cost of fuel.

99. ***Tariff of electricity from GVK Power (Goindwal Sahib) Plant:*** The Ex-Power Plant electricity tariff of the Petitioner, comprising of Capacity Charge and Energy Charge for the remaining period of the current Control period, is summarized below:

Particulars	Unit	05.04.2016 to 15.04.2016	16.04.2016 to 31.03.2017	2017-18	2018-19
Capacity charge	INR Lakhs	**77,087**	**106,212**	**104,491**	**102,978**
Capacity Charge	INR / kWh	**4.477**	**3.084**	**3.015**	**2.814**
Variable charge	INR/kWh	**4.143**	**3.318**	**3.384**	**3.384**

100. In the light of the above submissions, the Petitioner requests this Hon'ble Commission to kindly approve the capacity charge and the basis of calculation of energy charge of the Petitioner.

101. The Petitioner also submits that in addition to the above tariff, the Petitioner shall be allowed to pass through to the Respondent, at actuals, any cess, duty, tax, government levy, royalty etc. applicable to the Petitioner for supply of power to the Respondent from time to time.102. The present petition is bonafide and is in accordance with law, and the same may be allowed.

103. The Petitioner has submitted a copy of this Petition to the Respondent M/s PSPCL.

104. The Petitioner reserves its right to supplement, add to and alter its tariff proposal before the tariff is finally determined by this Hon'ble Commission. The Petitioner reserves its right to file any additional information/ submissions as may be necessary for the purposes of determination of tariff in the present petition. The submissions set out in this Petition supersede any submissions made previously.

PRAYER

105. The Petitioner in the aforesaid facts and circumstances most humbly prays that this Hon'ble Commission may be pleased to:-

(a) Admit the present petition and determine the determination of tariff for supply of power.

(b) Approve the provisional tariff of the power plant of the Petitioner pending determination of tariff.

(c) Approve the basis of calculation of Energy Charge Rate (ECR) claimed herein.

(d) Allow the Petitioner to charge the Respondent, the energy charge on month to month basis based on the landed cost of fuel for the month on actual costs as set out hereinabove.

(e) Allow the Petitioner to claim as fuel price adjustment change in price of secondary fuel oil

(f) Allow payment of incentive for generation and supply beyond 85% of Plant Load Factor (PLF) as set out hereinabove.

(g) Allow pass through at actual any cess, duty, tax, government levy, royalty etc. applicable to the Petitioner for supply of power to the Respondent.

(h) Allow the recovery of the filing fees as and when paid to the Hon'ble Commission and also the publication expenses from the beneficiaries.

(i) Allow any addition, change, modification, alteration of the present petition, if required, at a later stage.

(j) Allow the capital cost based on which the Tariff will be calculated as submitted by the Petitioner.

(k) To pass such order(s) as the Hon'ble Commission may deem fit in the circumstances and facts of the present petition.

GVK Power (Goindwal Sahib) Limited/Petitioner

Through:

J. Sagar Associates
Advocates for the Petitioner
B-303, Ansal Plaza, HUDCO Place
August Kranti Marg
New Delhi 110049

Place:

Date:

BEFORE THE HON'BLE PUNJAB STATE ELECTRICITY REGULATORY COMMISSION, CHANDIGARH

Petition No. of 2017

IN THE MATTER OF:

GVK Power (Goindwal Sahib) Limited …Petitioner

Versus

Punjab State Power Corporation Limited …Respondent

Affidavit

I, Oliver Tyagi, Son of Sh. R.S. Tyagi, aged 53 about years, Resident of H-11, Uppal Marble Arch Apartments, Chandigarh, the Authorised Representative, of do hereby solemnly affirm and state as under:-

1. I say that I am duly authorized and competent to affirm this Affidavit for and on behalf of the GVK Power (Goindwal Sahib) Limited and I am acquainted with the facts and circumstances of the present case. I say that I have read and understood the contents of the accompanying Petition.

2. I state that the facts stated in the accompanying Petition are true and correct to the best of my knowledge based on the records of the Petitioner and that the legal submissions made therein are based upon information received by me and believed to be true. The present Petition has been drafted pursuant to my instructions and its contents are true and correct.

3. I say that the annexures, if any, annexed with the Petition are true copies of the original.

4. I say that no similar petition or writ petition or suit or appeal regarding the matter in respect of which this Petition is preferred is pending before any court or any other authority.

DEPONENT

1. ***VERIFICATION***

I, the deponent above named, do hereby verify that the contents of my above affidavit are true and correct, no part of it is false and nothing material has been concealed therefrom.

Verified at Chandigarh on this ____ day of _____ 2017

DEPONENT

ANNEXURE P-1

भारतीय गैर न्यायिक

एक सौ रुपये

Rs. 100

रु. 100

ONE HUNDRED RUPEES

सत्यमेव जयते

भारत INDIA

INDIA NON JUDICIAL

पंजाब PUNJAB

E 787491

EXTENSION OF VALIDITY DATE OF THE MEMORANDUM OF UNDERSTANDING

WHEREAS:

Punjab State Electricity Board, having its Head Office at The Mall, Patiala – 147 001 (hereinafter referred to as the **"PSEB"**)

AND

GVK Power (Goindwal Sahib) Limited, a Company incorporated under the Companies Act, 1956, having its registered office at "Paigah House", 156-159, Sardar Patel Road, Secunderabad – 500 003, Andhra Pradesh (hereinafter referred to as **"Company"**) have entered into a MOU on 08.02.2006 and both the Parties intend to extend the validity date of the MOU.

It is hereby agreed by and between the Parties that the MOU will be valid upto 07.08.2007 and the Clause 30 of the MOU stands amended accordingly.

All other terms and conditions in the MOU dated 08.02.2006 remain unaltered.

IN WITNESS WHEREOF the duly authorised representatives of the Parties have caused this extension to the MOU to be signed in their names as on 31st day of January, 2007.

For and behalf of Punjab State Electricity Board	For and behalf of GVK Power (Goindwal Sahib) Ltd
Signature:	Signature:
Name: Y. S. RATRA	Name: G V KRISHNA REDDY
Designation: Chairman, Punjab State Elec[illegible] Board	Designation: CHAIRMAN
Seal Chairman Punjab S[illegible]	Seal

100Rs.

पंजाब PUNJAB

048203

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (herein under referred to as "MOU") is entered on the eighth day of the month of February, 2006 between **Punjab State Electricity Board,** having its Head Office at **The Mall, Patiala-147001** (hereinafter referred to as the **"PSEB",** which expression unless repugnant to the context or meaning thereof shall be deemed to include its successors, and permitted assigns) of the First Part

AND

GVK Power (Goindwal Sahib) Limited, a Company incorporated under the Companies Act, 1956, having its registered office at **"Paigah House", 156-159, Sardar Patel Road, Secundarabad - 500 003, Andhra Pradesh** (hereinafter referred to as **"Company"** which expression unless repugnant to the context or meaning thereof shall be deemed to include its successors and permitted assigns) of the Second Part, "**Party**" and "**Parties**" hereinafter refer to the PSEB and the Company individually and collectively respectively,

WHEREAS

a. The Government of Punjab and Punjab State Electricity Board had invited proposals during year 1996 to establish a coal based power station at Goindwal Sahib, Amritsar District in the state of Punjab, India and the Company having been selected by the Government of Punjab on the basis of International Competitive Bidding has accepted the invitation of the Government of Punjab and the PSEB to Build, Own and Operate the said power station;

b. The Company had entered into a Power Purchase Agreement (hereinafter to be referred as "PPA") with PSEB on 17.04.2000 for developing the coal based power station at Goindwal Sahib in Amritsar District in the State of Punjab (hereinafter to be referred as " **Project**");

c. The construction of the Project could not be taken-up for various reasons beyond the reasonable control of the Company and PSEB;

d. The Project has now been allotted "Tokisud North Sub Block" in the state of Jharkhand as the captive coal mine for supply of the coal exclusively to the Project/PSEB Thermal Projects;

e. The Company intends to develop the coal-based power station at Goindwal Sahib in Amritsar District in the State of Punjab with an installed capacity of 2x250 MW (+20%). The margin of up to +20% over the installed capacity has been agreed to by the Parties to accommodate the standard sizes of the power generating equipment available in the market in order to economize on the cost of the equipment. The ultimate installed capacity arrived at after considering the aforesaid factor shall be the Contracted Capacity of the Project;

f. The Company has proposed to sell the capacity and energy generated by its Project to PSEB and PSEB has agreed to purchase the capacity and the scheduled energy from the Company in accordance with the tariff to be approved by Punjab State Electricity Regulatory Commission (hereinafter to be referred as "**PSERC**").

NOW THEREFORE, it is hereby agreed by and between the Parties that:

1. The Company shall develop, build, construct, operate and maintain the Project, by installing the capacity of 2x250MW (+20%) so as to achieve Commercial Operation Date (hereinafter to be referred as "**COD**") of Unit-1 of capacity 1X250 MW (+20%) within thirty six months from the date of financial closure for the Ist unit which will not be later than six months from the date of approval of the Restated Power Purchase Agreement by Punjab State Electricity Regulatory Commission (hereinafter to be referred as "**Restated PPA**") & Unit-2 of the capacity 1X250 MW (+20%) within six months from the COD of Unit-I. Both the aforesaid CODs of the Units shall be referred to collectively and individually as the **Scheduled CODs** for the Project in this MOU. The Company will examine the possibility of adopting super critical technology. The company shall further give a reasonable time frame with intermediate milestones for implementation of the project and achieving the above stated CODs for both the Units as well as development of captive coal mine. Tentative PERT Chart shall be supplied for the development of Captive Coal Mine so as to coincide with the commissioning of the two units. Unreasonable delay in adhering to the above milestones may result in termination of allocation of Captive Coal Mine. Both the parties shall put in their best efforts to achieve the milestones. The Company shall arrange for alternative fuel source in case the development of coal mine is delayed beyond COD of the Project;
2. All statutory and non-statutory clearances required for the successful development, construction, operation and maintenance of the Project as well as that of Captive Coal Mine shall be arranged and secured by the Company;
3. The Company shall fulfil all its obligations under the Water Supply Agreement dated 29th March 2001 with Government of Punjab. Implementation Agreement dated 25th August 2000 with Government of Punjab. Letter of Intent dated 20th May 1998 issued by Government of Punjab. and any other agreement/commitment with PSEB or Government of Punjab in regard to the project. until and unless those obligations are expressly Restated modified/altered replaced in this MOU;

4. All liabilities towards environment and Resettlement & Rehabilitation of the people affected from the Project shall be to the account of the Company and shall be in line with the minimum requirements of the National Policy on Re-settlement and Rehabilitation for Project Affected Families-2003 (NPRR-2003) and cost towards such work will be included in the cost of the project;
5. PSEB shall purchase the contracted capacity and the energy generated by the Project in accordance with the scheduling procedures of IEGC/State Grid Code. The project shall be operated and scheduled under ABT regime as envisaged in the National Electricity Policy;
6. PSEB shall arrange for evacuation of the entire scheduled contracted capacity and energy from the 220 kV switchyard of the Project;
7. The Company has already provided to PSEB the Security Deposit, in the form of an irrevocable unconditional Bank Guarantee for an amount of Rs.3.9 crores which shall be kept valid till the commissioning of the project;
8. With respect to the delay in Scheduled COD of the Project the following liquidated damages shall be payable by the Company:

a In the event delay is less than five months, PSEB shall have the right to encash/appropriate an amount equivalent to twenty (20) percent of the security deposit provided by the Company for delay of each month or part thereof, as the case may be,

b In the event the delay is beyond five months, the additional amount payable by the Company shall be calculated as follows:

1. With respect to delay less than or equal to sixty (60) days, the Company shall have to pay Rs. 4000/- (Rupees four thousand only) per day per MW of the contracted capacity of the delayed unit;
2. With respect to delay more than sixty (60) days, the company shall pay Rs. 5000 (Rupees five thousand only) per day per MW of the contracted capacity of the delayed unit for each additional day counted from the sixtieth day;

c The Company's aggregate liability under aforementioned sections 8(a) and 8(b) shall not extend beyond twelve (12) months of delay for the Project as a whole provided that in case of non achieving of Scheduled COD of the Project even after twelve (12) months of the delay from the Scheduled COD, PSEB shall have the option to terminate the agreement for breach on the part of the Company and claim an amount equivalent to six (6) months of the billing, at the approved quoted tariff and energy corresponding to the 80% of the contracted capacity, as liquidated damages. Further, Company shall not sell power to any third party till such termination payment is made to PSEB. Since these are as per standard draft bid documents, the liquidated damages shall be limited to the value as per final guidelines of Govt. of India.

9. Aforementioned Liquidated damages shall be payable by the Company subject to the Force Majeure clause to be elaborated in the Restated PPA;
10. Capital cost of the Project shall be in line with the capital cost achieved by comparable projects both in capacity and time frame. Capital cost of the project shall be subject to approval of the Punjab State Electricity Regulatory Commission (hereinafter to be referred as "PSERC") and shall be appropriately mentioned in the Restated PPA. No cost overrun shall be admitted for the purpose of tariff determination unless allowed by PSERC;
11. In the event the Company secures "Mega Power Project" status under the relevant policy of Government of India, the company shall pass on the entire corresponding benefit to PSEB in terms of reduction in capital cost of the Project.
12. The principles for the determination of the tariff shall be in line with the CERC's regulations formed under Section 178 of the Electricity Act, 2003 and titled "The Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2004" and the subsequent amendments till the date of signing of the Restated PPA;
13. If the company achieves operational norms better than those specified by CERC on account of improvement in the operational practices, then the savings in Heat Rate and Auxiliary Consumption shall be shared equally between the company and the PSEB on an annual basis;
14. For the computation of the Variable Charge, the coal price will be the published price of Coal India Limited for supply from its subsidiary company M/s Central Coalfields Limited, Ranchi less a discount offered by the Coal Mining Company. The discount offered for different grades of coal will be similar to the discount rates agreed between PSEB and M

Eastern Minerals & Trading Agency (EMTA) during May 2000 as shown under definition 'D' in page 19. Al applicable taxes, duties, royalty, cess, transportation charges and any other charges as applicable shall be added to the cost of coal. Considering the environmental requirement and the long distance of transportation from the Captive Coal Mine to Goindwal Sahib, coal will be washed at the Captive Coal Mine before transporting to the power station. The cost of coal washing as well as the cost of washery rejects will be added to the coal price. The coal price will be determined based on the quantity and quality of coal delivered at the Project site at Goindwal Sahib;

The Company will make an application to the Ministry of Coal Government of India for allocation of coal to make up the shortfall in the coal production by the coal mining company as per the approved mining plan compared to the coal requirement of the Project. PSEB will recommend for the additional allocation;

If the Company is required to procure coal from a source other than the captive coal mine due to a mismatch between the Project coal requirements and the coal production from the captive Coal Mine as per the coal mining plan approved by the Ministry of Coal, Government of India or due to a Force Majeure at the Coal Mine, then PSEB shall pay the Variable Charge based on the price of coal published by Coal India Limited for the coal procured by the Company. The Company will furnish required supporting documents for the determination of the price of coal procured thus;

15. The Company shall enter into Coal Transportation Agreement with the Indian Railways for transportation of coal from the Captive Coal Mine to the power station located at Goindwal Sahib. The Company shall obtain in advance a letter of concurrence/clearance from Indian Railways conveying the acceptance for the coal transportation to the project;

16. The coal transportation cost shall be in line with the prevailing tariff of the Indian Railways with advance payment of railway freight. If the Company is required to participate in the 'Wagon Lease Scheme' or 'Wagon Investment Scheme' of the Indian Railways, the investment required to be made by the Company will become part of the project cost. Any or all costs associated with such schemes, taxes, operation & maintenance of adequate

railway wagons and other facilities, insurance premium charges levied by the Railways will become part of the cost of delivered coal. Benefits in terms of reduced freight tariff offered by the Indian Railways for participating in such schemes will be passed on to the PSEB. Any additional railway charges such as Penal Overloading Penalty, demurrage, siding charges are to be borne by the Coal Supply Company or the Generator as the case may be;

17. The Company shall source the coal from the captive coal mine "Tokisud North Sub Block (hereinafter to be referred as **"Captive Coal Mine"**), for the project, located in the Hazirabagh District of Jharkhand State. The Company is required to promote the Special Purpose Vehicle (hereinafter to be referred as **"SPV"**), for development and operation of the Coal Mine. If PSEB desires to become a partner in the 'SPV' the modalities of such an arrangement will be discussed between PSEB and the company.
18. The Company shall enter into separate Coal Supply Agreement with the SPV, to meet the coal requirement of the project at the equitable commercial and technical terms and conditions acceptable to PSEB; A separate coal supply agreement will be entered into with the coal supplier for the quantity allocated to the Project over and above the quantity to be supplied by the SPV;
19. The SPV for the captive coal mine will produce coal as per the coal mining plan approved by the Ministry of Coal, Government of India. In the event the SPV has adhered to the approved Coal Mining Plan and coal mine is not commissioned on time or the coal production falls short of the requirements of the Company, then the Company will procure coal from the market and PSEB shall pay to the Company in accordance with the clause no. 14 herein above;
20. The SPV shall mine coal from the Tokisud Coal Mine as per the approved coal mining plan. If coal production rate from the captive coal mine is higher than the requirement of the project such surplus coal production, if any, be diverted to other thermal Projects of PSEB. In case the project is shut down due to force majeure, the coal produced by the Captive Coal Mine, will be supplied to any or all of the existing power projects of PSEB as directed by PSEB. Similarly in case captive coal mine commences the production of coal ahead of the COD of project, coal so produced shall be

supplied to the existing thermal power stations of PSEB as directed by PSEB. Coal can be supplied to PSEB Projects at the same coal price as per the Coal Supply Agreement for Goindwal Sahib Project, provided Ministry of Coal, Govt. of India approves the proposed sale. The delivery point for supply of coal to other PSEB Projects will be the Captive Coal Mine.

21. As Payment Security Mechanism :

a) Prior to signing of the Restated PPA, PSEB shall enter into Tripartite Escrow Agreement between the Company, PSEB and the Escrow Banker of PSEB. The ESCROW account will be made operational not later than thirty days prior to the COD of the respective Units. The Escrow amount shall be 1.25 times the one month billing of the company determined in accordance with the tariff approved by the PSERC for the project,

b) PSEB will arrange for irrevocable revolving letter of credit (LC) to be decided mutually.

22. In case the seller (M/s GVK) does not realize full payment from the procurer (PSEB) by the due date as per payment cycle, the M/s GVK may after 7 days take recourse to payment security mechanism by encashing the LC to the extent of shortfall or take recourse to ESCROW Mechanism. The PSEB shall restore the payment security mechanism prior to the next date of payment. Failure to realise payment even through payment security mechanism shall constitute an event of payment default. In the event of payment default, M/s GVK after giving 7 days notice can sell up to 25% of the contracted power to other parties without loosing claim on the capacity charges due from PSEB. If the payment security mechanism is not fully restored within 30 days of the event of the payment default, M/s GVK can sell full contracted power to the other parties without loosing claim on the capacity charges due from PSEB. The surplus over energy charges recovered from sale to such other parties shall be adjusted against the capacity charge liability of the PSEB. In case the surplus over energy charges is higher than the capacity charge liability of the PSEB, M/s GVK shall retain such excess over the capacity charge liability.

23. The Company shall declare availability on a daily basis in accordance with the scheduling procedure as stipulated in the applicable Electricity Grid Code (hereinafter to be referred as "EGC") from time to time. Further, the

Company and PSEB shall comply with all the relevant provisions of the applicable EGC;

24. PSEB will recommend to the Government of Punjab to acquire the land required for the Project under the Land Acquisition Act, with the consent of the owners and also will recommend to Government of Punjab to make appropriate references to the Restated Power Purchase Agreement in the Implementation Agreement and the Water Supply Agreement;

25. The term of the Restated PPA shall be 25 years for each of the Unit. The term for each unit shall be computed from the Scheduled COD of the respective Units. The term of the Restated PPA may be extended based on mutual consents of the parties;

26. The risk sharing positions for events such as, change in law, events of termination and consequences, Force Majeure, Scheduling, etc. will be detailed in the Restated PPA. All these articles shall be as per new guidelines.

27. Any undefined term in this MOU will have the same meaning as in the Electricity Act, 2003 or CERC (Terms and Conditions of Tariff) Regulation, 2004 or any other relevant regulation;

28. PSEB & GVK shall make reasonable efforts to finalise/revise the PPA and obtain approval of the said Restated PPA from PSERC at the earliest. The clauses of the draft Power Purchase Agreement published by the Ministry of Power will be considered to the extent they are applicable and the PPA will generally be in line with the draft PPA published by the Ministry of Power".

29. Disputes between the parties shall be settled through Amicable Dispute Resolution (ADR) mechanism under the PPA or through 'Arbitration' conducted in accordance with the provisions of the Indian Arbitration and conciliation Act, 1996, and the Rules of Indian Council of Arbitration New Delhi.

30. The MOU shall expire after a period of one (1) year commencing from the date of its signing without any obligation to any party;

31. This MOU may be amended or terminated prior to the expiry date and may be extended beyond the expiry date subject to mutual consent of the Parties. and

32. In case the MOU is terminated for any reason, neither party shall make any claim against the other party for any loss, damage on account of such termination before any Forum, whether judicial or otherwise.

IN WITNESS WHEREOF the duly authorised representatives of the Parties have caused this MOU to be signed in their names as of the day and year first above written.

For and behalf of **Punjab State Electricity Board Ltd**	For and behalf of **GVK Power (Goindwal Sahib)** Ltd.,
Signature:	Signature:
Name: Y S RATRA	Name: G.V.K. Reddy
Designation: Chairman PSEB	Designation: Chairman
Seal: CHAIRMAN P.S.E.B. PATIALA	Seal: GVK POWER (GOINDWAL SAHIB) LTD. HYD-BAD.

ANNEXURE P-2

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION
SCO 220-221, SECTOR-34-A, CHANDIGARH

Petition No.4 of 2007
Date of hearing 16.4.08
Date of Order 29-04-08

In the matter of: Petition for approval of Tariff as per the Amended & Restated Power Purchase Agreement under Section 86 of the Electricity Act, 2003 read with Regulations 10 & 56 of the PSERC (Conduct of Business) Regulations, 2005 and PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005

And

In the matter of: M/s G.V.K. Power (Goindwal Sahib) limited Vs PSEB

Present: Sh. Jai Singh Gill, Chairman
Smt. Baljit Bains, Member
Sh. Satpal Singh Pall, Member

For the petitioner: Sh. S.Madhusudan
Sh. K.N.Bhawani Shankar
Sh. A. I. George
Sh. Oliver Tyagi

For PSEB: Er. J.P.Singh, Director/TR-II
Er. J.L.Bharara, Director/IPC
Er. Harsharan Kaur Trehan, Dy. Director/IPC

ORDER

M/s GVK Power (Goindwal Sahib) Ltd. (GVK) filed this petition before the Punjab State Electricity Regulatory Commission (Commission) on 28.3.2007 seeking approval of the estimated project cost and tariff structure for their 2 x 270 MW coal based generating station to be set up at Goindwal Sahib, District Tarn Taran. The petition which was admitted on 4.4.2007 was subsequently allowed to be amended and accordingly taken on record on 14.5.2007.

Regulations 20 and 37 of the Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2005 stipulate that in determining the cost of generation, the principles and methodologies specified by the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 (Regulations) are to be kept in view. Regulation 5 (3) of the latter Regulations provides that a generating company may make an application for determination of provisional tariff in advance of the anticipated date of completion of the project, based on capital expenditure actually incurred upto the date of making the application, duly audited and certified by the statutory auditors. Regulation 17 further provides that the actual expenditure incurred on completion of a project shall form the basis for determination of final tariff. The second proviso to Regulation 17 lays down that any person intending to establish, operate and maintain a generating station may make an application before the Commission for 'in principle' acceptance of the project capital cost and financing plan before taking up the project. The third proviso further provides that where the Commission has given 'in principle' acceptance to the estimates of project capital cost and financing plan, the same shall be the guiding factor for applying a prudence check on the actual capital expenditure. Evidently these provisions have been incorporated so as to reduce uncertainty regarding tariff on completion of a project which will help investors in achieving financial closure of the project.

The Commission invited public objections to the petition and held a public hearing on 22.8.07. The petitioner furnished separate replies to the objections raised by each of the objectors.

In it's Order dated 20.11.07, the Commission observed that one of the prayers of the petitioner relates to approval of the estimated project cost and considered it as a request for 'in principle' acceptance of the estimated capital cost and financing plan which is covered under the provisions of Regulation 17, referred to above. A careful perusal of this Regulation makes it apparent that 'in principle' acceptance to the estimates of project capital cost by the Commission has to be based on upto date supporting data so that the cost determined is as close as possible to the project cost finally incurred. This is specially relevant as this cost is to be the guiding factor for applying a prudence check on the actual capital cost with the latter having a direct bearing on the tariff to be determined. With a view to obtaining information of the project as required by this Regulation, the Commission sought further inputs from the petitioner who has, accordingly, submitted additional filings.

The Commission, on the basis of the filings in the petition, additional filings submitted by the petitioner, issues raised in public hearings – to the extent these relate to 'in principle' acceptance of estimates of the project capital cost & financing plan – and replies thereto, gives the following findings:

TECHNICAL

There are some technical concerns regarding the size of Generating Units, calorific value of coal and norms of operation as per CERC (Terms and Conditions of Tariff) Regulations 2004. Issues such as the calorific value of coal and CERC norms of operation have not been touched upon in this Order, as in the present petition, only 'in principle' acceptance to the estimates of project capital cost and financing plan are being considered. The Commission notes that the Unit size is 270 MW instead of the standard Unit of 250 MW. The petitioner has clarified that 270 MW is not non standard and is an upgraded version of BHEL's 250 MW Unit. In their latest filings, the petitioner has informed that the steam turbine belongs to the 250 MW class of which more than 15 Units are in commercial operation and another 22 Units under execution. Similar Unit ratings are also being supplied by BHEL to Sikka TPP, Gujarat and that this is the best techno-commercially suitable Unit size available in the market at this juncture. Moreover, the petitioner claims that selection of 270 MW Unit size will not increase the project cost but, rather make it more economical. By way of a clarification, BHEL has informed GVK that the modules used for 270 MW sets are the same as for 250 MW, and only the turbine internals have been modified to accommodate a higher amount of steam for increased power output. It is understood that BHEL will also redesign the boiler in order to enhance its capacity and provide sufficient cushion in the turbine design to enable increased generation through modification in the flow path.

STATUTORY AND NON STATUTORY CLEARANCES

The petitioner has stated that all the required clearances have been obtained. It was clarified that the Punjab Pollution Control Board (PPCB) and Ministry of Environment & Forests (MoEF) had approved the project in the year 1999 and the petitioner has again approached both these bodies for obtaining fresh clearances. A public hearing has reportedly been conducted by PPCB on 7.9.2007 and the proceedings have been sent to MoEF for final approval.

The Commission observes that most of statutory and non statutory clearances granted to the petitioner are subject to conditions stipulated therein. Further, the Water supply agreement with the State Irrigation Department of March 29, 2001 is for supply of water to a 2x250 MW project and the same is valid for 20 years from the date of COD of the project. Evidently, the same may need revision for the enhanced capacity and life of the Plant. Similarly the NOC obtained from the Western Command was issued on 31.8.1998 and may also need revalidation. In the circumstances, the *'in principle'* approval being considered hereunder is subject to the availability of unencumbered statutory and non statutory clearances.

FUEL SUPPLY AGREEMENT

GVK has informed that the Ministry of Coal, Govt. of India (MoC) has allotted the Tokisud North Sub block in the State of Jharkhand as a captive mine for this project. The block was originally allotted in 2002 for the project at Goindwal Sahib, then in Amritsar District. A copy of letter dated 22.10.2007 from the MoC, wherein location of the plant has been confirmed to be now in Tarn Taran District has also been submitted. The petitioner while reporting the formation of a SPV (M/s GVK Coal (Tokisud) Company Pvt. Ltd.) to carry out the mining operations has also intimated that :-

(a) A geological report for the allotted Tokisud Coal Mine has been obtained from CMPDIL and the mine plan prepared and submitted to the MoC in Aug. 2005 which has approved the same in April, 2006. The plan envisages extraction of about 52.5 million tonnes of coal at an average rate of 2.0 million tonnes per annum.

(b) The mining lease application has been processed by the Hazaribagh District Administration and is under review by Secretary (Mine & Geology), Govt. of Jharkhand.

(c) The Jharkhand Pollution Board has conducted public hearings for the Environment Impact Assessment (EIA) on 12.11.2007. The final EIA report is at an advanced stage of completion for submission to the Ministry of Environment and Forests.

(d) Land acquisition for compensatory afforestation is nearing completion.

(e) The coal mine is likely to start production by 2010 matching with the commissioning of this project.

(f) Ministry of Coal has on 9.1.2008 allotted a part of the Seregarha Coal Mine with a reserve of 66.67 million tonnes approximately to augment coal supply for Goindwal Sahib Project. The coal block will be jointly developed by M/s GVK and M/s Arcellor Mittal.

COAL TRANSPORTATION ARRANGEMENT

Railway siding at Plant

GVK has submitted that work on the railway siding will be carried out by Indian Railways or their approved contractor M/s BARSYL, Secunderabad. The take off station for the project is Khadoor Sahib which would need conversion from halt Station to Block Station and a 3.5 Kms. line from this station to the project site will be required for which survey work has been completed.

Coal Transportation

The petitioner has intimated that the draft Coal Transport Agreement has been submitted to the Railway Board, New Delhi, where it is under consideration.

EVACUATION OF POWER

The petitioner has reported that the sole beneficiary of the project will be PSEB who have filed the requisite petition for approval of the Amended & Restated Power Purchase Agreement initialed between the parties.

PROJECT CAPITAL COST

Land

The petitioner has informed that the Govt. of Punjab has initiated the process of acquiring a total of 1093 acres of land for the project, out of which about 54 acres of land was purchased/acquired in the year 1999 at a cost of Rs. 2.60 crores. The Commission notes that GVK while seeking the clearance of MoEF had indicated the requirement of land as 715 acres. The petitioner has clarified that 1093 acres of land is proposed to be acquired to accommodate a third generating unit, the work for which will be initiated as soon as the construction work on the instant project commences. The Commission is of the view that the cost of land for the third unit can not be presently capitalized and thus a land requirement of 715 acres is sufficient for a 2x270 MW Generating Station. As regards the estimated cost of the land, the petitioner had initially provided 75.61 crores but in the subsequent filings, the estimated cost for land has been revised to Rs.160 crores. Thereafter, GVK intimated that the Government of Punjab has completed the land acquisition process for the project and the award is likely to be announced at the rate of Rs.16.15 lakhs per acre. Accordingly, the balance requirement of 661 acres (715-54) @ Rs.16.15 lakhs per acre comes to Rs.106.75 crores. The Commission, accordingly, approves an amount of **Rs.109.35 crores** (106.75+2.60) for the land requirement of 715 acres for the project.

Boiler, Turbine and Generator (BTG) Package

As per the initial provision, the BTG package was for Rs.857.50 crores excluding taxes and duties. GVK, after inviting competitive bids, has issued a Letter of Intent (LOI) to M/s BHEL for supply of BTG package at a cost of **Rs.1070.55 crores** inclusive of taxes and duties which the Commission considers as reasonable for the purpose of estimating project capital cost.

Balance of Plant (BoP)

In the original petition, GVK has provided a sum of Rs.444.87crores for this purpose excluding taxes & duties and engineering, erection & civil works. Separate provisions of Rs.245.52 crores and Rs.624.13 crores respectively, has been made for the above exclusions. The petitioner has since invited competitive bids for the BOP and obtained the lowest bid of Rs.1003 crores inclusive of taxes and duties, engineering, erection and civil works. GVK has now informed that the contract for BOP has been finalized and furnished a copy of LOI which indicates a contract price of Rs.1005 crores including all taxes and duties (excluding entry tax and octroi) as on 1.4.08. Any variation in cement and steel prices will, however, be taken into account up to the estimated quantities mentioned in the LOI. The Commission notes that GVK has chosen to place the LOI on the highest bidder and that the price is inclusive of the provision for two 'natural draft cooling towers'. However, it has been intimated that the BOP contract price will be reduced by Rs.50 crores in the event of 'induced draft cooling towers' being accepted. The Commission notes that the quantum of work varies in the bids received and that work allotted is on a negotiated basis. For that reason, the Commission accepts the negotiated price of **Rs. 1005 crores** for the BOP package subject to the condition that it will be reduced by Rs.50 crores if GVK eventually goes in for ' induced draft cooling towers'.

Non EPC Works

In the petition, GVK has provided Rs.86 crores for non EPC works i.e. works other than BTG & BOP. In the subsequent filings, it has been informed that the provision for non EPC works includes Rs.35 crores for railway siding as intimated by the approved railway contractor M/s BARSYL. GVK has indicated that the railway siding work will be carried out either by Indian Railways or their approved contractor M/s BARSYL, Secunderabad. This entails upgradation of the Khadoor Sahib Railway Station and the laying of a 3.5 Km line from this station to the project site. The remaining provision of Rs.51 crores (86-35) is stated to be for the residential colony, boundary wall, administrative building, green belt, site office, approach road, site grading, site drainage, fire station building, main entrance gate complex, security barracks and ash pond etc. The Commission is inclined to allow the amount of **Rs.86 crores** for non EPC works but does not approve an additional amount of Rs. 49 crores for site clearing/grading and Ash pond reported separately in the latest filing by the petitioner as the same are considered included in the total non EPC cost of Rs. 86 crores intimated earlier.

48 Crores

Start up expenses

The petitioner has provided Rs.15 crores towards start up expenses. The Commission does not allow this cost in view of the normal industry practice of setting off such expenses against revenue from sale of infirm power and not to add these to the project capital cost.

15 Crores

Power and Water for Construction

The petitioner envisages an outlay of Rs.12 crores for the purpose. The Commission notes that this cost is included in the BTG as well as BOP contracts while the cost associated with providing power and water at the construction site is included in the estimate for non EPC works. As such no provision is required to be separately made for this purpose.

12 Crores

Rehabilitation & Resettlement Cost and Preliminary Expenses

The petitioner had indicated a requirement of Rs.5 crores on this account. In one of its filings, GVK has mentioned that this amount is necessary for relocation of existing power lines in the plant area, construction of approach roads to lands of farmers, access to which is blocked by land acquisition for the project and drainage around the plant to protect land not acquired for this project.

ok

The Commission considers the provision of Rs. 5 crores to be reasonable, as also the amount of Rs.0.25 crores provided for preliminary expenses.

Consultancy & Engineering and Operator Training

The provision of **Rs.7.50 crores** for consultancy and engineering and **Rs.5 crores** for operator training is considered reasonable by the Commission.

Pre-operative Expenses

A sum of Rs 50 crores has been provided by the petitioner on this account. The Commission notes that the bulk of the work relating to this project will be through two major contracts for the BTG and BOP packages which include erection, testing and commissioning. Moreover, railway siding work is to be carried out on an estimated contract price of Rs.35 crores with the remaining non EPC works of Rs.51 crores roughly amounting to 2% of the total project cost.

As such, the establishment that the petitioner will need to deploy during the project period for supervision and management is not likely to be very large. The cost estimate provided in this regard thus appears to be very much on the higher side and the Commission considers that a sum of **Rs.15 crores**, is sufficient to meet these costs.

35 Crores

Insurance

An amount of Rs 11.44 crores is provided towards insurance in the project capital cost. Usually, insurance charges are included in the contract between the contractor and the project developer. In the present case also, it is noticed that the petitioner has indicated that the BTG and BOP contractors will take erection all-risk policies. GVK in its latest filing has clarified that the premium provided in the estimated project cost pertains to Advance Loss of Profits Policy/Delayed Startup Policy for a period of 3 years which covers loss of fixed charges attributable to physical damage during construction/transportation of equipment. The Commission is inclined to permit the additional capital cost of **Rs.11.44** crores on account of insurance as GVK informed that financial institutions insist on obtaining this level of comfort.

Interest during Construction

The petitioner's first submission indicated two types of loans – a rupee term loan and a foreign currency loan, each equal to 40% of the project cost, and carrying an annual interest rate of 10% and 7.75% respectively. Based on these the petitioner worked out IDC as Rs 365.19 crores.

In a subsequent submission, the petitioner has indicated that, in view of contracts for the bulk of the project being mainly in Indian Rupees, the RBI is not likely to permit a foreign currency loan. In the meanwhile, interest rate on rupee term loan has increased and the petitioner has negotiated an interest rate of 11.25% on the rupee term loan. However, still assuming that 50% loan would be in foreign currency, a revised IDC of Rs 393.44 crores has been worked out by GVK on the basis of quarterwise drawl schedule/phasing of expenditure, for a period of 36 months, assuming that equity shall be expended in the debt equity ratio (80:20) from the start of the project.

The Commission has accepted the estimates of the project capital cost of **Rs.2315.12** crores excluding IDC, financing charges and contingency. Since the likelihood of foreign currency loan appears remote in view of the restrictions placed by RBI on external commercial borrowing, the Commission has assumed the entire loan to be rupee term loan at a rate of 11.25% in the calculations for IDC. In the LOI, it has been mentioned that BHEL guarantees to achieve commercial operation of the first unit not later than 33 months and the second unit not later than 36 months, from the date of the notice to proceed, which has been taken in to consideration by the Commission in the IDC calculations besides the following standard terms in respect of such loans as detailed hereinafter:

- 50% of the total equity shall be expended before any instalment of the loan can be drawn upon;
- loan instalments can be drawn until the actual expenditure achieves the debt equity ratio (80:20) for the project; and
- thereafter, disbursement of loan is pro rata so as to maintain the debt equity ratio as 80:20.
- the phasing of expenditure has been assumed as 15% for the first year, 50% for the second year, 30% for third year upto COD and 5% for three months after COD of the last unit.
- within the above phasing, the ratio of expenditure between unit 1 and unit 2 has been taken as 60:40.
- in the IDC calculations, 36 months have been taken as the time for achieving the commercial operation of the first unit and 39 for the second one.

On the above assumptions, IDC cost works out to **Rs.286.36 crores** which is accepted by the Commission.

Financing Charges

The petitioner has provided Rs. 70 crores on this account including an up front fee of 0.5% of the debt committed plus taxes, a financial advisory fee of 1% of the debt amount plus taxes, a syndication fee of 0.2% of the debt availed plus taxes and a commission of Rs.31.80 crores, which is 1.06 % of the project capital cost, payable to the bankers for opening letters of credit.

The Commission is not inclined to allow the sum of Rs.31.80 crores as such amounts are negotiable and not always insisted upon by the lending institutions. The Commission is also of the view that the estimated amount on account of financial advisory services is not commensurate with the quantum of services provided most of which the project developers usually manage in-house. However, the up front fee of 0.5% and the syndication fee of 0.2% of the loan amount both inclusive of taxes appear to be reasonable. Accordingly, the Commission approves Financing Charges of **Rs.16 crores.**

54 (cr)

Contingency

GVK has provided a sum of Rs 66.85 crores for unforeseen expenses. As a bulk of the expected outlay has been firmed up in terms of a contract for the BTG, BOP package and the Railway Siding, there is a need to provide contingency only for remaining non EPC works estimated to cost Rs.51 crores. Accordingly, the Commission considers that the provision of **Rs 5 crores**, is sufficient and reasonable for this purpose.

Working Capital Margin

An amount of Rs 46 crores has been provided towards working capital margin. The Commission notes that in similar petitions of M/s Essar Power Ltd., Nagarjuna Power Corporation Ltd. and Torrent Power Generation Ltd., CERC has held that working capital margin is not to be considered as part of the project capital cost. Accordingly, the Commission concludes that this amount should not form part of the project capital cost.

46 (cr)

ELECTRICITY REGULATORY COMMISSION

FINANCING PLAN

A debt equity ratio of 80:20 has been intimated by the petitioner whereas CERC norms provide 70:30 for the purpose of determination of tariff provided that where deployment of equity is less than 30%, the actual debt and equity shall be taken into account. The petitioner has also submitted a letter from IDBI bank bringing out the award of mandate in favour of the bank for syndicating the debt requirement of the project. The Commission finds the same sufficient for according 'in principle' acceptance of the financing plan.

CONCLUSION

Based on the above, item-wise estimates of project capital cost as submitted by M/s GVK and approved by the Commission are depicted in tabulated form in the Annexure. The Commission notes that with the issuance of LOI for BTG and BOP packages, nearly 79% of the estimated project capital cost gets firmed up. Another 15% of the capital cost is accounted for by land cost (4%) and IDC (11%) thereby firming up nearly 94% of the total cost of the project. Another sum of Rs.35 crores for the railway siding can also be considered as firm. The balance infirm amount comes to Rs.116.19 crores (approx. 4.4%) which includes Rs.51 crores for non EPC cost (excluding railway siding). On the above basis, the Commission accords 'in principle' acceptance to the estimated project capital cost of **Rs.2622.48 crores**. This approval will, however, not be construed as approval/ratification of any other aspect separately covered under an applicable law.

Satpal Singh Pall
Member

Baljit Bains
Member

Jai Singh Gill
Chairman

Place: Chandigarh
Date: 29-04-2008

Authenticated

Registrar
Punjab State Electricity Regulatory Commission
Chandigarh

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION

Annexure

Estimates of the Project Capital Cost (Rs. in crores)

Sr. No.	Item	Cost Estimates as per Petition & subsequent filings	Estimates of the Project Capital Cost accepted by the Commission
1.	Land	75.61	109.35
2.	Rehabilitation & Resettlement	5.00	5.00
3.	Preliminary Expenses	0.25	0.25
4.	Boiler Turbine Generator package	857.50	1070.58
5.	Balance of Plant	444.87	*1005.00
6.	Engg., Erection, Civil Works	624.13	Incl. in BTG BOP contracts
7.	Taxes & Duties	245.52	Incl. in BTG BOP contracts
8.	Non EPC	86.00	86.00
9.	Start-up Expenses	15.00	Set off against sale of infirm power
10.	Power and Water for Construction	12.00	Included in BTG & BOP contracts and Non EPC works
11.	Consultancy & Engg.	7.50	7.50
12.	Pre-operative Expenses	50.00	15.00
13.	Operator Training & Mobilisation	5.00	5.00
14.	Insurance	11.44	11.44
15.	**Capital Cost excluding IDC, Financing Charges & Contingency**	**2439.82**	**2315.12**
16.	Interest during Construction	365.19	286.36
17.	Financing Charges	70.00	16.00
18.	Contingency	66.85	5.00
19.	**Estimated Project Capital Cost excluding WCM**	**2941.86**	**2622.48**
20.	*Working Capital Margin*	46.00	Pass through in tariff
21.	**Estimated Project Capital Cost**	**2987.86**	**2622.48**
22.	Capacity (MW)	540	540
23.	**Cost per MW**	**5.53**	**4.86**

** The BOP package cost will be reduced by Rs.50 crores if GVK eventually goes in for 'induced draft cooling towers'.*

ANNEXURE P-3

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION
SCO 220-221 SECTOR-34-A CHANDIGARH

Petition No.3 of 2007
Date of hearing: 26.02.2009
Date of Order: 06.03.2009

In the matter of:	Petition under Section 86(1)(b) of the Electricity Act, 2003 for approval of Power Purchase Agreement for purchase of power from 2x270 MW Goindwal Sahib Thermal Power Station, Goindwal Sahib (Distt. TarnTaran) to be developed by M/s GVK Power (Goindwal Sahib) Limited, Secunderabad(AP) on 'BOO' basis.
	AND
In the matter of:	Punjab State Electricity Board, The Mall, Patiala.
Present:	Sh. Jai Singh Gill, Chairman Smt. Baljit Bains, Member Shri Satpal Singh Pall, Member

ORDER

1. Punjab State Electricity Board (PSEB) filed this petition on 21.3.2007 under Section 86 (1) (b) of the Electricity Act, 2003 (Act) for approval of the Power Purchase Agreement (PPA) for purchase of 2x250 (+20%) MW of power from the Goindwal Sahib Thermal Power Station, Goindwal Sahib (Distt. TarnTaran) (GSTPS) to be developed by M/s. GVK Power (Goindwal Sahib) Ltd. Secunderabad (Developer/Seller).

2. The petitioner has submitted that M/s GVK Industries Ltd., Hyderabad (GVK) was first selected by the Government of Punjab (GoP) for setting up GSTPS on 'BOO' basis through a competitive bidding process and a Letter of Intent was issued in its favour on 18.5.1998 by GoP. The PPA was signed between the parties on 17.4.2000 after approval by GoP. GVK thereupon set up GVK Power (Goindwal Sahib) Ltd. as a special purpose vehicle to develop the project. The company obtained various clearances and an Implementation Agreement (IA) was signed by them with GoP on 25.8.2000. However, the project could not be implemented as IDBI, the main lender for the project, did not accept the escrow capacity of PSEB and the fuel supply agreement between the developer and Eastern Coal Fields Ltd. could not be finalized as price of coal was found to be higher when compared to the price at which coal was being received at other thermal plants of PSEB.

3. Thereafter, the Ministry of Coal (MoC) on the recommendation of GoP, allocated the Tokisud North Coal Block as a captive mine for GSTPS on 7.1.2002. The project still did not proceed further as the developer was unable to indicate the tentative cost of coal from the captive coal mine allocated for the project. At that stage, the Officers' Committee on Projects of GoP in its meeting held on 26.7.2005 deliberated the matter and decided that PSEB may proceed to revise the MoU which besides providing for the commissioning schedule and tripartite payment security mechanism also stipulated that the tariff shall be subject to the approval of the Commission and be based on the principle that variable/fuel charges linked to coal cost will not exceed the cost as prevailing in the captive Pachhwara coal mine of PSEB and that fixed charges will not exceed the charges as worked out as per Central Electricity Regulatory Commission (CERC) norms.

4. A revised MoU was then signed on 8.2.2006 between M/s GVK Power (Goindwal Sahib) Limited

and PSEB for reviving the development of GSTPS. The margin of up to 20% over the installed capacity was agreed by the parties to accommodate the standard sizes of power generating equipment available in the market with a view to economizing on the cost of the equipment. Subsequently, the developer filed an amendment to their petition no.4 of 2007 in which the capacity was revised to 2 x 270 MW from 2 x 300 MW as indicated in the PPA initialed between the parties in January, 2007. PSEB also filed an interim application for amending this petition to this effect. Accordingly, the contracted capacity of the project is now being reckoned as 2 x 270 MW.

5. In accordance with the terms of MoU, the Restated Power Purchase Agreement is to be signed between the two parties after approval of the Commission. It has been averred in the petition that the PPA initialed by the respective Chairmen of PSEB and GSTPS in January, 2007 and now submitted for approval is based on the guidelines of the MoP and norms of operation for Thermal Power Projects specified by CERC/State Grid Code.

6. The petition was fixed for its maintainability on 4.4.2007 when PSEB was also directed to clarify as to whether the PPA conforms to the requirements of the National Tariff Policy. After considering the submissions filed by PSEB on 24.4.2007 in this respect, the petition was admitted on 4.5.2007. The Commission after having taken into account the several submissions of PSEB on the question of conformance of the PPA with the National Tariff Policy and specially taking into account the clarifications dated 15.2.2008 given by the Ministry of Power, Govt. of India finally accepted, in its order of 15.10.2008, the request of the petitioner to consider the restated PPA for approval. Parallely, the petition was put to the public and a public hearing held on 22.8.2007 when the views of the PSEB Engineers' Association and another objector were heard. The petition was thereafter fixed for hearing on its merits on 30.12.2008 and 6.1.2009. PSEB filed their final submissions on 23.1.2009 after which they were heard on 27.1.2009, 17.2.2009 and 26.2.2009.

7. The Commission observes that the restated PPA is based on the Standard PPA which is a part of the Guidelines issued by the MoP and it includes all the 18 articles of the latter but with substantial deviations. The Commission carefully perused the PPA and noticed that most of its articles have, after the amendments, lost their sanctity of purpose and no longer remain equitable. The deviations effected were brought to the attention of the petitioner who during the hearing contended that the PPA needs to be accepted by the Commission with all the deviations. It is argued that the risks associated and mitigation options reflected in the instant procurement are different as compared to a case where tariff based bids are invited. In the event of tariff based bidding, various clearances and approvals are put in place by the procurer before the start of the procurement process while in the instant case, the developer had undertaken all the risks connected with acquiring the land, approvals, fuel linkage, environmental clearances etc. It was further submitted that in the case of the petitioner, the original PPA was signed by both the parties on 17.4.2000 and the present amended and restated PPA is an improvement upon the original PPA, which is the result of negotiations with the developer. It is urged that this PPA should not be compared with the Standard PPA (of which only a draft was available at the time of signing of the PPA) when the procurement process in the case of the petitioner is entirely different.

8. Before discussing the significant deviations in detail, the Commission observes that the above contentions of the petitioner have little merit. Various clearances and approvals referred to by the petitioner were already in place before the PPA was initialed in January, 2007. GoP/PSEB offered full cooperation in acquiring the land and expediting the various statutory/non statutory clearances required for implementation of the project and as such there was no additional risk passed on to the developer at the time of negotiating and initialing the PPA in January, 2007. It also needs to be emphasized that the Government of India, Ministry of Power notified the Tariff Policy, 2006 and as per clause 5.1 thereof, all future requirements of power are to be procured competitively by the distribution licensee. Subsequently, exceptions were provided for the projects where appraisal was started before 6.1.2006 by the relevant financial institutions and the final PPA filed before the appropriate Commission by 30.9.2006. In such cases, a relaxation was provided in the tariff policy

that power from such projects may be procured by the utilities without going through the competitive bidding process. However, the process of procuring power is still as per the Tariff Policy, 2006 and, accordingly, PPAs, even for such projects must conform to the Standard PPA formulated under the guidelines issued by MoP. The Commission further notes that the petitioner has drafted the PPA on the lines of the Standard PPA; it includes all the 18 articles as per the Standard PPA and thus the argument that the original PPA alone should be considered for comparison has no merit. The Standard PPA, which is a well balanced document and the result of collective efforts put in under the supervision of MoP, must be adhered to for procurement of power under the Tariff Policy, 2006 including the exceptions under this policy and any deviations can be considered only when those are absolutely necessary. In view of these considerations, the Commission holds that the Standard PPA is a benchmark for permitting any need based and necessary deviations provided these are equitable to the procurer and the developer.

9. In the light of the above conclusions, it is necessary to refer to some of the important clauses in the PPA where deviations from the standard PPA have been effected and the views of the Commission thereon. These are discussed hereunder:
   a. Performance Guarantee:
      The standard PPA provides that the performance guarantee in the form of a bank guarantee would be provided @ Rs.7.5 lakhs MW. In case conditions subsequent are not fulfilled, the above amount would increase weekly @ 0.375 lakh per MW. The PPA on the other hand has no provision for a performance guarantee and instead provides for a security deposit in the shape of a bank guarantee of the amount of Rs.3.9 crores. The petitioner has sought to justify the substantial difference between the amount to be provided in accordance with the standard PPA (Rs.40.5 crores) and that indicated in the PPA by referring to the higher risk associated in this case where the responsibility for providing land, obtaining clearances and fuel linkage has been passed on to the developer. Moreover, it is mentioned that the security deposit in the shape of a bank guarantee was agreed to on the basis of prevailing practices at the time of signing the original PPA. The Commission is of the considered opinion that the provisions of the PPA in this respect are highly inadequate. Given the fact that the actual risk of the developer in the matter of land acquisition, obtaining clearances and fuel linkage was actually much less, there appears to be no justification for this deviation.

   b. Liquidated Damages:
      The Commission observes that the charges payable as Liquidated Damages (LD) provided in the PPA are significantly less than the amount indicated in the standard PPA. Moreover, there is further provision in the PPA that levy of LD charges will begin after a gap of 5 months while there is no parallel provision in the standard documents. The petitioner has clarified that the rates indicated in the charges are those which were stipulated in the bidding documents in 2006. The levy of liquidated charges after 5 months is justified on the ground that the security deposit of Rs.3.9 crores would be appropriated @ 20% per month and LD charges would become payable thereafter. The Commission is of the view that LD charges as per the standard PPA appear fair and equitable and need to be provided for accordingly. There is little justification for taking into account the bank guarantee of Rs.3.9 crores which is being referred to both in respect of performance guarantee and liquidated damages.

   c. Performance Test:
      The standard PPA provides for that as many as 8 re-tests can be taken in a period of 180 days while the PPA allows a maximum of 5 tests in the period of 360 days. The Commission is of the view that capacity at which the generating units are operating should become known to the procurer as early as possible and that provisions as per the standard PPA need to be retained.

   d. Tested Capacity in excess of Contracted Capacity:
      The Commission observes that the standard PPA provides for excess capacity, if any, to be

offered to the procurer while the PPA permits the seller to dispose off such capacity to a third party. The petitioner has justified this by stating that PSEB has assured contracted capacity available at all times and can purchase in excess of tested capacity if it chooses to do so. The Commission is of the view that the provisions in the standard PPA are fairer and need to be retained.

e. Reduction in Capital Cost due to De-rating:
The Commission finds that the PPA does not provide for proportionate reduction in capital cost in the event of generating units being derated. The petitioner has argued that the interests of the procurer are effectively safeguarded when derating results in proportionate reduction in contracted capacity. The Commission notes that there is a significant deviation in the PPA in so far as there is no provision for proportionate reduction in each element of capital cost which is specifically provided in the standard PPA. Accordingly, the Commission does not find any justification for this deviation.

f. Adjudication by the Commission:
Several articles of the standard PPA provide for an adjudicatory role of the Commission in the event of disputes between the seller and the procurer while the PPA nowhere provides for such a role by the Commission. However, in one of their subsequent filings the petitioner has agreed, taking into account a recent Supreme Court judgment, to suitably provide for the adjudication by the Commission, wherever required. Accordingly, the Commission concludes that clauses in the standard PPA where such a role is defined need to be suitably incorporated.

g. Appointment of an Independent Engineer:
The standard PPA provides that an independent engineer will be jointly appointed by the procurer and the seller whereas the PPA stipulates the appointment of the independent engineer by the procurer who will also bear the cost. The petitioner has supported the amended stipulation on the ground that it is to the benefit of the procurer. That notwithstanding, the Commission is of the view that an independent engineer should be jointly appointed and paid for by both parties so as to uphold and strengthen the impartial image of such an agency.

h. Articles 7 and 9:
The Commission observes that there is no need for any further elaboration of articles 7 (Operation and Maintenance) and article 9 (Metering and Energy Accounting) as the standard PPA provides that these aspects shall be governed by the provisions of the Grid Code, the Central Electricity Authority (Installation and Operation of Meters) Regulations 2006 and the principles of Availability Based Tariff. Since the above mentioned rules and regulations are already notified, it is neither necessary nor desirable that further elaboration be made in respect of these technical matters in addition to what is already stipulated therein. Accordingly, the provisions of the standard PPA need alone to be retained.

i. Article 14:
The Commission observes that the standard PPA does not provide for a buy-out option in case of a persistent default on either side. It is evident that in providing substitution rights of the lenders, the standard PPA seeks to give them a measure of comfort. However, it may be advantageous, at the same time, to further provide for the eventuality of a buy-out as has been indicated in the PPA. The Commission accordingly observes that both parties might like to explore the possibility of providing an appropriate and equitable buy-out clause in addition to this article which may provide greater flexibility in case the lenders are unable to find a suitable selectee as provided in the standard PPA.

10. Coal Cost: The petitioner has indicated that a captive coal mine (Tokisud North) has been allocated

for GSTPS by the Ministry of Coal on the recommendation of GoP/PSEB. As per decisions taken in the meeting of the Officers' Committee on Projects held on 26.7.2005, the fuel charges linked to coal cost are not to exceed the cost as prevailing in the PSEB's existing Pachhwara captive coal mine. The Commission observes that the coal price of the Pachhwara coal mine determined on the basis of percentage of discounts on the Coal India Ltd. price for different categories of coal can not automatically be adopted for another mine where geographical and other features may be different. The Commission is, therefore, of the view that adoption of coal cost of the Pachhwara mine indicates the maximum price at which coal would be supplied to GSTPS. However, the possibility that cost of fuel from the captive coal mine of GSTPS may actually be lower needs to be explored. Accordingly, the Commission is of the view that there is a need to devise a judicious method of arriving at the cost that will actually be supplied from Tukisud North. The Commission directs that the developer will in association with the procurer resort to a competitive bidding process, preferably international both for developing and operating the captive coal block allocated to GSTPS and any lower cost emanating as a result of this exercise shall form part of the mining agreement and be adopted for the purposes of working out the variable (fuel) charges.

11. The Commission observes that the standard PPA includes 17 schedules of which several are relevant only in a case of competitive bidding and multiple procurers. The PPA on the other hand includes 7 schedules which are common and another 5 which find no mention at all in the standard PPA. After taking into account the need and relevance of these schedules, the Commission directs that Schedule 1A (Site), 2 (Initial Consent), 4 (Functional Specification), 5 (Commissioning and Testing), 6 (Availability Factors), 7 (Tariff), 8 (Details of Inter-connection Point and Facilities), 10 (Representation and Warranties), 15 (Format of the Performance Guarantee) and 17 (Substitution Rights of the Lenders) shall be retained in the PPA allotting them serial numbers from 1 to 10. Further schedule 11 of the PPA will pertain to the estimates of project capital cost as approved by the Commission. In case the parties are able to reach an agreement on a suitable buy-out clause, schedule for the same be provided as Schedule 12. However, other schedules included in the PPA such as those for Metering System, Calculation of Fuel Consumption, Price of Coal and Weighted Average GCV and Draft Format of the Tripartite Escrow Agreement will not form a part of the final PPA. The Commission also clarifies that:
    i. The schedule for Tariff shall clearly mention that the tariff will be determined by the Commission when the application for the same is received from the developer at the appropriate time.
    ii. All clauses in the schedule for Tariff as per the standard PPA shall be retained (except clause 1.2.2 and 1.2.3 applicable in the case of tariff based bidding) including proviso under 1.2.2.
    iii. In the schedule for Functional Specification, ramp rates (clause 1.3) will be retained as per stipulations in the standard PPA. This clause will be further customized to the satisfaction of the procurer taking into account the plant type and the relevant provisions of the Grid Code.
    iv. Language of schedules pertaining to Commissioning and Testing, Availability Factors, Representation and Warranties, Format of the Performance Guarantee and Substitution Rights of the Lenders will be retained as per the standard PPA.
    v. If so required and agreed, the schedule pertaining to details of Inter- connection Point and Facilities may be kept as per the PPA.

12. In the light of observations in the foregoing paras, the Commission directs that all articles of the PPA initialed between the parties including the definitions be finalized as per the standard PPA excluding references made to multiple procurers or the bidding process wherever occurring as these are not applicable and incorporating permitted deviations. However, the definition of Project and Captive Coal Mine may be retained as per the PPA. The Schedules shall be drawn as discussed in para 11 and keeping in view the clarifications elaborated therein.

Sd/- **Sd/-** **Sd/-**

(Satpal Singh Pall)	**(Baljit Bains)**	**(Jai Singh Gill)**
Member	**Member**	**Chairman**

Place: Chandigarh
Dated: 06-03-2009

ANNEXURE P-4

Before the Appellate Tribunal for Electricity
(Appellate Jurisdiction)

Appeal No. 104 of 2008

Dated: April 8, 2009.

Present: - Hon'ble Mrs. Justice Manju Goel, Judicial Member
Hon'ble Shri H.L. Bajaj, Technical Member

M/s G.V.K. Power (Goindwal Sahib) Ltd.
Paigah House, 156-159, Sardar Patel Road
Secunderabad-500003
Andhra Pradesh ....Appellant

Versus

1. Punjab State Electricity Regulatory Commission
SCO: 220-221, Sector: 34-A
Chandigarh-160002

2. Punjab State Electricity Board
The Mall, Patiala-147001
Punjab .....Respondents

Counsel for the appellant:	Mr. M.G. Ramachandran Ms Swapna Seshadri Mr. Anand K. Ganesan Mr. A.Akshaya Babu
Counsel for the respondents:	Mr. M.S. Marwah Resp.for PSERC Mr. A.S. Beriwal Rep for PSEB Mr. Sakesh Kumar Er. J.P. Singh, Dy. CE Ms Jayshree Anand for Resp.No.2 Mr. K.K. Mahalik for R-2

JUDGMENT

Per Hon'ble Mr. H.L. Bajaj, Technical Member.

This appeal challenges order dated April 29, 2008 passed by the Punjab State Electricity Regulatory Commission (hereinafter referred to as the Commission) whereby the Commission has granted in-principle approval of the project cost of the 2 X 270 MW thermal power project proposed to be set up by the appellant in the state of Punjab.

2. Facts of the case to the extent relevant for this appeal are briefly given below:-

3. The appellant, M/s GVK Power (Goindwal Sahib) Limited is a company incorporated under the provisions of the Companies Act with the object of engaging in the business of establishing, maintaining, operating a Thermal power station at Goindwal Sahib in the state of Punjab and for supplying electricity from the said station.

4. The Government of Punjab invited bids from prospective project developers' proposals on the basis of an International Competitive Bidding in the year 1996 to establish a coal based thermal power generation project at Goindwal Sahib, Tarn Taran District, Punjab. The entire electricity generated from the said generating station was proposed to be sold to meet the ever increasing needs of the Punjab State Electricity Board, the Respondent No. 2 herein (hereinafter called PSEB).

5. The appellant was selected on the basis of lowest capital cost by the Government of Punjab under the said International Competitive Bidding Process to build, own and operate the said generating station at Goindwal Sahib.

6. Pursuant to the above the appellant and PSEB executed a power purchase agreement on April 17, 2000 and thereafter, in January, 2007, both the parties initialed a draft amended and restated Power Purchase Agreement (hereinafter called Draft amended and restated PPA) which is to be entered into after

completion of the required formalities including and in particular the approval of the Commission required under The Electricity Act, 2003.

7. Pursuant to the above draft amended and restated PPA initialed between PSEB and the appellant, PSEB filed before the Commission an application being No. 3 of 2007 for approval of the draft amended and restated PPA. The said approval of the Commission is required to be taken by PSEB as per Section 86(1) (b) read with Section 62(1) of The Electricity Act, 2003.

8. In the meanwhile, the appellant was advised to file a petition before the Commission for an in-principle approval of the estimated project cost of the generating station. Accordingly, on March 23, 2007, the appellant filed a petition being petition No. 4 of 2007 for the in-principle approval of the estimated project cost and financing plan. On May 07, 2007, the appellant filed an application under Regulation 10 read with Regulation 69 of the PSERC Regulations for amendment of

the original petition No. 4 of 2007 for incorporating the change in the capacity of the Project to 2X270 MW. The amended application was allowed by the Commission. As per the third proviso to Regulation 7 of the Central Electricity Regulatory Commission (Terms and Condition for Determination of Tariff) Regulations 2004, the in-principle acceptance of the project cost and the financing plan shall be the guiding factor for applying prudence check on the actual capital expenditure.

9. In the petition No. 4 of 2007 filed before the Commission the appellant submitted the entire details of the estimated project cost including such further details and particulars as directed to be furnished by the Commission and also the full justification for the project cost estimated by the appellant.

10. Pursuant to the petition filed by the appellant the Commission apart from hearing PSEB, issued public notices inviting comments from the general public to the petition filed by the appellant.

11. Thereafter, the Commission directed the issue of public notices and invited comments from the general public. PSEB filed its reply to the application in which PSEB did not raise any specific or detailed objection to the estimated capital cost of the power project proposed to be set up by the appellant. PSEB had only stated the factual developments in the case. Apart from PSEB two other objections were received pursuant to the public notice issued by the Commission.

12. Vide order dated April 29, 2008, the Commission disposed of the petition No. 4 of 2007 and decided on the in-principle project cost of the power project proposed to be set up by the appellant.

13. The Commission has approved the capital cost of Rs. 2622.48 crores as against the capital cost of Rs. 2987.86 crores proposed by the appellant leaving a gap of Rs. 365.38 crores and hence this appeal. Before approaching this Tribunal a

review petition was filed by GVK which was rejected by the Commission vide order dated August 06, 2008.

14. Mr. Ramachandran, learned counsel for the appellant has explained to us that GVK has not awarded the project execution on turn key basis by the entire project is given to one agency for implementation with overall responsibility of the entire project and delivery. He said that whereas such turnkey award contract minimizes the work for the project developer (the appellant), it increases the project cost substantially. Appellant having experience in such project execution decided to get the project executed under following different packages in order to reduce the project cost.

a. Boiler Turbine Generator Package to be executed by BHEL;
b. Balance of Plant Package to be executed by Punj Lloyd;
c. Other procurements;
d. Other contractors executing miscellaneous work; and
e. Management and coordination performed by GVK itself.

15. In the project cost projected by GVK amongst others, the break-up was given for Boiler Turbine Generator Package (BTG), Balance of Plant Package (BOP), Engineering erection, civil works and taxes and duties separately at item No. 4,5,6 and 7 as under:

Sl.No.	Package	Amount (Rupees in crores)
4	Boiler Turbine Generator Package	857.50
5	Balance of Plant	444.87
6	Engineering, erection civil works	624.13
7	Taxes and duties	245.52
	Total	2172.02

16. However, while giving approval the Commission has combined the Engineering, Erection, Civil Works (Item 6 above) and taxes and duties (item 7 above) into item 4&5 and the amount has been stated as under:

Sl.No.	Package	Amount (Rupees in crores)
4	Boiler Turbine Generator Package	1070.58

5	Balance of Plant	1005.00
6	Engineering, erection civil works	Including in BTG BOP contracts
7	Taxes and duties	Including in BTG BOP contracts
	Total	2075.58

17. Mr. Ramachandran submitted that the difference in the above two works out to Rs. 96.44 crores. The other items of capital cost claimed by the GVK and allowed by the PSERC are also contained in the appeal and the aggregate difference between the capital cost estimates given by GVK and approved by the Commission works out to Rs. 365.38 crores (Rs. 2987.86 crores – Rs. 2622.48 crores = Rs. 365.38 crores). He submitted that in the present case the capital cost proposed by GVK is comparable to that of the other projects and that this fact was placed before the Commission in their submissions dated September 06, 2007. He stated that GVK has proceeded to acquire the land and also made initial payments to EPC contractors, consultants aggregating to Rs.275.45 crores, clearly showing its commitment to the project.

18. Learned counsel contended that the appellant is aggrieved by the reduction or non consideration of the following elements in the estimated capital cost of the project in the order dated April 29, 2008.

(a) Non-inclusion of the cost of initial recommended spares in the capital cost of BTG package;
(b) Non-inclusion of the cost of initial recommended spares in the capital cost of BOP package;
(c) Disallowance of site Grading and Ash Pond Development costs;
(d) Disallowance of start up expenses;
(e) Disallowance of expenses towards power and water for construction;
(f) Production of pre-operative expenses;
(g) Treatment of interest during construction;
(h) Reduction of contingency expenses;
(i) Reduction of financing charges and
(j) Disallowance of working capital margin

19. Mr. Ramachandran reiterated that at this stage only in-principle approval to the capital cost to be incurred by GVK on the project was sought for and the tariff will, however, be based

only on the actual capital cost which GVK incurs. In the event the actual capital cost is in excess of what is approved in the in-principle estimated capital cost GVK has to establish that the additional expenditure has been incurred not for any reasons attributable to the GVK or its suppliers or its contractors. The purpose of in-principle approval is to provide guidance to the project developer and facilitate the lenders and financial institutions to finalize the funding and financing arrangement. In this regard he has cited Clause 1(2) (a) of notification dated March 30,1992 of Government of India which reads as under:-

> *" 1.2 The capital expenditure of the project shall be financed as per the approved financial package set out in the techno-economic clearance of the authority. The Project cost shall include capitalized initial spares. The approved project cost shall be the cost which has been specified in the techno-economic clearance of the authority.*
>
> *The actual capital expenditure incurred on completion of the project shall be the criterion for the fixation of tariff. Where the actual expenditure exceeds the approved project cost the excesses as approved by the authority shall be deemed to be the actual capital expenditure for the purpose of determining the tariff.*

Provided that such excess expenditure is not attributable to the Generating Company or its suppliers or contractors;

Provided that such excess expenditure is not attributable to the Generating Company or its suppliers or contractors;

Provided further that where a power purchase agreement entered between the Generating Company and the Board provides a ceiling on capital expenditure, the capital expenditure shall not exceed such ceiling.

Provided also that in case of multi-unit project, the percentage of capital cost s specified by the authority in its techno-economic clearance shall be considered for fixation of tariff, on commercial operation of the progressive units but in case of delay in commissioning of second or subsequent units from the scheduled date, the project cost, for the period of delay, shall be retrospectively approved for the tariff purpose in the ratio of proportionate allocation of units;

Provided further that if the capital cost of the project increases, in comparison to the cost approved in Techno-economic Clearance, on account of foreign exchange variation or change of low or any other reason not attributable to the Generating Company or its suppliers or contractors and approved by the competent Government the project developers may approach the authority with the recommendations of the competent Government, not more than once in a financial year, for the mid term review of the project cost.

Provided further that the authority may for special reasons to be specified by the project developer, allow *the mid term review of the capital cost more than once in a financial year.*

20. Learned counsel brought to our notice the Central Commission Press release dated August 24, 2005 in-principle approval of project cost by CERC to promote investment in thermal generation:

> *" The Central Electricity Commission (CERC) has announced procedure for granting in-principle acceptance to the estimated cost of a thermal generation project. It is hoped that the regulatory comfort in the form of upfront in-principle acceptance of estimated project cost would help the independent power producers (IPPS) intending to generate and supply electricity in more than one state and companies owned or controller by the Central Government to achieve financial closure expeditiously. Once the CERC has accorded in-principle approval to the estimates of project capital cost and financial plan, the same shall be the guiding factor for applying prudence check on the actual capital expenditure. However, the tariff shall be determined on the basis of actual audited expenditure for the project found prudent by the Commission. The draft regulation was earlier published for comments from stakeholders in May, 2005 which has now been finalized after considering response received. The guidelines for competitive bidding for procurement of generation issued by the Central Government in January, 2005 do not stipulate that all future projects will come through the competitive bidding route. The projects can continue to come under regulated tariff regime.*

Accordingly, applications have been made before the Commission by IPPS for determination of tariff prior to commencement of construction of the generation station since it would give them a level of comfort. The Commission considered the matter and it was felt that existing tariff regulations should be amended to provide for in-principle acceptance of the capital cost of the project before commencement of construction. Request for grant of in-principle acceptance to project capital cost and financing plan would have to be made in the form of a petition with requisite details and a copy served to all prospective beneficiaries of the project. The application shall be posted on website of the applicant and a notice to that effect shall be published in the newspapers for inviting comments/suggestions from stakeholders/general public."

21. Mr. Ramachandran contended that in the impugned order dated April 30, 2008 the Commission had itself recognized the above as under:

"Regulations 20 and 37 of the Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2005 stipulate that in determining the cost of generation, the principles and methodologies specified by the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 (Regulations are to be kept in view. Regulation 5(3) of the latter Regulations provides that a generating company may make an application for determination of provisional tariff in advance of the anticipated date of completion

of the project, based on capital expenditure actually incurred up to the date of making the application, duly audited and certified by the statutory auditors. Regulation 17 further provides that the actual expenditure incurred on completion of a project shall form the basis for determination of final tariff. The second proviso to Regulation 17 lays down that any person intending to establish, operate and maintain a generating station may make an application before the Commission for in-principle acceptance of he project capital cost and financing plan before taking up the project. The third proviso further provides that where the Commission has given in-principle acceptance to the estimates of project capital cost and financing plan, the same shall be the guiding factor for applying a prudence check on the actual capital expenditure. Evidently these provisions have been incorporated so as to reduce uncertainty regarding tariff on completion of a project which will help investors in achieving financial closure of the project" (page 199)

22. Learned counsel averred that in the review order dated August 06, 2008 the Commission has stated as under:

" The Commission observes that in-principle approval can, at best, provide a rough estimate of project costs and that these would necessarily have to be fine tuned at a subsequent stage after the project has been completed. It is relevant in this context to note that Regulation 17 of the CERC (Terms & Conditions of Tariff) Regulations 2004 along with subsequent amendments clearly stipulates that the actual expenditure incurred on completion shall, subject to a prudence check by the Commission, form the basis for

determining final tariff and that in-principle acceptance of estimated project cost and financing plan will only be the guiding factor for applying a prudence check on the actual capital expenditure. Accordingly, even on review, the Commission upholds the in-principle approval of the estimates of the project capital cost as already allowed in order dated April 29, 2008 "(Page 238)

23. He cited our judgment in M.P. Power Trading Company Limited V/s Torrent Power Limited Appeal No. 11 of 2008 decided on January 19, 2009 in which this Tribunal has observed as under:

> *".....In-principle approval of the capital cost is granted to provide a guidance to the power generator as well as to the financing institution and to indicate the possible tariff which the new generator may expect. This approval is not a part of any adjustment".*

24. Mr. Ramachandran submitted that in Karnataka Power Transmission Corporation Limited V/s Karnataka Electricity Regulatory Commission & Others, 2007 APTEL 223 this Tribunal had held that the Commission should be slow to interfere with the estimation of the costs drawn by the utility and the Commission can always correct the discrepancies at

the time of actual determination of the cost after it has been incurred. The said decision has been followed by the Appellate Tribunal in other subsequent decisions including order dated May 08,2008 passed in appeal No. 129 of 2007, JSEB v/s JSERC and Order dated December 04, 2007 passed in appeal No. 100 of 2007, KPTCL V/s KERC & Others.

25. Mr. Ramachandran contended that in the present case the Commission has proceeded to reject the inclusion of the specific costs under the heads mentioned above, even if such costs are legitimately incurred without any default or failure etc attributable to GVK or its contractor or supplier and even if the incurring of such costs can be shown to be prudent, the apprehension of the appellants and also of lenders is that the Commission may not consider to include the same while determining the completed capital cost of the Project. This apprehension in the minds of the financial institutions and lenders is preventing due financial closure of the project which is essential for implementing the project. Mr.

Ramachandran submitted that without prejudice to this submission on the ten issues (a) to (j) on the reduction in the capital cost estimates for in-principle approval he would plead as under on each of the issues:

(a) Spares of BTG package.

26. Mr. Ramachandran contended that in the order dated April 30, 2008 the Commission allowed the BTG package as proposed by the GVK based on the letter of intent issued to BHEL at Rs. 1070.58 crores finding the same to be reasonable. The contract awarded to BHEL for BTG package is with a price variation formula and a part of the contract price needs to be paid in Euros & US$. In the review order dated August 06, 2008 under para 1, the Commission has rightly recognized that the BTG contract price has a price variation formula and the exchange rates used for conversion of Euros & US$ are respectively Rs. 57.50 and Rs. 41.00 while the actual exchange rates prevailing on the date of payment for the Euro/US$ will be applicable, while making the payment to BHEL. However,

the Commission did not separately deal with initial spares. The initial spares were not included in BTG package of BHEL. In the review order dated August 06, 2008 the Commission has observed as under:

> *"The Commission observes that there is no provision for spares in Annexure VI of the petition where project costs have been detailed. In a subsequent submission dated August 13, 2007, the petitioner while providing the break up of capital cost indicated initial spares as being a part of the total engineering, procurement and construction (EPC) costs. In the LOI placed on BHEL for BTG (clause 1(iv)), it is provided that itemized spares as recommended by BHEL for 3 years operation of the plant are to be ordered separately. In another submission dated January 16, 2008 (para 7), the petitioner mentioned that initial spares are not included in the LOI placed for the BTG package.*
>
> *It is evident that the petitioner has not made any clear and unambiguous statement as to whether any category of spares is a part of the LOI issued. However, relying on the LOI placed on the BHEL for the BTG, it appears that initial spares are included as a part of the BTG package specially when there is a clear indication in clause 1(iv) that itemized spares as recommended by the BHEL for 3 years operation of the plant are to be ordered separately. In the circumstances, the Commission concludes that cost of initial spares has already been catered for and no further provision on this account is warranted at this stage".*

27. He averred that GVK had filed submissions before the Commission in the proceedings in petition No. 4 of 2007. In these submissions it was pointed out that the initial spares related to BTG were not part of the BHEL quoted cost and they were extra items. The letter dated November 12, 2007 written by GVK to BHEL was placed on record wherein it has been stated under scope of services spare parts- itemized price of spares as recommended by BHEL for 3 years operation of the plant to be ordered separately. In para 7 of the submissions dated January 16, 2008 made by the appellant it was specifically stated that the initial spares are not included in the LOI of BTG package and that only mandatory spares are included in cost figures. The provisioning of Rs. 39.65 crore (as indicated in form 5B submitted vide letter dated August 13, 2007) is towards the initial spares of BTG and BOP package.

28. Mr. Ramachandran contended that in view of the above, the specific case of GVK before the Commission has been that the initial spares are not included in the BHEL BTG package.

He submitted that as there is nothing on record to show anything to the contrary in the circumstances, the conclusion reached by the Commission that the initial spares are included in the BTG package is not correct.

(b) Non-inclusion of the cost of initial recommended spares in the capital cost of BOP package.

29. Mr. Ramachandran submitted that as in the case of BTG package the BOP package of Punj Lloyd also excluded the initial spares. In the order dated April 29, 2008 the Commission did not specifically deal with initial spares. The Commission however, accepted the cost of Rs. 1005 crores for BOP package of Punj Lloyd as reasonable. In the review order dated August 06, 2008 the Commission has held as under:

> *"2. Balance of Plant (BOP)*
> *The petitioner has in this context argued that the Commission has failed to take into account the cost of spares in the BOP package. The Commission observes that there is no separate mention of spares in Annexure VI where itemized project costs have been brought out nor is there any reference to this in the LOI placed on M/s Punj Lloyd Ltd. In their submissions of January 16, 2008, the petitioner has mentioned that mandatory spares are included in the BOP cost and it is only in their final submissions of*

April 15, 2008 that it has been indicated that the BOP cost package of Rs. 1005 crores does not include the cost of spares. It is evident that as in the case of BTG, the petitioner has not brought out spares as a separate item of cost right up to April 15, 2008 nor has any clarification been given as to what constitutes mandatory or initial spares. Significantly, there is also no mention of spares in the LOI. In the circumstances, the Commission is inclined to hold that the cost of initial spares has been provided for and there is no occasion for making a separate provision on this account. For these reasons, the Commission sees no reason for deviating from its findings in the order of April 29, 2008".

30. Learned counsel for the appellant stated that in the submissions filed before the Commission it was pointed out that the BOP package did not include the initial spares. In para 7 of the submissions of January 16, 2008 made it was specifically stated that the initial spares are not included in the LOI of BTG package and only mandatory spares are included in cost figures. The provisioning of Rs. 39.65 crores as indicated in form 5B submitted vide letter dated August 13, 2007 is towards the initial spares of BTG and BOP package. He contended that in view of the facts the specific case of GVK before the Commission is that the initial spares is not included

in the BOP package also. He contended that there is nothing on record to show any thing to the contrary and, therefore, in the circumstances the conclusion reached by the Commission that the initial spares are included in the BOP package is not correct.

(c) Disallowance of Site Grading and Ash Pond Development cost:

31. Mr. Ramachandran contended that in the order dated April 29, 2008 the Commission did not allow an expenditure of Rs. 49 crores claimed by GVK for site grading and ash pond development cost on the ground that it is included in the Non EPC work of Rs. 86 crores. The relevant part of the order dated April 29, 2008 read as under:

> *"The Commission is inclined to allow the amount of Rs. 86 crores for non EPC works but does not approve an additional amount of Rs.49 crores for site clearing/ grading and Ash pond reported separately in the latest filing by the petitioner as the same are considered included in the total non EPC cost of Rs. 86 crores intimated earlier".*

32. He submitted that in the order dated August 06, 2008 the Commission has held as under:

" 3. Site grading and Ash pond development costs

The petitioner's main contention is that full costs on account of site leveling/grading and expenses for providing a flood protection embankment and development of ash pond have not been allowed by the Commission. The Commission observes that Annexure VI of the petition which brings out the estimated project cost has no separate provision for site grading and ash pond development. In submissions of August 13, 2007, the petitioner while providing the break up of capital cost indicated ash disposal area and site development as part of the non EPC and site development costs respectively. Again, in the petitioner's filing of December 08,2007, site grading, site drainage and ash pond etc. were intimated as part of the non EPC works with site specific features having been clearly outlined giving reference to high quantum of back filing, non availability of adequate back fill material and need to provide impervious lining of ash pond etc. The fact that development of the ash disposal site would be covered under the scope of non EPC works is again confirmed in the petitioner's submissions dated January 16, 2008. Quite evidently, such costs were known and had been initially factored into the estimates of project capital cost. It is only at the penultimate stage that the petitioner had, in their submissions of April 15, 2008, indicated (without any supporting data) that Rs. 49 crores is being separately provided for site grading and ash pond development. It is also necessary to recall that in the petitioner's *filing of January 16, 2008, it was unambiguously confirmed that total contract price would not exceed Rs. 2987.86 crores and this included a total of Rs. 86 crores as non EPC component. In the circumstances, it is reasonable to assume that all site development costs including grading, leveling and ash pond development and construction of protection embankment are a part and parcel of non EPC and site development works and that a claim of an additional Rs. 49 crores in similar works is untenable and clearly an after thought".*

33. Mr. Ramachandran contended that as indicated in the submission made by GVK on April 15, 2008 before the Commission the final package which was worked out, particularly, in regard to the BTG package and non-EPC works connected with the BTG package involved non-EPC works of Rs. 86 crores, excluding the cost of Site Grading and Ash Pond Development work which was separately estimated at a cost of Rs. 49 crores thus, aggregating to Rs. 135 crores for other works (non-EPC works) and that the break up of Rs. 49 crores being the cost of Site Grading and Ash Pond Development is given in Annexure 4 to the submissions made on April 15, 2008. Annexures 5 and 6 of the submissions dated April 15, 2008 deals with the cost of non-EPC works and cost of Railway siding respectively. He contended that no part of the cost of Site Grading and Ash Pond Development has been included in any of the items in Annexure 5 or Annexure 6 and accordingly

the amount of Rs. 49 crores being the cost of Site Grading and Ash Pond Development cannot be said to be included in the amount of Rs. 86 crores.

(d) Disallowance of Start-up expenses

34. Mr. Ramachandran submitted that the only ground for not allowing the start up expenses of Rs. 15 crores claimed by GVK has been that it can be off set against the amount that may be recovered from infirm power sale. In the review order dated August 06,2008 the Commission stated as under:

> *"4. Start up expenses*
> *The petitioner claims that disallowance of Rs. 15 crores on account of start up expenses is not justified as the power procurer will only reimburse the cost of coal and fuel oil used for generation of infirm power supplied to it but not the other costs involved, details of which have been furnished in the petitioner's filing of April 15, 2008. It is not disputed that revenues occurring from the sale of infirm power will become available to the petitioner for defraying costs on account of start up expenses. From the details provided in the submissions of April 15, 2008, the Commission notes that cost of coal and fuel constitute almost the entire start up expenses claimed. As these expenses are admittedly going to be met by the power procurer, the claim as per the petitioner's own submission gets reduced to a minuscule amount which has no significant bearing on the totality of costs for a project of this magnitude. The Commission,*

accordingly, does not find sufficient justification in the claim for allowing the start up expenses."

35. Mr. Ramachandran contended that the above position of the Commission is contrary to the established practice being followed in deciding on the estimate of capital cost. The recovery of price of in-firm power is uncertain. The practice followed is to adjust the in-firm power cost by reduction in capital cost. He said that at the time of grant of approval to the actual capital cost GVK does not dispute that the entire net revenue from the infirm power ought to be adjusted in the capital cost to be finally worked out and the petitioner is duty bound to do so. However, the disallowance of start up expenses at his stage on the presumption that the total revenue from the sale of infirm power will equalize or exceed the start up expenses is not correct. He contended that there is no basis whatsoever to proceed on such assumption particularly at this stage when financials are being worked out on estimates and that there will be an opportunity at the stage of final approval of the project cost based on actuals to adjust the revenues from

infirm power against capital cost. He submitted that this has been the consistent practice followed in all generation projects and the same should be followed in this case also.

(e) Disallowance of expenses towards power and water for construction.

36. Mr. Ramachandran contended that the only ground on which such expenses had been disallowed is that they already form a part of BTG, BOP and non EPC cost allowed. He submitted that in the order dated April 29, 2008 the Commission has held as under:

> *"Power and Water for construction.*
> *The petitioner envisages an outlay of Rs. 12 crores for the purpose. The Commission notes that this cost is included in the BTG as well as BOP contracts while the cost associated with providing power and water at the construction site is included in the estimate for non EPC works. As such no provision is required to be separately made for this purpose".*

37. Learned counsel also brought to our notice that in the order dated August 06, 2008 the Commission has held as under:

> *" The petitioner has submitted that these costs are to be incurred for the development of infrastructure for*

power distribution and the cost of energy and water on works not included in the main packages. It has been further clarified that PSEB will make power available at site at 33 kV or above and that a sub station would be developed to step down the voltage 11 kV and also provide internal distribution of power.

The Commission notes that the provision of Rs. 12 crores in the estimates was for construction power and water charges. Even in the break up of the cost, provided for the first time by the petitioner in its filing dated April 15, 2008, the major portion is for defraying the construction power and water charges. Such expenses for BTG and BOP works are to be paid by the respective suppliers/contractors, as provided in their respective LOIs. As regards creating infrastructure for these facilities and payment of such charges for non EPC works, the same are covered in the non EPC estimates. Accordingly, the Commission finds no reason to change its earlier decision on this issue."

38. Learned counsel submitted that the BTG and BOP packages do not cover the entire expenses for the development of the infrastructure for the power distribution and energy consumed, the statutory fees etc paid. The amount of Rs. 12 crores claimed by the petitioner is the amount which GVK is required to incur to install a sub station to reduce the voltage level to 11 kV and make arrangement for distribution of

electricity for construction purposes and GVK will be making payment to PSEB for such supply of electricity. He contended that the amount of Rs. 12 crores estimated by GVK be allowed for the above purpose, subject however, to appropriate the adjustment to be done based on actual cost incurred by GVK and subject further to prudent check at the time of approval of the final capital cost on the date of the commercial operation.

(f) Production of Pre-operative expenses.

39. Mr. Ramachandran contended that the reason given for reducing preoperative expenses from Rs. 50 crores to Rs. 15 crores in the Commission's order dated April 29, 2008 is as under:

> *"Pre-operative expenses:*
> *A sum of Rs. 50 crores has been provided by the petitioner on this account. The Commission notes that the bulk of the work relating to this project will be through two major contracts for the BTG and BOP packages which include erection, testing and commissioning. Moreover, railway siding work is to be carried out on an estimated contract price of Rs. 35 crores with the remaining non EPC works of Rs. 51 crores roughly mounting to 2% of the total project cost.*

As such, the establishment that the petitioner will need to deploy during the project period for supervision and management is not likely to be very large. The cost estimate provided in this regard thus appears to be very much on the higher side and the Commission considers that a sum of Rs. 15 crores, is sufficient to meet these costs".

40. Learned counsel stated that the review order dated August 06, 2008 the Commission has stated as under:

" The petitioner has contended that a reasonable estimate of Rs. 50 crores on pre-operative expenses had been made but the same has been severely curtailed by the Commission. It is noted that such expenses are to be incurred largely for administrative and supervisory costs during the course of executing the project. It has also been observed that major portion of the total works are included in the BTG, BOP and non EPC works packages, leaving only a very small quantum of work that need to be directly supervised by the petitioner. It is true that acceptance of such costs would ultimately be subjected to a prudence test when tariff determination is to take place but this can not be construed as a mean that the reasonability of such expenses is not to be gone into at this stage. The Commission has already held that Rs. 15 crores would be sufficient to meet the costs in this respect and it does not see any reason to arrive at a different conclusion now".

41. Learned counsel contended that the Commission has reduced the claim for pre-operative expenses from Rs. 50 crores

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41. Learned counsel contended that the Commission has reduced the claim for pre-operative expenses from Rs. 50 crores

to Rs. 15 crores on the grounds that the bulk of the work is going to be done by BTG and BOP contractors. He reiterated that GVK is implementing the project on non-turnkey contract basis and there are substantial pre-operative expenses to be incurred by GVK. The Commission has not considered the various co-ordination and other related works to be done by GVK itself as the contract is not given on turn-key basis. The amount of Rs. 50 crores claimed towards pre-operative expenses is based on the reasonable estimates made by GVK on the advise from experts, consultants and financial institutions funding the project. These have been projected after great deal of deliberation. The financial institutions consider such expenses as an essential part of the project cost and financial closure to be achieved by GVK is dependent on appropriate estimation of such expenditure. Learned counsel contended that the substantial reduction of this expense at this stage will cause serious prejudice to the implementation of the project cost. And that anyway the in-principle approval to the project cost by including such expenses as estimated by GVK are subject to prudent check after the actual costs are incurred and therefore, the interest of PSEB and the public at large will be fully protected by the Commission at appropriate stage.

(g) Treatment of Interest during construction.

42. Mr. Ramachandran submitted that the estimated cost of Rs.2987.86 crore submitted to the Commission in May, 2007 was based on the assumption that 50% debt would be raised in US$ and 50% debt in INR. Subsequently in view of the limitations in raising debt in US$, the appellant had submitted to the Commission that it will be raising the entire loan in INR. This has been recognized in Commission's order dated April 29, 2008 under head "Interest During Construction". In the review order dated August 06, 2008 the Commission has clarified as under:

> " *The petitioner has submitted that the Commission has reduced the claim of IDC by adopting a different method of calculation. Even when a debt equity ratio of 80:20 has been allowed by the Commission, the IDC calculation in the impugned order assumes that*

the petitioner will bring in 50% of the total equity before drawing upon any installment of the loan. On the other hand, the petitioner proposes to initially bring in 30% of the total equity which is in line with the financing requirements. The petitioner has further submitted that drawdown of debt takes into account the supply schedule as provided in the EPC and non-EPC contracts while that for other expenses is based on estimates. It has been argued by the petitioner that as IDC will eventually form a part of the project cost based on the actual amount spent, the amount claimed should be accepted at the stage of granting in principle approval.

The petitioner has rightly observed that IDC is likely to form part of the project cost based on the actual amount spent on IDC. Since the petitioner had not furnished any details in respect of the supply and construction schedule for EPC as well as non EPC works, phasing of expenditure by the Commission in its order of April 29,2008 was presumptive and based on historic considerations and industry practice. IDC as per actuals would be considered at the time of tariff determination except where reasonableness of such cost is not substantiated. Accordingly, for the purpose of in-principle approval of the estimates of project capital cost, phasing of expenditure adopted by the Commission is in order. As regards the upfront equity contribution by the petitioner to be expended before any installment of the loan is drawn, the Commission has no objection if the petitioner brings down the same to any value between 30% to 50% (in place of 50% taken into order dated April 29, 2008), provided the petitioner can manage additional term loan without any extra cost to the project capital cost estimates, on this account. The Commission further observes that all the other pleadings made in the review petition

> *were already on record and have been considered before passing the order dated April 29, 2008 and there is no patent error of law or fact therein that warrants review of the IDC cost as approved by the Commission".*

43. Learned counsel averred that in view of the clarification given by appellant he be permitted to proceed on the basis that the IDC will be adjusted as per actuals but subject to prudence check and based on the petitioner bringing in equity in the proportion of 30% and phasing of expenditure adopted by the Commission is indicative only. He submitted that the phasing of the expenditure has been submitted to the Commission on January 16, 2008. The phasing of expenditure in the first year, 2nd year and 3rd year up to the COD and thereafter three months after the COD has been decided in a manner which is not consistent with the finalized packages with the contractors and therefore cannot work. The contractors will not accept such phasing of expenditure, when the contracts with them stands concluded and cannot be re-opened at this stage.

44. Mr. Ramachandran contended that the phasing out has been done only on assumptions and without regard to the expenditure to be incurred as per the BTG and BOP packages and non-EPC contracts concluded or to be concluded by the petitioner and that the direction that 50% of the total equity to be expended before any part of the loan is taken is completely contrary to:

- Debt Equity Ratio of 80: 20 approved for the project; and
- Normal practice adopted in financing generation projects.

(h) Reduction of Contingency charges.

45. Mr. Ramachandran stated that in the order dated April 29, 2008 the Commission stated as under:

> "Contingency
> *GVK has provided a sum of Rs. 66.85 crores for unforeseen expenses. As a bulk of the expected outlay has been firmed up in terms of a contract for the BTG, BOP package and the Railway siding, there is a need to provide contingency only for remaining non EPC works estimated to cost Rs. 51 crores. Accordingly, the Commission considers that the*

provision of Rs. 5 crores, is sufficient and reasonable for this purpose".

46. He submitted that in the review order dated August 06, 2008 the Commission has stated as under:

> *" In the review petition, it is stated that contingency totaling 66.85 crores has been worked out as 3% and 2.10% on EPC and non- EPC works respectively to meet any unforeseen increase in the project cost. It is further stated that the financial closure will not be possible if the contingency reserve is not allowed as financial institutions insist that the project should have suitable amount of contingency as part of the proposed capital cost. The Commission had given careful consideration to the submissions of the petitioner in earlier filing as well as in the review petitioner and notes that it had in the order of April 29, 2008 held that a provision for contingencies has already been made in the BTG, BOP and non EPC work packages which leaves works amounting to Rs. 51 crores for which contingency needs to be provided and Rs. 5 crores for this purpose as already provided appear to be sufficient. There is nothing in the arguments preferred by the petitioner at this stage which rebuts the findings of the Commission and accordingly there is no occasion for reconsideration of the same".*

47. Learned counsel reiterated that GVK is implementing the project on non-turnkey basis. The Commission has not considered the various possible eventualities where GVK may

have to incur he expenses not envisaged. There is no provision made for contingency while finalizing the BTG and BOP packages. He contended that the amount of Rs. 66.85 crores claimed towards contingency expenses is based on the reasonable estimates made by GVK on the advise from experts, consultants and financial institutions funding the project. These have been projected after great deal of deliberation. The financial institution consider such expenses as an essential part of the project cost and financial closure to be achieved by GVK is dependent on appropriate estimation of such expenditure.

48. He contended that the contingency reserves for expenditure to meet the unforeseen circumstances is essential and that if the contingency does not happen the expenditure will not be incurred and the actual capital cost alone is to be approved. He submitted that if contingency does happen money will be available for the project developer to proceed with the implementation and that GVK will have to then give the

justification at the time of determination of the actual completed capital cost.

49. He contended that the financial institutions do not approve the project without sufficient contingency reserves in the initial estimate of the capital cost and that the substantial reduction of this expense at this stage will cause serious prejudice to the implementation of the project.

(i) Reduction of Financial charges.

50. Learned counsel contended that the Commission has reduced the financial charges claimed by GVK from Rs. 70 crores to Rs. 16 crores only on the ground that the charges for financial and developmental charges etc. are not to be included. He averred that these are actual costs incurred by GVK for project financing and achieving financial closure in a prudent manner and with best possible rates. However, in the order dated August 06, 2008 the Commission has held as under:

"9. Financing charges.

The petitioner has urged that letter of credit (LC) charges are a part of the financing charges as payment security mechanism for the EPC and non EPC contracts. A copy of letter from the IDBI Bank dated May 08, 2008 showing the LC Commission that would be charged has also been filed. It is further stated that the provision for financial advisory fees @ 1% of the debt is based on supporting documents filed as Annexure-8 of submission dated December 08,2007. The petitioner's prayer is to allow financing charges at Rs. 70 crores inclusive of LC commission of Rs. 31.80 crores and financial advisory fees @ 1% of the debt. The Commission has carefully gone through the pleadings in the review petition and observes that similar submissions had been made earlier which were considered by the Commission while deciding this issue in order dated April 29, 2008. The letter of May 08, 2008 from IDBI submitted along with the review petition has been obtained subsequent to the order and was not on record at the time of passing the order. In any case, this pleading of the petitioner was taken into account while deciding the issue of allowing financing charges. As regards financial advisory fee, the same was not allowed as there was no document to substantiate this claim attached with Annexure-8. For all these reasons the Commission, even after reconsidering the submissions of the petitioner, is unable to find any additional justification in allowing increase in the financing charges".

51. He submitted that the letter dated May 08,2008 from the IDBI Bank showing clearly the liability to pay LC commission was filed before the Commission which has not been

considered. The financial advisory fees at the rate of 1% of the debt inclusive of taxes is economical and competitive for a loan of about Rs. 2400 crores to be syndicated from the financial institution and secured to the project. Such fees are payable by all infrastructure projects. Further, GVK had submitted the supporting vide its affidavit dated December 08, 2007.

(j) Disallowance of working capital margin.

52. Mr. Ramachandran submitted that in the order dated August 06,2008 the Commission has stated as under:

> *" 10 Working capital margin (WCM)*
> *It is stated in the review petition that it is necessary that margin on working capital is funded with long term funds and should be included s a part of the project cost. It is further stated that the Central Electricity Regulatory Commission (CERC) while granting in-principle approval in the case of Essar Power Limited has allowed working capital margin of Rs. 60.37 crores in the order dated August 02,2006. Therefore, working capital margin should be allowed s a part of the capital cost.*
>
> *The Commission is of the view that cost of working capital margin forms a part of the Annual Revenue Requirement and is not a part of the project cost. The pleadings of the petitioner that CERC has included working capital margin in the project cost is not*

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substantiated from a careful reading of the order in the case of Essar Power Ltd. The per MW cost of Rs. 2.52 crores approved by the CERC in para 17 of its order has been taken from para 8 thereof where the same has been worked out by excluding the working capital margin. The mention of including working capital margin of Rs. 60.37 crore in para 17 of the ibid order also appears to be anomalous because after including this amount in the capital cost, the per MW cost exceeds Rs. 2.52 crores approved by CERC. Moreover, in an immediately succeeding order dated August 22, 2006, CERC has, in the case of Torrent Power Generation Limited, clearly held (para 11) that as per its Regulations of 2004, working capital margin is not a part of the capital cost. Accordingly, the Commission reiterates its earlier findings on this issue."

53. He submitted that the margin on working capital has been disallowed from the project cost. It is necessary that margin on working capital is funded with long term funds as such and should be included as part of the project cost.

54. Second respondent, Punjab State Electricity Board, submitted that they would like that the issue of in-principle approval may be resolved at the earliest so that the state can receive power from this plant as the Punjab State has been expecting power from this plant for the last over a decade.

Learned counsel for the PSEB further submitted that the tariff for the power from the plant has to be determined by the Commission and the same will be acceptable to them as per the Power Purchase Agreement between the appellant and the Board.

55. Learned counsel Mr. Sakesh Kumar appearing for the Commission vehemently contended that all the issues raised by the appellant have been dealt in details in the order of the Commission. He averred that it cannot be the case of the appellant that whatever costs are given by it the same should be accepted by the Commission on the plea that this is the stage of in-principle approval.

Analysis and Decision

56. We have heard various contentions of all the parties and perused their submissions made.

57. At the outset it is to be understood that the appellant has sought in-principle approval from the Commission. Eventually

after the project is completed and before it is commissioned, the appellant is required to file petition for determination of the tariff for this station. In this context, it will be useful to recall our judgment in appeal 11 of 2008 dated January 19,2009 in which this Tribunal has observed as under:

> " 9.........*In-principle approval of the capital cost is granted to provide a guidance to the power generator as well as to the financing institution and to indicate the possible tariff which the new generator may expect. This approval is not a part of any adjudication. The Commission certainly has the power to review a decision which was purely technical and administrative provided however, it is a bona fide exercise of its functions:*

58. We now proceed to analyse and decide each issue raised by the appellant with the aforementioned backdrop of the case.

Issue No. (a) Non-inclusion of the cost of initial recommended spares in the capital cost of BTG package.

(b) Non-inclusion of the cost of initial spares in the capital cost of BOP package.

59. It is a normal practice to procure the following spares for main plant and equipment.

(i) Mandatory spares

(ii) Recommended spares

(iii) Insurance spares

(i) Mandatory spares are such spares as are necessarily required and are procured along with the main equipment in the first instance itself.

(ii) As far as recommended spares are concerned, it is a normal practice to obtain prices of the recommended spares along with price of the main equipment. The engineering, operation and maintenance Engineers of the owner study the drawings and the equipment being procured. Based on their experience of operation and maintenance they decide as to which recommended spares should be procured by the owner. Normally these spares are not ordered along with the main equipment and are ordered about six months after the Award of the main equipment order when more equipment details and drawings are available.

(iii) Insurance spares are such of those spares as are capital intensive and require long delivery periods. Such equipment may or may not be used during the life of the plant but is necessarily purchased as an insurance so that in case these are required the entire plant will not remain in- operational because of non-availability of such spares. The appellant in the present case has rightly decided to order the recommended spares separately at a later stage.

60. The appellant in its letter dated November 12, 2007 to BHEL has mentioned that the spares recommended by BHEL for three years operation of the plant will be ordered separately.

61. Appellant has clarified in its submission on January 16, 2008 to the Commission that initial spares are not included in the LOI of BTG package and that only mandatory spares are included in BOP cost figures. It was further clarified that provisioning of Rs. 39.65 crores as indicated in the form 5 B submitted vide their letter dated August 13, 2007 is towards

the cost of initial spares of BTG and BOP packages. We are unable to agree with the observations of the Commission that as there is no mention of spares in the LOI "the Commission is inclined to hold that the cost of initial spares had been provided for and there is no occasion to make separate provision on this account". We have explained (supra) that recommended spares are normally ordered separately after due examination by the owner's engineer. It is the only mandatory spares which are ordered along with the main equipment. In view of this we allow Rs. 39.65 crores as cost of recommended spares for BTG and BOP packages for the purpose of in-principle approval. Actual prudent expenditure on all spares will be allowed by the Commission while determining tariff.

(c) Site Grading and Ash Pond Development Cost.

62. We note from the submissions of the appellant dated April 15, 2008 to the Commission vide which Letter of Intent (LOI) dated April 14, 2008 issued to M/s Punj Lloyd Ltd. is enclosed. In the scope of work for BOP in this LOI, under

exclusions 7 and 8, it is clear that site leveling, site grading and ash disposal area development works are excluded. Annexure IV gives the cost of site grading and ash pond as 490 million rupees. As this information was available with the Commission we do not find any reason as to why this cost of Rs. 49 crores should not be allowed at this stage of in-principle approval. In this view of the matter we, therefore, allow the appeal.

(d) Disallowance of Start up expenses.

63. We agree with the Commission's observations that the appellant will be able to recover the cost of infirm power and thereby recover the cost of fuel, start up power etc. from the receiver of the infirm power. However, it has to be kept in mind that the appellant will have to pay for the coal, fuel oil and start up power bill in the first instance. It is only after the infirm power has been supplied and billed that the appellant will be able to recover the cost in due course. It is therefore, necessary to allow the cost of start up expenses as estimated by the appellant. The cost of infirm power will eventually be reduced

from the capital cost of the project. In this view of the matter also we allow the appeal.

(e) Disallowance of expenses towards power and water for construction.

64. In large projects it is a normal practice to provide power and water for construction to various contractors. The appellant has categorically stated that BTG and BOP packages do not cover entire expenses for the development of infrastructure for power distribution and energy consumed and statutory fees to be paid. The amount of Rs. 128 crores claimed by the appellant is required for installation of sub station to reduce the voltage to 11 kV, distribution system for construction purposes and energy payment to PSEB for supply of electricity. These are all actual expenses which will be allowed by the Commission only if these are prudently expended and therefore, we do not find any rationale in not allowing these at this stage of in-principle approval when the appellant is stating that the BTG and BOP packages do not

cover the entire expenses for development of infrastructure for the power distribution and energy consumed. In this view of the matter we allow the appeal.

(f) Production of Pre-operative expenses.

65. Large projects can be executed either on turnkey basis or on the basis of separately awarding various packages such as site development, BTG, BOP and Ash Pond etc. The role of owner in a turnkey project is minimum and the owner engineers have to supervise the projects on the whole with respect to quality and timely completion. However, when the project is awarded to several contractors on EPC basis for individual packages, the owner has important role to play with respect to overall supervision of all packages, contract management, inspection of equipment and works with respect to quality control, expediting supply, ensuring sequential dispatches of equipments, ensuring timely completion of works of one contractor to handover the same to the next contractor. It is a known fact that the project cost differential between

turnkey basis and non-turnkey basis projects is substantial. Such owners who have expertise available within their organizations always prefer to execute the projects on the basis of several packages rather than on turnkey basis. Such approach also enables their operation and maintenance engineers to take over the plant immediately on its completion.

66. In view of the aforesaid discussion we find rationale in the arguments of the appellant and decide that the sum of Rs. 50 crores provided as pre-operative expenses (being less than 2% of the project cost) be allowed. However, only the actual prudent expenditure of pre-operative activities may be allowed at the time of determination of the tariff.

(g) Treatment of Interest during construction.

67. We observe that the Commission has decided as under:

> *"As regards the upfront equity contribution by the petitioner to be expended before any installment of the loan is drawn, the Commission has no objection if the petitioner brings down the same to any value between 30% to 50% (in place of 50% taken into order dated April 29, 2008), provided the petitioner can manage*

additional term loan without any extra cost to the project capital cost estimates, on this account".

68. This issue lies in a narrow compass. The appellant proposes to deploy 30% of the total equity before the drawdown of debt. However, the Commission has decided that the appellant should bring equity between 30% to 50% of the total equity before drawdown of debt provided the appellant can manage additional term loan for funding equity between 30% and 50% without any extra cost to the project capital estimates on this account. This means that if the appellant brings in only 30% of the equity upfront, the remaining 20% of the equity will have to be arranged by the appellant through a term loan at his own cost thereby implying that asfaras the total project cost is concerned, Interest During Construction (IDC) on this component of equity borrowings will have to be borne by the appellant.

69. In practice, the lending agencies themselves do require that the project developer first deploys in a portion of his equity

to prove his commitment to the project. It is the lending agency itself which ensures, depending upon the credit rating of the developer, as to how much equity infusion can establish his commitment. In this case the lending agencies are ready to lend on 30% equity infusion by the appellant in the project. Of Course more equity infusion before borrowings does entail some reduction in the tariff as no return on equity or interest on the equity infusion forms part of tariff. In view of this it is always the intention of the project developer to infuse only as much equity as is required by the lending agencies. Balance has to be kept between the interest of the consumer and the project developer by the Commission. To be fair to all parties infusion of equity and debt must go simultaneously in equal proportions. In our view 30% upfront equity infusion is sufficient since the lending agencies have confirmed that only 30% of the total equity is required to be brought by the promoter. Therefore, in this view of the matter we allow the appeal.

70. The phasing of expenditure is done keeping in view the terms of payment of the various contract packages awarded by the project developer. Terms of payment have a direct bearing on the pricing of the equipment. Appellant has to make payments to various contractors based on terms of payment of each contract. In view of this the phasing of the expenditure cannot be done in isolation disregarding the terms of payment of the contracts. In view of this, we direct the Commission to redo the phasing of expenditure consistent with the finalized packages with various contractors.

(h) Reduction of contingency charges.

71. Large projects when executed on non-turn key basis always face several risks such as delayed deliveries of equipment, non sequential supplies, delayed execution of various works by one contractor forming inputs for another contractor. In large long gestation projects contingencies can and do arise. Financial Institutions like to see the completion of the project despite several unforeseen circumstances and,

therefore, do require that sufficient contingency reserves are available in the initial estimates before they approve the project and lend money for the same. It is difficult to assess requirement of funds due to contingencies but it is normal to provide 2-3% of the project cost as contingency reserves. In the instant case in hand though the individual contractors for various packages would have provided for contingencies in respect of their packages, it is the appellant who will be responsible for overall timely completion of the project despite delays of a package forming input for the other. This may call for compression of schedule requiring additional funds. A particular package contractor may have to overstay due to default of the other. To cover all such eventualities and cost escalations, it is desirable that contingency reserves are available with the appellant. The contingency reserves provided if not used will in anyway not form part of the project cost while determining the tariff by the Commission. In this view of the matter we allow the appeal.

(i) Reduction of financial charges.

72. In large projects requiring massive investments, it is necessary to depend upon the Financial Advisers who arrange loans from other Financial Institutions. Letter of Credit established by the purchaser of equipment guarantees timely payment to the suppliers. In view of this charges for Letter of Credit and Financial Adviser fees and charges do form part of project cost. In this view of the matter also we allow the appeal.

(j) Disallowance of Working Capital Margin.

73. Working Capital is required once the station has become operational. Interest on Working Capital forms a part of tariff. However, so as to arrange working capital, banks normally require some working capital margin which should be available with the owner. This Working Capital Margin is a sunk cost. Therefore the Working Capital Margin (virtually equity) has to be included in the capital cost of the project and return on this

component of equity also has to be allowed. Alternatively, the working capital margin itself could be arranged through debt and equity components in which case interest on the non equity component and return on the equity component would have to be allowed. In either case working capital margin being essential in the hands of the owner has to form a part of capital cost which may be funded partly by equity and partly by debt. Parties have confirmed that there is no regulation issued by the Commission in respect of Working Capital Margin. In view of the aforesaid discussion we allow the appeal in this view of the matter also.

74. In conclusion the appeal is allowed but with no order as to cost. The Commission shall abide by our directions in paras 61,62,63,64,66,69,70,71,72 and 73.

75. Pronounced in the open court on 8th day of April, 2009.

Sd/-	Sd/-
(H.L Bajaj)	(Mrs. Justice Manju Goel)
Technical Member	Judicial Member

Appellate Tribunal for Electricity, New Delhi-3
Appeal/I.A./Review Petn. No.: 104/08
Date of Order: 8/4/09
Date when copy Application is filed/Request made through e-mail: 19/5/09
Date when copy is made ready: 19/5/09
Date of Delivery: 19/5/09
19 MAY 2009
Registrar

ANNEXURE P-5

Before the Appellate Tribunal for Electricity
(Appellate Jurisdiction)

APPEAL NO. 70 OF 2009 &
I.A. No. 167 of 2009

Dated: 19th May, 2009

Present : Hon'ble Mr. Justice M. Karpaga Vinayagam, Chairperson
Hon'ble Mr. A.A. Khan, Technical Member

G.V.K. Power (Gobindwal Sahib) Ltd. … Appellants (s)
Versus
Punjab State Electricity Regulatory Commission and Anr. … Respondent (s)

Counsel for the Appellant/ (s) : Mr. M.G. Ramachandaran,
Mr. Akshay babu &
Madhusudan, Director (Tech.)
Counsel for the Respondent (s) : Mr. Sitesh Mukherjee,
Ms. Sakya Caudhari for PSERC
Mr. Vishal Anan, Mr. Jai Shree Anand
Mr. K.K. Malik

ORDER
I.A. No. 167 of 2009

M/s G.V.K. Power (Govindwal Sahib) Ltd., Appellant has challenged the impugned order dated 06.03.2009. This Appeal has been admitted and notice served on the other side.

Pending the Appeal the Appellant has sought the interim directions to enable him for signing the impugned Power Purchase Agreement, draft of which has been served on 20.04.2009 on the appellant, in line with the standard bid document as per the directions of the State Commission contained in the impugned order dated 06.03.2009 without prejudice to the rights and contentions of the Appellant in the Appeal arising out of the impugned order.

Now the learned counsel for the Respondent submits that such a liberty can be given to both the parties without prejudice to their respective rights. To this effect, Respondent has filed the affidavit.

Following is the statement made by the respondent in the affidavit with regard to the interim relief sought for :-

> "I say that in view of the above statement made in the appeal by the Appellant that Amended and Restated Power Purchaser Agreement be signed in terms of the order dated 06.03.2009 passed by the Punjab State Electricity Regulatory Commission and that the Power Purchase Agreement shall be subject to modifications only as may be directed by the Hon'ble Tribunal in the Appeal. The Punjab State Electricity Board also agrees to execute the Power purchaser Agreement in terms of the Order dated 06.03.2009 passed by the State Commission and drafted by PSEB as per SBD, a copy of which has already been sent to Appellant on 20.04.2009, the same may be filed before the state commission for further implementation. However, this would be done without prejudice to the rights and contentions of the PSEB for taking any further legal recourse remedy or to file appeal in the appropriate court."

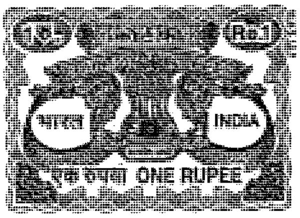
In view of this statement, as referred to in the affidavit, it is appropriate to give interim relief by giving the liberty to both the parties for signing the modified PPA as per the standard bid documents in compliance with the direction given by the State Commission in the impugned order passed on 06.03.2009. Accordingly ordered.

As pointed out by the learned counsel for the parties it is made clear that, this interim order would be subject to the result of the final order of this Tribunal.

Post the main matter for final hearing on **4th august, 2009**. In the meantime counter, if any, may be filed with advance copy to the other side.

(A.A. Khan)	**(Justice M. Karpaga Vinayagam)**
Technical Member	**Chairperson**

ANNEXURE P-6



Amended and Restated Power Purchase Agreement
between

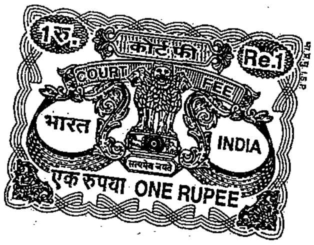
Punjab State Electricity Board
(the "Procurer ")

And

GVK Power (Goindwal Sahib) Limited
(the "Seller")

Date:26/05/2009

2x270MW COAL FIRED THERMAL POWER PLANT AT GOINDWAL SAHIB, DISTRICT TARN TARAN PUNJAB



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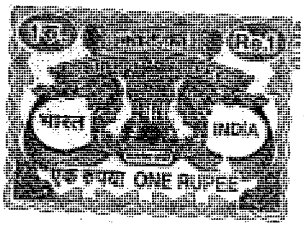
भारत
INDIA
ONE RUPEE

भारतीय गैर न्यायिक

एक सौ रुपये Rs. 100

रु. 100 ONE HUNDRED RUPEES

सत्यमेव जयते

भारत INDIA

INDIA NON JUDICIAL

అంధ్రప్రదేశ్ आन्ध्र प्रदेश ANDHRA PRADESH Saleema AA 241197

S.No. 3624 Date 23/05/2009 Rs. 100
Name V-Mohan
S/o.W/o.D/o. Shankar
For Whom GVK Power (Goindwal Sahib) Ltd Sec-bad

SALEEMA ANJUM
STAMP VENDOR
S.V.L.No.3/2009
H.No.13-4-661/A,
KARWAN, HYDERABAD.

This Amended and Restated Power Purchase Agreement (the "Agreement") is entered into on this 26th day of May 2009 between

1. **Punjab State Electricity Board,** a Board established under The Electricity (Supply) Act 1948, having its Head Office at **"The Mall, Patiala - 147 001, Punjab, India"** (hereinafter referred to as the **"Procurer"**, which expression unless repugnant to the context or meaning thereof shall be deemed to include its successors, and permitted assigns) of the first part ; and

2. **GVK Power (Goindwal Sahib) Limited**, a Company incorporated under The Companies Act, 1956, having its registered office at **"Paigah House", 156-159, Sardar Patel Road, Secunderabad- 500 003, Andhra Pradesh, India"** (hereinafter referred to as the **"Seller"**, which expression unless repugnant to the context or meaning thereof shall be deemed to include its successors, and permitted assigns) of the second part. hereinafter referred to as "Party" or "Parties" as appropriate;

भारतीय गैर न्यायिक

एक सौ रुपये Rs. 100

रु. 100 ONE HUNDRED RUPEES

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भारत INDIA

INDIA NON JUDICIAL

ఆంధ్రప్రదేశ్ आन्ध्र प्रदेश ANDHRA PRADESH Saleema AA 241198

S.No. 3625 Date 23\05\2009 Rs. 100

Name V. Mohan

S/o.W/o.D/o. Shankar

For Whom GVK Power (Goindwal Sahib) Ltd Sec-bad

SALEEMA ANJUM
STAMP VENDOR
S.V.L.No.3/2009
H.No.13-4-661/A,
KARWAN, HYDERABAD.

Whereas:

The Government of Punjab and the Procurer had invited proposals during the year 1996 to establish a coal based power station with an Installed Capacity of approximately 462.5 MW at Goindwal Sahib, Amritsar District in the state of Punjab, India and the Seller having been selected by the Government of Punjab and the Procurer on the basis of International Competitive Bidding has accepted the invitation of the Government of Punjab and the Procurer to Build, Own and Operate the coal based power station;

Whereas the Procurer and the Seller entered into a Power Purchase Agreement (PPA) on 17th April 2000.

Whereas the Parties have entered into a Memorandum of Understanding on 8th February 2006 and have agreed to modify the Power Purchase Agreement dated 17th April 2000 to incorporate among other things the revised capacity 2 x 250 MW (+20%) of the Power Station agreed between the Parties, adoption of CERC norms for Tariff calculation and schedule for achieving commercial operation of Unit-1 & Unit-2 of the Power Station;

Whereas the Punjab State Electricity Regulatory Commission ("PSERC") (hereinafter referred to as "Commission") was established after the signing of the Power Purchase

भारतीय गैर न्यायिक

एक सौ रुपये Rs. 100

रु. 100 ONE HUNDRED RUPEES

सत्यमेव जयते

भारत INDIA

INDIA NON JUDICIAL

ఆంధ్రప్రదేశ్ आन्ध्र प्रदेश ANDHRA PRADESH Saleema AA 241199

S.No. 3676 Date 23\05\2009 Rs.100

Name V. Mohan

S/o.W/o.D/o. Shankar

For Whom GVK Power (Goindwal Sahib) Ltd Secbad

SALEEMA ANJUM
STAMP VENDOR
S.V.L.No.3/2009
H.No.13-4-661/A,
KARWAN, HYDERABAD.

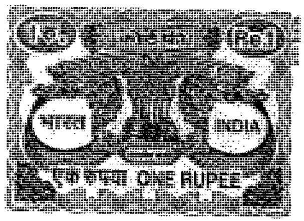
Agreement (PPA) dated 17th April 2000 and PSERC is empowered to regulate electricity purchase and procurement process of the Procurer, the terms and conditions of this Agreement including the price at which electricity shall be procured from the Seller

Whereas the Seller has agreed to sell the entire Contracted Capacity and energy generated by the Project to the Procurer and the Procurer has agreed to purchase the Contracted Capacity and scheduled energy from the Seller in accordance with the terms and conditions of this Amended and Restated Power Purchase Agreement

Whereas subsequently the Seller filed Petition for an amendment in the capacity of the Project to 2x270 MW from 2x300 MW indicated in the Amended & Restated PPA initialled between the Parties in January,2007, and accordingly the Contracted Capacity of the project shall now be 2x270 MW.

Whereas the Project has been since allotted the Tokisud North Sub Block as a captive coal mine and a part of Saregarha Block in the state of Jharkhand for supply of coal to the Project;

Whereas the PSERC had issued the order dated 29.04.08 in case of Petition No. 4 of 2007 filed by M/s GVK for approval of capital cost of the project and M/s GVK filed an Appeal



No. 104 of 2008 in the Appellate Tribunal for Electricity against this order to which the Tribunal has issued the order dated 08.04.2009 allowing additional costs to M/s GVK.

Whereas the estimated costs as approved by PSERC and additional costs allowed by Appellate Tribunal shall now be indicated in the estimated cost listed in the Schedule-11.

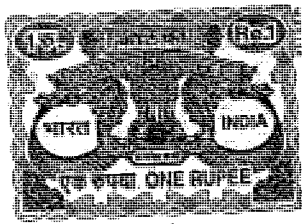
Whereas the Parties mutually desire to amend and restate the Power Purchase Agreement dated 17th April 2000 and enter into this Agreement, as per the order of the PSERC dated 06 March 2009 on Petition no. 3 of 2007 filed for approval of the initialed Amended and Restated PPA between the Parties;

Whereas M/s GVK Power (Goindwal Sahib) Ltd. filed the Appeal No. 70 of 2009 in the Appellate Tribunal for Electricity against the order of PSERC dated 06.03.09 which is yet to be decided.

Whereas M/s GVK Power also filed an Interim Application No. 167 of 2009 before the Appellate Tribunal to allow them to sign the Amended & Restated PPA as per the order of PSERC dated 6.3.2009 without prejudice to their right to appeal.

Whereas the Appellate Tribunal has issued the order dated 19.05.09 against I.A. No. 167 of 2009 allowing both the parties to sign the Amended & Restated PPA as per the order of PSERC dated 6.3.2009 and reserving the right to appeal of both the parties in any Court of Law.

Now therefore, in consideration of the premises and mutual agreements, covenants and conditions set forth herein, it is hereby agreed by and between the Parties, in supercession of all agreements, letters, communications and the like, anterior to this Agreement, as follows:



ARTICLE 1: DEFINITIONS AND INTERPRETATION

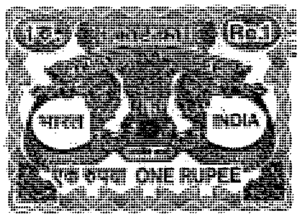
1.1 *Definitions*

The terms used in this Agreement, unless as defined below or repugnant to the context, shall have the same meaning as assigned to them by the Electricity Act, 2003 and the rules or regulations framed there under, including those issued/framed by Appropriate Commission (as defined hereunder), as amended or re-enacted from time to time.

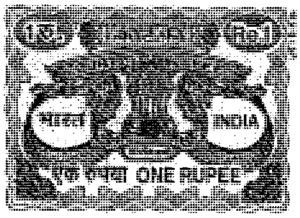
The following terms when used in this Agreement shall have the respective meanings, as specified below:

"Act" or "Electricity Act 2003"	means the Electricity Act 2003 or any amendments made to the same or any succeeding enactment thereof;
"Agreed Form"	means, in relation to any document, the form of the said document most recently agreed to by the Parties and initialled by them for identification;
"Agreement" or "Power Purchase Agreement" or "PPA"	means this document including its recitals and Schedules;
"Appropriate Commission"	means the Punjab State Electricity Regulatory Commission (PSERC) or its successors;
"Availability Based Tariff" or "ABT"	Shall mean all the regulations contained in the Central Electricity Regulatory Commission (terms and conditions of Tariff) Regulations as applicable.
"Availability Factor" or "Availability"	shall have the meaning ascribed thereto in ABT ;
"Available Capacity"	shall have the meaning ascribed thereto in ABT;
"Auxiliary Energy Consumption or AUX"	means, in relation to a period in case of a generating station means, the quantum of energy consumed by auxiliary equipment of the generating station and transformer losses within the generating station expressed as a percentage of the sum of the gross energy generated at the generator terminals of all the Units of the generating station.
"Bill Dispute Notice"	means the notice issued by a Party raising a Dispute regarding a Monthly Bill or a Supplementary Bill issued by the other Party;
"Business Day"	means with respect to the Seller and the Procurer, a day other than Sunday or a statutory holiday, on which the banks remain open for business in the State in which the Procurer's registered office is

	located;
"Capacity Charge" or "Capacity Charges"	shall have meaning ascribed thereto in Schedule 6
"Capacity Notice"	shall have the meaning ascribed thereto under ABT or the Grid Code;
'Capital Cost'	means actual capital cost of the Project on a relevant date which shall not be later than the Commercial Operation Date of the Power Station, as certified by the auditors appointed jointly by the Seller and Procurer and as approved by PSERC. provided that Capital Cost shall always exclude cost overruns arising due to a Seller Event of Default, or costs due to events for which compensation has been received by the Seller from the Procurer or Insurers or third parties; Provided further that the Capital Cost in relation to a Unit shall be the Capital Cost allocated in proportion to the Contracted Capacity of the said Unit.
'Capital Structure Schedule'	shall mean sources of finance used to finance the Capital Cost as provided in the Financing Agreements;
"Captive Coal Mine(s)"	means the Tokisud North Sub Block" in the Hazaribagh District of Jharkhand State in India, and any other coal mine/block allocated by the Government of India for supplying coal to the Project and associated fuel transport system up to the Power Station; "
"Central Transmission Utility" or "CTU"	shall have the meaning ascribed thereto in the Electricity Act, 2003;
"CERC"	means the Central Electricity Regulatory Commission, as defined in the Electricity Act, 2003, or its successors;
"CERC Tariff Regulations"	Means the regulations formed by CERC under section 178 of the Electricity Act, 2003 and titled the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations as applicable.
"CERC Norms"	means the norms for determination of tariff for the coal based power stations under the CERC (Terms and conditions of Tariff) Regulations as applicable.
"Change in Law"	shall have the meaning ascribed thereto in Article 13.1.1;
"Commercial Operation	means, in relation to a Unit, the date one day after the date when the



Date" or "COD"	Procurer receives a Final Test Certificate of the Independent Engineer as per the provisions of Article 6.3.1 and in relation to the Power Station shall mean the date by which such Final Test Certificates as per Article 6.3.1 are received by the Procurer for all the Units;
"Commissioning" or "Commissioned" with its grammatical variations	means, in relation to a Unit, that the Unit or in relation to the Power Station, all the Units of the Power Station have passed the Commissioning Tests successfully;
"Commissioning Tests" or "Commissioning Test"	means the tests provided in Schedule 4 herein;
"Commissioned Unit"	means the Unit in respect of which COD has occurred;
"Construction Contractor/s"	means one or more main contractors, appointed by the Seller to design, engineer, supply, construct and commission the Project;
"Construction Period"	means the period from (and including) the date upon which the Construction Contractor is instructed or required to commence work under the Construction Contract up to (but not including) the Commercial Operation Date of the Unit in relation to a Unit and of all the Units in relation to the Power Station;
"Consultation Period"	means the period, commencing from the date of issue of a Seller Preliminary Default Notice or a Procurer Preliminary Default Notice as provided in Article 14 of this Agreement, for consultation between the Parties to mitigate the consequence of the relevant event having regard to all the circumstances
"Contract Year"	means the period beginning on the Effective Date (as defined hereunder) and ending on the immediately succeeding March 31 and thereafter each period of 12 months beginning on April 1 and ending on March 31 provided that : (i) in the financial year in which Scheduled COD of the first Unit would have occurred, a Contract Year shall end on the date immediately before the Scheduled COD of the first Unit and a new Contract Year shall begin once again from the Scheduled Commercial Operation Date of the first Unit and end on immediately succeeding March 31 and provided further that (ii) the last Contract Year of this Agreement shall end on the last day of the term of this Agreement;



"Contracted Capacity"	means a) (i) for the first Unit, [270] MW; (ii) for the second Unit, [270] MW; rated capacity and in relation to the Power Station as a whole means [540] MW rated capacity at the generator terminals of the units. or such rated capacities as may be determined in accordance with Article 6.3.4 or Article 8.2 of this Agreement;
"Control Centre" or "Nodal Agency"	means the RLDC or SLDC or such other load control centre designated by the Procurer from time to time through which the Procurer shall issue Dispatch Instructions to the Seller for the Power Station;
"Debt Service"	means the amounts which are due under the Financing Agreements by the Seller to the Lenders, expressed in Rupees (with all amounts denominated in currencies other than Rupees being converted to Rupees at the Reference Exchange Rate, the selling rate in Rupees for the Foreign Currency on the relevant day, as notified by the State Bank of India as its TT Rate at 12:00 noon on the Notice to Proceed);
"Declared Capacity"	In relation to a Unit or the Power Station at any time means the net capacity of the Unit or the Power Station at the relevant time (expressed in MW at the Interconnection Point) as declared by the Seller in accordance with the Grid Code and dispatching procedures as per the Availability Based Tariff;
" Delivery Point " or "Interconnection Point"	means the points of delivery specified in Schedule 7 for fulfilling the obligation of the Seller to deliver the Contracted Capacity less Auxiliary Energy Consumption to the Procurer;
"Direct Non-Natural Force Majeure Event"	shall have the meaning ascribed thereto in Article 12.3(ii)(1).
"Dispute"	means any dispute or difference of any kind between the Procurer and the Seller, in connection with or arising out of this Agreement including any issue on the interpretation and scope of the terms of this Agreement as provided in Article 17;
"Dispatch Instruction"	means any instruction issued by the Procurer through the respective SLDC and RLDC to the Seller, in accordance with applicable Grid

Code and this Agreement;

"Due Date" means the thirtieth (30th) day after a Monthly Bill or a Supplementary Bill is received and duly acknowledged by the Procurer (or, if such day is not a Business Day, the immediately succeeding Business Day) by which date such bill is payable by the Procurer;

"Effective Date" means the date of signing of this Agreement by the Parties;

"Electricity Laws" means the Electricity Act, 2003 and the rules and regulations made thereunder from time to time along with amendments thereto and replacements thereof and any other Law pertaining to electricity including regulations framed by the Appropriate Commission;

"Electrical Output" means the net electrical output of the Power Station at the Delivery Point, as expressed in kWh;

"Emergency" means a condition or situation that, in the opinion of the Procurer or RLDC or SLDC or the agency responsible for operating and maintaining the Interconnection and Transmission Facilities or the transmission company, as the case may be, poses a significant threat to the Procurer's or the said agency's or transmission company's ability to maintain safe, adequate and continuous electricity supply to its customers, or seriously endangers the security of persons, plant or equipment;

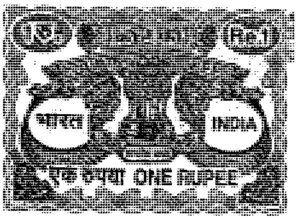
Energy Charges shall have the meaning ascribed to this term under Schedule - 6

"Energy Output" means for any period, the Energy Units actually delivered by the Project, as metered at the Interconnection Point, reduced by the Energy Units supplied by the Procurer to the Seller at the Interconnection Point or to any Project facility for which the Seller is responsible located inside or outside the Project boundary such as raw water or other pumping stations;

"Expiry Date" means the 25th anniversary of the Commercial Operation Date of the Power Station. For the avoidance of doubt, in case the COD of the Power Station occurs on June 1, 2013, then the 25th anniversary of the Scheduled COD of the Power Station shall occur on June 1, 2038, i.e. in the Contract Year 2038-39;

"Final Test Certificate" means

a) a certificate of the Independent Engineer certifying and accepting the results of a Commissioning Test/s in accordance with Article 6.3.1 of this Agreement; or
b) a certificate of the Independent Engineer certifying the result of a Repeat Performance Tests in accordance with Article 8.2.1 of this Agreement;



"Financial Closure" or "Financial Close"	means the execution of all the Financing Agreements required for the Project and fulfilment of conditions precedents and waiver, if any, of any of the conditions precedent for the initial draw down of funds there under.
"Financing Agreements"	means all the loan agreements, notes, indentures, security agreements, letters of credit and other documents relating to the financing of the Project on or before the COD of the Power Station, as may be amended, modified, refinanced or replaced from time to time, but without in anyway increasing the liabilities of the Procurer therein;
"Force Majeure"	shall have the meaning ascribed thereto in Article 12.3;
"Forced Outage"	shall have the meaning ascribed thereto in Grid Code;
"Fuel"	means primary fuel used to generate electricity namely, domestic coal
"Fuel Supply Agreements[6]	means the agreement(s) entered into between the Seller and the Fuel Supplier for the purchase, transportation and handling of the Fuel, required for the operation of the Power Station. In case the transportation of the Fuel is not the responsibility of the Fuel Supplier, the term shall also include the separate agreement between the Seller and the Fuel Transporter for the transportation of Fuel in addition to the agreement between the Seller and the Fuel Supplier for the supply of the Fuel;
"Functional Specifications"	means the technical requirements and parameters described in Schedule 3 of this Agreement and as provided in Grid Code relating to the operation, maintenance and dispatch of any Unit and the Power Station;
"Grid Code" or "IEGC"	means any set of regulations or codes issued by Appropriate Commission as amended and revised from time to time and legally binding on the Seller' and theProcurer' governing the operation of the Grid System or any succeeding set of regulations or code;
"Grid System"	means the Interconnection and Transmission Facilities and any other transmission or distribution facilities through which the Procurer's supply electricity to their customers or the transmission company transmits electricity to the Procurer;
"Independent Engineer"	means an independent consulting engineering firm or group appointed jointly by the Procurer and the Seller to carry out the functions in accordance with Article 4.7.1 and Article 6, Article 12 and Article 8 herein.

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	functions in accordance with Article 4.7.1 and Article 6, Article 12 and Article 8 herein. provided that separate Independent Engineer may be appointed for the purposes of Article 4.7.1, Article 6, Article 12 and Article 8; provided further that the separate Independent Engineer may be appointed for each financial year for the purposes of Article 8, and in such case, such Independent Engineer shall be appointed at least ninety (90) days prior to the beginning of the financial year.
"Indirect Non-Natural Force Majeure Event"	shall have the meaning ascribed thereto in Article 12.3(ii)(2).
"Indian Governmental Instrumentality"	means the GOI, Government of Punjab, and any ministry or, department or board or agency other regulatory or quasi-judicial authority controlled by GOI or Government of Punjab where the Procurer and Project are located and includes the Appropriate Commission;
"Infirm Power"	means energy produced by a generating unit and delivered to the Procurer prior to the Commercial Operation Date of such generating unit;
"Initial Consents"	shall mean the consents listed in Schedule 2;
"Initial Performance Retest Period"	shall have the meaning ascribed thereto in Article 6.3.3 of this Agreement;
"Interconnection Facilities" or "Interconnection and Transmission Facilities"	means the facilities on the Procurer's side of the Interconnection Point for receiving and metering Electrical Output in accordance with this Agreement and which shall include, without limitation, all other transmission lines and associated equipment, transformers and associated equipment, relay and switching equipment and protective devices, safety equipment and, subject to Article 9, the Metering. System required for the Project. The Interconnection Facilities also include the facilities for receiving power at the Delivery Point where the transmission line from the Power Station Switchyard end is injecting power into the transmission network (including the dedicated transmission line connecting the Power Station with the STU /CTU transmission network) ;

"Invoice" or "Bill" — means either a Monthly Tariff Invoice, a Supplementary Invoice or a Procurer Invoice;

"Late Payment Surcharge" — shall have the meaning ascribed thereto in Article 11.3.4;

"Law" — means, in relation to this Agreement, all laws including Electricity Laws in force in India and any statute, ordinance, regulation, notification or code, rule, or any interpretation of any of them by an Indian Governmental Instrumentality and having force of law and shall further include all applicable rules, regulations, orders, notifications by an Indian Governmental Instrumentality pursuant to or under any of them and shall include all rules, regulations, decisions and orders of the Appropriate Commission ;

"Lenders" — means the banks, other financial institutions, multilateral agencies, RBI registered non banking financial companies, mutual funds and agents or trustees of debenture / bond holders, including their successors and assignees, who have agreed as on or befor COD of the power station to provide the Seller with the senior debt financing described in the Capital Structure Schedule, and any successor banks or financial institutions to whom their interests under the Financing Agreements may be transferred or assigned:

Provided that, such assignment or transfer shall not relieve the Seller of its obligations to the Procurer under this Agreement in any manner and shall also does not lead to an increase in the liability of the Procurer;

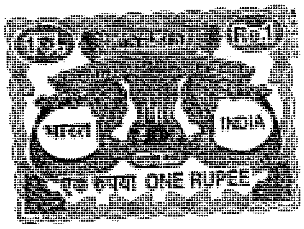
"Letter of Credit" or "L/C" — shall have the meaning ascribed thereto in Article 11.4.1;

"Meters" or "Metering System" — means meters used for accounting and billing of electricity in accordance with Central Electricity Authority (Installation and Operations of Meters) Regulations, 2006, Grid Code and ABT, as amended from time to time;

"Maintenance Outage" — shall have the meaning as ascribed to this term as per the provisions of the Grid Code.

"MCR" — means gross Power Station or Unit Maximum Continuous Rating as defined in the Grid Code;

"Minimum Offtake Guarantee" — means guaranteed offtake of sixty five per cent (65%) of the total



	contracted capacity for the procurer during a contract year.
"Month"	means a period of thirty (30) days from (and excluding) the date of the event, where applicable, else a calendar month;
"Monthly Bill" or "Monthly Invoice"	means a monthly invoice comprising Capacity Charges (applicable after COD of the first unit) and Energy Charges, including incentive and penalty, as per Schedule 6 hereof;
"Natural Force Majeure Event"	shall have the meaning ascribed thereto in Article 12.3(i).
" Non-Natural Force Majeure Event"	shall have the meaning ascribed thereto in Article 12.3(ii).
"Normative Availability"	means equal to eighty per cent (80%) Availability at the Delivery Point on Contract Year basis[8].
"Operating Period"	in relation to the Unit means the period from its COD and in relation to the Power Station the date by which all the Units achieve COD, until the expiry or earlier termination of this Agreement in accordance with Article 2 of this Agreement;
"O&M Contract" or "O&M Contracts"	means the contract/s entered into by the Seller with the Operator or operators, if any;
"Operating Procedures "	shall have the meaning ascribed thereto in Grid Code;
"Operator" or "Operators"	means one or more contractors appointed as operator of power generation facilities of the Power Station pursuant to an O&M contract, if any;
"Party" and "Parties"	shall have the meaning ascribed thereto in the recital to this Agreement;
"Performance Guarantee"	means the irrevocable unconditional bank guarantee, submitted and to be submitted by the Seller to the Procurer from a scheduled bank specified by the Procurer , in the form attached hereto as Schedule 9, in accordance with Article 3 of this Agreement and which shall include the additional bank guarantee furnished by the Seller under this Agreement;
"Performance Test "	means the test carried out in accordance with Article 1.2 of Schedule 4 of this Agreement;
"Preliminary Default Notice"	shall have the meaning ascribed thereto in Article 14 of this agreement;
"Power Station"	means the:

(a) Thermal power generation facility comprising of any or all the Units;

(b) any associated fuel handling, treatment or storage facilities of the power generation facility referred to above;

(c) any water supply, treatment or storage facilities required for the operation of the power generation facility referred to above;

(d) the ash disposal system including ash dyke [as applicable];

(e) township area for the staff colony; and

(f) bay/s for transmission system in the switchyard of the power station,

(g) all the other assets, buildings/structures, equipments, plant and machinery, facilities and related assets required for the efficient and economic operation of the power generation facility;

whether completed or at any stage of development and construction or intended to be developed and constructed as per the provisions of this Agreement.

"Project" — means the coal based Thermal Power Station to be established at Goindwal Sahib undertaken for design, financing, engineering, procurement, construction, operation, maintenance, repair, refurbishment, development and insurance by the Seller in accordance with the terms and conditions of this Agreement;

"Project Documents" — mean

a) Construction Contracts;
b) Fuel Supply Agreements including the Fuel Transportation Agreement,
c) O&M contracts;

d) any other agreements designated in writing as such, from time to time , jointly by the Procurer and the Seller;

"Prudent Utility Practices" — means the practices, methods and standards that are generally accepted internationally from time to time by electric utilities for the purpose of ensuring the safe, efficient and economic design, construction, commissioning, operation and maintenance of power generation equipment of the type specified in this Agreement and which practices, methods and standards shall be adjusted as necessary, to take account of:

a) operation and maintenance guidelines recommended by the manufacturers of the plant and equipment to be incorporated in the Project;

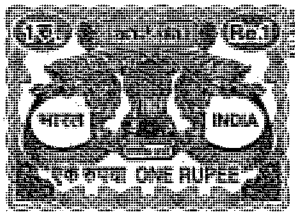
b) the requirements of Indian Law; and

c) the physical conditions at the Site;

"Repeat Performance Test "	shall have the meaning ascribed thereto in Article 8.1 of this agreement;
"RPC"	means the relevant Regional Power Committee established by the Government of India for a specific Region in accordance with the Electricity Act, 2003 for facilitating integrated operation of the power system in that Region;
"RBI"	means Reserve Bank of India;
"Regional Energy Accounts" or "REA"	means as defined in the Grid Code and issued by the relevant RPC secretariat or other appropriate agency for each Week and for each Month (as per their prescribed methodology), including the revisions and amendments thereof;
"RLDC"	means the relevant Regional Load Dispatch Centre as defined in the Electricity Act, 2003, in the region in which the Project is located;
"Rupees" or "Rs."	means the lawful currency of India;
"SBAR"	means the prime lending rate per annum applicable for loans with one (1) year maturity as fixed from time to time by the State Bank of India. In the absence of such rate, any other arrangement that substitutes such prime lending rate as mutually agreed to by the Parties;
"Selectee"	means a new company (i) proposed by the Lenders pursuant to Schedule 10 hereof and approved by the Procurer (ii) or proposed by the Procurer in accordance with Schedule 10 hereof and approved by the Lenders, for substituting the Seller for the residual period of the PPA by amendment of the PPA or by execution of a fresh PPA in accordance with the terms and conditions contained in the said Schedule.
"SERC"	means the State Electricity Regulatory Commission, as defined in the Electricity Act, 2003, or its successors;
"Scheduled COD" or "Scheduled Commercial Operation	means the date on or before which COD of a Generating Unit is required to occur, which shall be thirty six (36) Months from the date of Financial Closure for the First Generating Unit and six (6)

Date"	months from the COD of the First Generating Unit for the Second Generating Unit or such other dates from time to time, specified in accordance with the provisions of this Agreement;
"Scheduled Connection Date"	Shall mean the date falling 210[10] days before the Scheduled COD of first Unit;
"Scheduled Energy" or "Scheduled Generation"	means scheduled generation as defined in the ABT;
"Scheduled Outage"	shall have the meaning ascribed to this term as per the provisions of the Grid Code;
"Scheduled Synchronisation Date"	means in relation to a Unit, the date, which shall be maximum of one hundred and eighty (180) days prior to the Scheduled COD of the respective Unit;
"Settlement Period"	means the time block for issue of daily generation and drawal schedules as provided in ABT;
Site	means the land over which the Project will be developed as provided in Schedule 1;
"SLDC"	means the relevant State Load Dispatch Centre as defined in the Electricity Laws, in the State where the Procurer's registered office is located;
"State Transmission Utility" or "STU"	shall have the meaning ascribed thereto in the Electricity Act 2003;
"Supplementary Bill"	means a bill other than a Monthly Bill raised by any of the Parties in accordance with Article 11;
"Tariff Payment"	means the payments under Monthly Bills as referred to in Schedule 6 and the relevant Supplementary Bills;
"Tariff"	means the tariff as computed in accordance with Schedule 6 and approved by PSERC.
"Tested Capacity"	in relation to a Unit, or the Power Station as a whole (if all the Units of the Power Station have been Commissioned) means the results of the most recent Performance Test or Repeat Performance Test carried out in relation to the Power Station in accordance with Article 6, Article 8 and Schedule 4 of this Agreement;
"Termination Notice"	shall mean the notice given before termination of this Agreement in accordance with relevant clauses of this Agreement
"Term of Agreement"	shall have the meaning ascribed thereto in Article 2.1;

"Total Debt Amount"	Means the sum of the following amounts, expressed in Rupees (with all amounts denominated in currencies other than Rupees being converted to Rupees at the Reference Exchange Rate, the selling rate in Rupees for the Foreign Currency on the relevant day, as notified by the State Bank of India as its TT Rate at 12:00 noon on the date of issuance of Substitution Notice by the Lenders (a) the principal amount of the senior debt incurred by the Seller (as per the terms of the Financing Agreements) to finance the Project according to the Capital Structure Schedule which remains outstanding on the date of issuance of Substitution Notice by the Lender after taking account of any senior debt repayments which could have been made out of the Monthly Tariff Payments received by the Seller on or before the date of issuance of Substitution Notice by the Lender as per the terms provided in the Financing Agreements ; and (b) all accrued interest and financing fees payable under the Financing Agreements on the amounts referred to in (a) above from the date of the Capacity Charge payment (as specified in paragraph 1.2 of Schedule 6 hereof) immediately preceding the date of issuance of Substitution Notice by the Lender or, if the Capacity Charges have not yet fallen due to be paid, from the most recent date when interest and financing fees were capitalised, and (c) if this Agreement is terminated during the Construction Period, any amounts owed to the Construction Contractor for work performed but not paid for under the Construction Contract (other than amounts falling due by reason of the Seller's default);
"Unit"	Means one steam generator, steam turbine, generator and associated auxiliaries of the Power Station
"Unscheduled Interchange" or "UI"	shall have the meaning ascribed thereto in Rule 24 of the CERC (Terms and Conditions of Tariff) Regulations as applicable.
"Week"	means a calendar week commencing from 00:00 hours of Monday, and ending at 24:00 hours of the following Sunday;
"Wheeling Charges" or "Transmission Charges"	are the charges paid by the Procurer to the CTU or STU or any other agency for the transfer of power from the Power Station switchyard end to the Procurer's network.



1.2 ***Interpretation***

Save where the contrary is indicated, any reference in this Agreement to:

1.2.1 A "Recital", an "Article", a "Schedule" and a "paragraph/Clause" shall be construed as a reference to a Recital, an Article, a Schedule and a paragraph/clause respectively of this Agreement.

1.2.2 An "affiliate" of any party shall mean a company that either directly or indirectly controls or is controlled by or is under common control of the same person which controls the concerned party; and control means ownership by one company of at least twenty six percent (26%) of the voting rights of the other company.

1.2.3 A "crore" means a reference to ten million (10,000,000) and a "lakh" means a reference to one tenth of a million (1,00,000);

1.2.4 An "encumbrance" shall be construed as a reference to a mortgage, charge, pledge, lien or other encumbrance securing any obligation of any person or any other type of preferential arrangement (including, without limitation, title transfer and retention arrangements) having a similar effect.

1.2.5 "indebtedness" shall be construed so as to include any obligation (whether incurred as principal or surety) for the payment or repayment of money, whether present or future, actual or contingent;

1.2.6 A "person" shall be construed as a reference to any person, firm, company, corporation, society, trust, government, state or agency of a state or any association or partnership (whether or not having separate legal personality) of two or more of the above and a person shall be construed as including a reference to its successors, permitted transferees and permitted assigns in accordance with their respective interests.

1.2.7 The "winding-up", "dissolution", "insolvency", or "reorganization" of a company or corporation shall be construed so as to include any equivalent or analogous proceedings under the Law of the jurisdiction in which such company or corporation is incorporated or any jurisdiction in which such company or corporation carries on business including the seeking of liquidation, winding-up, reorganization, dissolution, arrangement, protection or relief of debtors.

1.2.8 Words importing the singular shall include the plural and vice versa.

1.2.9 This Agreement itself or any other agreement or document shall be construed as a reference to this or to such other agreement or document as it may have been, or may from time to time be, amended, varied, novated, replaced or supplemented.

1.2.10 A Law shall be construed as a reference to such Law including its amendments or re-enactments from time to time.

1.2.11 A time of day shall, save as otherwise provided in any agreement or document be construed as a reference to Indian Standard Time.

1.2.12 Different parts of this Agreement are to be taken as mutually explanatory and supplementary to each other and if there is any inconsistency between or among the parts of this Agreement, they shall be interpreted in a harmonious manner so as to give effect to each part.

1.2.13 The tables of contents and any headings or sub-headings in this Agreement have been inserted for ease of reference only and shall not affect the interpretation of this Agreement.

1.2.14 All interest payable under this Agreement shall accrue from day to day and be calculated on the basis of a year of three hundred and sixty five (365) days.

1.2.17 The words "hereof" or "herein", if and when used in this Agreement shall mean a reference to this Agreement.

2 ARTICLE 2 : TERM OF AGREEMENT

2.1 *Effective Date and Term of Agreement*

This Agreement shall come into effect from the Effective Date. This Agreement shall be valid for a term commencing from the Effective Date until the Expiry Date ("Term of Agreement") unless terminated earlier pursuant to Article 2.2. Upon the occurrence of the Expiry Date, this Agreement shall, subject to Article 18.9, automatically terminate, unless mutually, extended by the Parties on mutually agreed terms and conditions, atleast one hundred and eighty (180) days prior to the Expiry Date, subject to approval of the Appropriate Commission, as necessary.

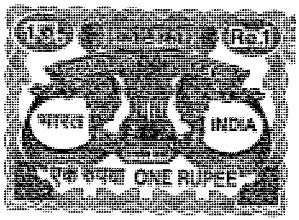
2.2 *Early Termination*

This Agreement shall terminate before the Expiry Date:

i. if either the Procurer or Seller exercises a right to terminate, pursuant to Article 3.3.2, Article 3.3.3, , Article 4.5.3, , Article 14.4.5 or Schedule 8 of this Agreement or any other provision of this Agreement; or
ii. in such other circumstances as the Seller and the Procurer may agree, in writing.

2.3 *Survival*

2.3.1 The expiry or termination of this Agreement shall not affect accrued rights and obligations of the Parties under this Agreement, including the right to receive Liquidated Damages as per the terms of this Agreement, nor shall it affect any continuing obligations for which this Agreement provides, either expressly or by necessary implication, the survival of, post its expiry or termination.



3 ARTICLE 3 : CONDITIONS SUBSEQUENTTO BE SATISFIED BY THE SELLER AND THE PROCURER

3.1 *Satisfaction of conditions subsequent by the Seller and the Procurer*

3.1.1 Prior to the Effective Date, the Seller have provided to the Procurer, the Performance Guarantee from any of the banks specified by the Procurer, of an aggregate amount of Rupees 40.5 crores. Subject to Article 3.4, the Performance Guarantee shall be initially valid till three (3) Months after the Scheduled COD of the Power Station and which shall be extended from time to time to be valid up to three (3) Months after the actual COD of the Power Station. In case the validity of Performance Guarantee is expiring before the validity period specified in this Article, the Seller shall at least thirty (30) days before the expiry of the Performance Guarantee replace the Performance Guarantee with another Performance Guarantee or extend validity of existing Performance Guarantee which is valid and in force till the validity period specified in this Article.

3.1.2 The Seller agrees and undertakes to duly perform and complete the following activities within 12 (twelve) Months from the Effective Date unless such completion is affected due to any Force Majeure event or if any of the activities is specifically waived in writing by the Procurer :

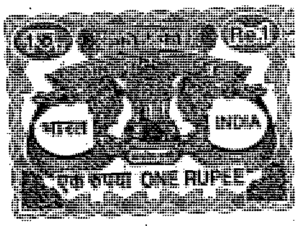
i). the Seller shall have received the Initial Consents as mentioned in Schedule 2, either unconditionally or subject to conditions which do not materially prejudice its rights or the performance of its obligations under this Agreement ;

ii) the Seller shall have executed Fuel Supply Agreement and provided the copies of the same to the Procurer;

iii)the Seller shall have

a) awarded the main plant contract for boiler, turbine and generator ("BTG"), for the Project and shall have given to such contractor an irrevocable notice to proceed ; and

b) the Seller shall have achieved Financial Closure;



iv. the Seller shall have made available to the Procurer the data with respect to the Project for design of Interconnection Facilities and Transmission Facilities, if required;

v. the Seller shall have finalised the specific delivery point for supply of power in consultation with the Procurer;

vi. the Seller shall have taken the possession of the land for the Power Station and have paid the Price of the Land, if any to the State Government authority acquiring the land,

vii. the Seller shall have provided an irrevocable letter to the Lenders duly accepting and acknowledging the rights provided to the Lenders under the terms of this Agreement and all other Project Documents.

3.1.3 Joint responsibilities of the Procurer and the Seller

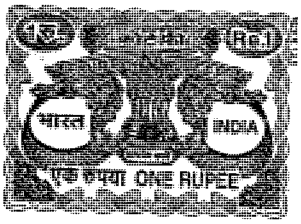
The Procurer and Seller shall jointly appoint the Independent Engineer for the purposes of carrying out the functions as specified in Article 4.7.1, Article 6, Article 8 and Article 12, herein within a period of eight (8) months from the Effective Date.

3.2 *Progress Reports*

The Seller and the Procurer shall notify one another in writing at least once a Month on the progress made in satisfying the conditions in Articles 3.1.2, and 3.1.3.

3.3 *Consequences of non-fulfillment of conditions under Article 3.1*

3.3.1 If any of the conditions specified in Article 3.1.2 is not duly fulfilled by the Seller even within three (3) Months after the time specified under Article 3.1.2, then on and from the expiry of such period and until the Seller has satisfied all the conditions specified in Article 3.1.2, the Seller shall be liable to furnish to the Procurer additional weekly Performance Guarantee of Rs. 2.025 crores within two (2) business days of expiry of every such week. Such additional Performance Guarantee shall become part of the Performance Guarantee and all the provisions of this Agreement shall be construed accordingly. The Procurer shall be entitled to hold and/or invoke the Performance Guarantee, including such increased Performance Guarantee, in accordance with the provisions of this Agreement.



3.3.2 Subject to Article 3.3.3 if:

(i). fulfilment of any of the conditions specified in Article 3.1.2 is delayed beyond the period of three (3) Months and the Seller fails to furnish any additional Performance Guarantee to the Procurer in accordance with Article 3.3.1 hereof; or

(ii). the Seller furnishes additional Performance Guarantee to the Procurer in accordance with Article 3.3.1 hereof but fails to fulfil the conditions specified in Article 3.1.2 for a period of eight (8) months beyond the period specified therein,

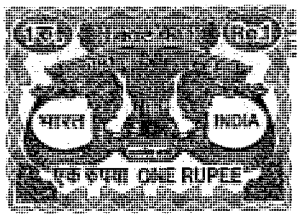
the Procurer or Seller shall have the right to terminate this Agreement by giving a Termination Notice to the Seller / Procurer in writing of at least seven (7) days.

If the Procurer or the Seller elect to terminate this Agreement in the event specified in the preceding paragraph of this Article 3.3.2, the Seller shall be liable to pay to the Procurer an amount of Rupees 54 crores only as liquidated damages. The Procurer shall be entitled to recover this amount of damages by invoking the Performance Guarantee to the extent of Rupees 54 crores and shall then return the balance Performance Guarantee, if any, to the Seller. If the Procurer is unable to recover the said amount of Rupees 54 crores or any part thereof from the Performance Guarantee the amount not recovered from the Performance Guarantee, if any, shall be payable by the Seller to the Procurer within ten (10) days from the end of eight (8) Months period from the due date of completion of conditions subsequent.

It is clarified for removal of doubt that this Article shall survive the termination of this Agreement.

3.3.3 In case of inability of the Seller to fulfil the conditions specified in Article 3.1.2 due to any Force Majeure event, the time period for fulfilment of the Condition Subsequent as mentioned in Article 3.1.2 shall be extended for the period of such Force Majeure event, subject to a maximum extension period of ten (10) Months, continuous or non-continuous in aggregate. Thereafter, this Agreement may be terminated by either the Procurer or the Seller by giving a notice of at least seven (7) days, in writing to the other Party.

3.3.4 Due to the provisions of Article 3.3.3 if there is any increase in the time period for completion of Conditions Subsequent mentioned under Article 3.1.2 there



shall be an equal increase in the time period for Scheduled COD and Scheduled Connection Date.

3.4 ***Reduction in the amount of Performance Guarantee***

3.4.1 On the due fulfilment by the Seller of all the conditions specified under Article 3.1.2 and investment by the Seller of at least twenty five percent (25%) of the total equity required for the Project as certified by the lead lender of the Seller, the Performance Guarantee then existing shall be reduced by an aggregate amount of Rupees 13.5 crores. for the period specified in Article 3.4.2.

3.4.2 The Performance Guarantee specified in Article 3.4.1 hereof shall be in substitution of the earlier Performance Guarantee furnished under Article 3.1.1

The Performance Guarantee furnished under this Article shall be initially valid till three (3) Months after the Scheduled COD of the Power Station and which shall be extended from time to time to be valid upto three (3) Months after the actual COD of the Power Station.

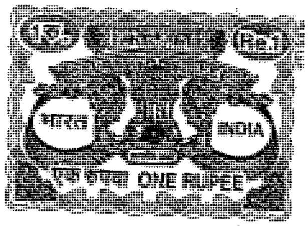
3.4.3 The Performance Guarantee furnished under Article 3.1, 3.3 and 3.4 shall be for guaranteeing the due and timely completion of the Project and achievement of Scheduled Commercial Operation Date of each Unit within the time specified in this Agreement.

3.4.4 The failure on the part of the Seller to furnish and maintain the Performance Guarantee as mentioned above shall be a material breach of the term of this Agreement on the part of the Seller.

3.4.5 If the Seller fails to achieve COD of each of the Units on their respective Scheduled Commercial Operation Date specified in this Agreement, subject to conditions mentioned in Article 4.5.1, the Procurer shall have the right to encash the Performance Guarantee and appropriate in its favour as liquidated damages an amount specified in Article 4.6.1, without prejudice to the other rights of the Procurer under this Agreement.

3.5 ***Return of Performance Guarantee***

3.5.1 The Performance Guarantee as submitted by Seller in accordance with Article 3.4 shall be released by the Procurer within three (3) Months from the actual Commercial Operation Date of the Power Station. In the event of delay in achieving Scheduled COD of any of the Units by the Seller (otherwise than due to Force Majeure event) and consequent part invocation of the Performance Guarantee by the Procurer, the Procurer shall release the Performance Guarantee if any, remaining unadjusted under Article 3.4, after the satisfactory completion by the Seller of all the requirements regarding



achieving the Scheduled Commercial Operation Date of the remaining Units of the Power Station. It is clarified that the Procurer shall also return/release the Performance Guarantee in the event of (i) applicability of Article 3.3.2 to the extent the Performance Guarantee is valid for an amount in excess of Rupees 54 crores, or (ii) termination of this Agreement under Article 3.3.3.

3.5.2 The release of the Performance Guarantee shall be without prejudice to other rights of the Procurer under this Agreement.

4 ARTCLE 4 : DEVELOPMENT OF THE PROJECT

4.1 *The Seller's obligation to build, own and operate the Project*

4.1.1 Subject to the terms and conditions of this Agreement, the Seller undertakes to be responsible, at Seller's own cost and risk, for:

a) obtaining the Initial Consents and maintaining in full force and effect all Consents required by it pursuant to this Agreement and Indian Law;

b) executing the Project in a timely manner so as to enable each of the Units and the Power Station as a whole to be Commissioned no later than its Scheduled Commercial Operations Date and such that as much of the Contracted Capacity as can be made available through the use of Prudent Utility Practices will be made available reliably to meet the Procurer's scheduling and dispatch requirements throughout the term of this Agreement

c) owning the Project throughout the term of this Agreement free and clear of encumbrances, except those expressly permitted by Article 16;

d) procure the requirements of electricity at the Project (including construction, commissioning and start-up power) and to meet in a timely manner all formalities for getting such a supply of electricity;

e) provide on a timely basis relevant information on Power Station specifications which may be required for interconnecting system with the transmission system;

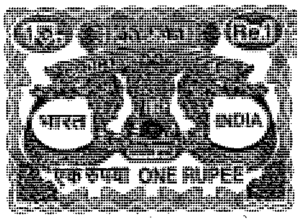
f) fulfilling all other obligations undertaken by him under this Agreement.

4.2 Procurer's obligation

Subject to the terms and conditions of this Agreement, the Procurer:

a) shall be responsible for procuring the Interconnection and Transmission Facilities[14]-to enable the Power Station to be connected to the Grid System not later than the Scheduled Connection Date;

b) shall ensure that the Seller is provided an electrical connection for reasonable construction, commissioning and start up power at the Project as reasonably requisitioned by the Seller by written intimation to the Procurer, on the then prevalent terms and conditions as applicable to such consumers.;



c) shall be responsible for payment of the Transmission Charges and RLDC and SLDC charges;

d) shall make all reasonable arrangements for the evacuation of the Infirm Power from the Power Station; subject to the availability of transmission lines and

e) fulfilling obligations undertaken by them under this Agreement.

4.2 ***Purchase and sale of Available Capacity and Scheduled Energy***

4.3.1 (a) Subject to the terms and conditions of this Agreement, the Seller undertakes to sell to the Procurer, and the Procurer undertakes to pay the Tariff for all of the Available Capacity up to the Contracted Capacity and Scheduled Energy of the Power Station, throughout the term of this Agreement.

b) Prior to the Commercial Operation Date of any generating Unit, the Seller shall sell and the Procurer shall purchase all the Infirm Power produced by that generating Unit for the consideration which shall be as per clause 1.2.9 of Schedule 6.

4.3.2Unless otherwise instructed by the Procurer , the Seller shall sell all the Available Capacity up to the Contracted Capacity of the Power Station pursuant to Dispatch Instructions.

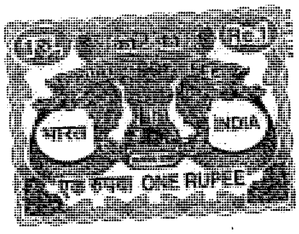
4.4 Right to Available Capacity and ScheduledEnergy

4.4.1 Subject to other provisions of this Agreement, the entire Contracted Capacity of the Power Station and all the Units of the Power Station shall at all times be for the exclusive benefit of the Procurer and the Procurer shall have the exclusive right to purchase the entire Contracted Capacity from the Seller. The Seller shall not grant to any third party or allow any third party to obtain any entitlement to the Available Capacity and/or ScheduledEnergy

4.4.2 Notwithstanding Article 4.4.1, the Seller shall be permitted to sell power, being a part of the Available Capacity of the Power Station to third parties if:

(a) there is a part of Available Capacity which has not been Dispatched by the Procurer, ordinarily entitled to receive such part;

4.4.3 If the Procurer does not avail of power upto the Available Capacity provided by the Seller and the provisions of Article 4.4.2 have been complied with, the Seller shall be entitled to sell such Available Capacity not procured, to any person without losing the right to receive the Capacity Charges from the Procurer for such un-availed Available Capacity. In such a case, the sale realization in excess of Energy Charges,



shall be equally shared by the Seller with the Procurer. In the event, the Seller sells such Available Capacity to the shareholders of the Seller or any direct or indirect affiliate of the Seller/shareholders of the Seller without obtaining the prior written consent of the Procurer, the Seller shall be liable to sell such Available Capacity to such entity at tariffs being not less than the Tariff payable by the ProcurerIn such case, fifty percent (50%) of the excess over Energy Charges recovered by the Seller from sale to third party shall be retained by the Seller and the balance fifty percent (50%) shall be provided by the Seller to the Procurer/s During this period, the Seller will also continue to receive the Capacity Charges from the Procurer. Upon the Procurers intimating to the Seller of its intention and willingness to avail of the part of the Available Capacity not availed of and therefore sold to the third party, the Seller shall, notwithstanding anything contained in the arrangement between the Seller and said third party, commence supply of such capacity to the Procurer/s from the later of two (2) hours from receipt of notice in this regard from the Procurer/s or the time for commencement of supply specified in such notice.

4.4.4 The Seller shall not itself use any of the electricity generated by the Power Station during the term of this Agreement, except for the purpose of meeting the Power Station's auxiliary load requirements, as per the norms laid down by theAppropriate Commission and load requirements of the housing colony for the staff.

4.4.5 The sale under Unscheduled Interchange shall not be considered as sale to third party for the purposes of this Agreement.

4.5 Extensions of time

4.5.1 In the event that:

(a) the Seller is prevented from performing its obligations under Article 4.1.1(b) by the stipulated date, due to any Procurer Event of Default; or

(b) a Unit cannot be Commissioned by its Scheduled Commercial Operations Date because of Force Majeure Events.

the Scheduled Commercial Operations Date, the Scheduled Connection Date and the Expiry Date shall be deferred, subject to the limit prescribed in Article 4.5.3, for a reasonable period but not less than 'day for day' basis, to permit the Seller through the use of due diligence, to overcome the effects of the Force Majeure Events affecting the Seller or in the case of the Procurer's Event of Default, till such time such default is rectified by the Procurer.

4.5.2 If the Parties have not agreed, within thirty (30) days after the affected Party's performance has ceased to be affected by the relevant circumstance, on how long the Scheduled Commercial Operation Date, the Scheduled Connection

Date or the Expiry Date should be deferred by, any Party may raise the Dispute to be resolved in accordance with Article 17.

4.5.3 In case of extension occurring due to reasons specified in Article 4.5.1(a), the original Scheduled Commercial Operation Date of any Unit or the original Scheduled Commercial Operations Date of the Power Station as a whole, would not be extended by more than two (2) years or the date on which the Seller elects to terminate this Agreement, whichever is earlier.

As a result of such extension, the date newly determined shall be deemed to be the Scheduled Commercial Operations Date for the purposes of this Agreement.

4.6 Liquidated damages for delay in providing Contracted Capacity

4.6.1 If any Unit is not Commissioned by its Scheduled Commercial Operation Date other than for the reasons specified in Article 4.5.1, the Seller shall pay to the Procurer liquidated damages, for the delay in such Commissioning or making the Unit's Contracted Capacity available for dispatch by such date. The sum total of the liquidated damages payable by the Seller to the Procurer for such delayed Unit shall be calculated as follows:

$$SLDb = [CCun \times dn \times DR1], \text{ if } dn <= 60$$

$$SLDb = [CCun \times 60 \times DR1] + [CCun \times (dn - 60) \times DR2], \text{ if } dn > 60$$

Where:

a) "SLDb" are the liquidated damages payable by the Seller during the period beginning with the day from the Scheduled Commercial Operation Date of a Unit up to and including the day on which Unit is actually Commissioned;
b) "CCun" is the Contracted Capacity of Unit "n";
c) "d" is the number of days in the period beginning with the day after the Scheduled Commercial Operation Date of Unit "n" up to and including the day on which such Unit is actually Commissioned;
d) "DR1" is Rs. Ten Thousand (10,000) of damages per MW per day of delay in case "d" is less than 60 days and "DR2" is Rs. Fifteen Thousand (15,000) of damages per MW per day of delay in case "d" is equal to or more than 60 days

4.6.2 The Seller's maximum liability under this Article 4.6 shall be limited to the amount of liquidated damages calculated in accordance with Article 4.6.1 for and upto twelve (12) Months of delay for the Unit. Provided that in case of failure of the Seller to Commission the Unit even after expiry of twelve (12) Months from its Scheduled Commercial Date, the provisions of Article 14 shall apply.

4.6.3 The Seller shall pay the amount calculated pursuant to Article 4.6.1 to the Procurer within ten (10) days of the earlier of:

(a) the date on which the Unit is actually Commissioned; or

(b) expiry of the twelve (12) month period mentioned in Article 4.6.2.

If the Seller fails to pay the amount of damages within the said period of ten (10) days, the Procurer shall be entitled to recover the said amount of the liquidated damages by invoking the Performance Guarantee. If the then existing Performance Guarantee is for an amount which is less than the amount of the liquidated damages payable by the Seller to the Procurer under this Article 4.6, then the Seller shall be liable to forthwith pay the balance amount.

4.6.4 The Parties agree that the formula specified in Article 4.6.1 for calculation of liquidated damages payable by the Seller under this Article 4.6, read with Article 14 is a genuine and accurate pre-estimation of the actual loss that will be suffered by the Procurer in the event of Seller's delay in achieving Commissioning of a Unit by its Scheduled COD.

4.7 Liquidated damages for delay due to Procurer Event of Default and Non Natural Force Majeure Events and Natural Force Majeure Event (affecting the Procurer)

4.7.1 If

a) a Unit cannot be commissioned by its Scheduled Commercial Operations Date, due to a Procurer Event of Default or due to. Non Natural Force Majeure Event (or Natural Force Majeure affecting the Procurer) provided such Non Natural Force Majeure Event (or Natural Force Majeure affecting the Procurer/s) has continued for a period of more than three (3) continuous or non-continuous Months; or

b) a Unit is available for conducting Commissioning Tests and is anticipated to be capable of duly completing the Commissioning Tests as certified by the Independent Engineer, but the said Commissioning Tests are not undertaken or completed due to such Procurer Event of Default or due to Non Natural Force Majeure Event (or Natural Force

Majeure affecting the Procurer) provided such Non Natural Force Majeure Event (or Natural Force Majeure affecting the Procurer) has continued for a period of more than three (3) continuous or non-continuous Months:

such Unit shall, until the effects of the Procurer Event of Default or of Non Natural Force Majeure Event (or Natural Force Majeure affecting the Procurer) no longer prevent the Seller from undertaking a Commissioning Test/s, be deemed to have a Tested Capacity equal to the Contracted Capacity and to this extent, be deemed to have been Commissioned with effect from the Scheduled COD without taking into account delay due to such Procurer Event of Default or Non Natural Force Majeure Event (or Natural Force Majeure affecting the Procurer) and shall be treated as follows.

a) In case of delay on account of the Procurer Event of Default, the Procurer shall make payment to the Seller of Capacity Charges calculated on Normative Availability of Contracted Capacity of such Unit for and during the period of such delay

b) In case of delay on account of Direct Non Natural Force Majeure Event, the Procurer shall make payment to the Seller of Capacity Charges calculated on Normative Availability of Contracted Capacity of such Unit for the period of such events in excess of three (3) continuous or non-continuous Months in the manner provided in (d) below.

c) In case of an Indirect Non Natural Force Majeure Event (or Natural Force Majeure affecting the Procurer), the Procurer shall make payments for amounts ("Debt Service") relatable to such Unit, which are due under the Financing Agreements, subject to a maximum of Capacity Charges based on Normative Availability, for the period of such events in excess of three (3) continuous or non-continuous Months in the manner provided in (d) below.

d) In case of delay due to Direct and Indirect Non Natural Force Majeure Events (or Natural Force Majeure affecting the Procurer), the Procurer shall be liable to make payments mentioned in (b) and (c) above, after Commissioning of the Unit, in the form of an increase in Capacity Charges. Provided such increase in Capacity Charges shall be determined by Appropriate Commissionon the basis of putting the Seller in the same economic position as the Seller would have been in case the Seller had been paid amounts mentioned in (b) and (c) above in a situation where the Direct Non Natural Force Majeure or Indirect Non Natural Force Majeure Event, as the case may be, had not occurred.

For the avoidance of doubt, it is specified that the charges payable under this Article 4.7.1 shall be paid by the Procurer as per the Contracted Capacity.

4.7.2 In every case referred to in Article 4.7.1 hereinabove, the Seller shall undertake a Commissioning Test/s as soon as reasonably practicable [and in no event later than two (2) weeks or such longer period as mutually agreed between the Seller and the Procurer] after the point at which it is no longer prevented from doing so by the effects of Force Majeure Events or Procurer Event of Default (as appropriate) and if such Commissioning Test/s is not duly completed and / or demonstrate/s a Tested Capacity of a Unit which is less than ninety five (95) percent of its Contracted Capacity, then:

a) The Unit which fails the Commissioning Tests, shall be deemed to have not been Commissioned from the deemed COD referred to in Article 4.7.1;
b) The Seller shall repay to the Procurer, all sums received by way of Capacity Charge for such Unit along with interest at the same rate as Late Payment Surcharge; and
c) If the Seller fails to achieve Commissioning by the Scheduled Commercial Operation Date, it shall also pay liquidated damages to the Procurer for such Unit calculated in accordance with Article 4.6.

4.8 Limit on amounts payable due to default

4.8.1 The Parties expressly agree that the Procurer's only liability for any loss of profits or any other loss of any other kind or description whatsoever (except claims for indemnity under Article 15), suffered by the Seller by reason of the Procurer's failure to meet its obligations under Article 4.2(a) to Article 4.2(d) shall be to pay the Seller the amounts specified in Article 4.7 and Article 14.

4.8.2 Similarly, Seller's only liability for any loss suffered by the Procurer of any kind or description whatsoever (except claims for indemnity under Article 15), by reason of the Seller's failure to meet its obligations of Commissioning the various Units on their Scheduled COD, shall be as per Article 4.6 and Article-14.

5 ARTICLE 5 : CONSTRUCTION

5.1 *Seller's Construction Responsibilities*

The Seller shall be responsible for designing, constructing, erecting, commissioning, completing and testing the Power Station in accordance with the following, it being clearly understood that in the event of inconsistency between two or more of the following, the order of priority as between them shall be the order in which they are placed, with 'applicable law' being the first:

a) applicable Law;
b) the Grid Code;
c) the terms and conditions of this Agreement;
d) the Functional Specifications; and
e) Prudent Utility Practices.

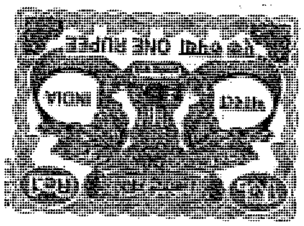
Notwithstanding anything to the contrary contained in this PPA, the Seller shall ensure that the technical parameters or equipment limits of the Project shall always be subject to the requirements as specified in points (a) to (e) above and under no event shall over-ride or contradict the provisions of this Agreement and shall not excuse the Seller from the performance of his obligations under this Agreement.

5.2 *The Site*

The Seller acknowledges that, before entering into this Agreement, it has had sufficient opportunity to investigate the Site and accepts full responsibility for its condition (including but not limited to its geological condition, on the Site, the adequacy of the road and rail links to the Site and the availability of adequate supplies of water) and agrees that it shall not be relieved from any of its obligations under this Agreement or be entitled to any extension of time or financial compensation by reason of the unsuitability of the Site for whatever reason.

5.3 *Information Regarding Interconnection Facilities*

The Procurer shall provide the Seller, on a timely basis, all information with regard to the Interconnection and Transmission Facilities as is reasonably necessary to enable the Seller to design, install and operate all interconnection plant and apparatus on the Seller's side of the Interconnection Point.



5.4 *Quality of Workmanship*

The Seller shall ensure that the Power Station is designed, built and completed in a good workmanlike manner using sound engineering construction practices and using only materials and equipment that are new and of international utility grade quality such that, the useful life of the Power Station will be till the Expiry Date.

The Seller shall ensure that design, construction and testing of all equipment, facilities, components and systems of the Project shall be in accordance with Indian Standards and Codes issued by Bureau of Indian Standards and/or internationally recognised Standards and Codes, such as:

i. American National Standards Institute (ANS)
ii. American Society of Testing and Materials (ASTM)
iii. American Society of Mechanical Engineers (ASME)
iv. American Petroleum Institute (API)
v. Standards of the Hydraulic Institute, USA
vi. International Organization for Standardization (ISO)
vii. Japanese Industrial Standards (JIS)
viii. Tubular Exchanger Manufacturer's Association (TEMA)
ix. American Welding Society (AWS)
x. National Electrical Manufacturers Association (NEMA)
xi. National Fire Protection Association (NFPA)
xii. International Electro-Technical Commission (IEC)
xiii. Expansion Joint Manufacturers Association (EJMA)
xiv. Heat Exchange Institute (HEI)
xv. American Water Works Association (AWWA)
xvi. Deutsches Institut fur Normung (DIN)

Other international standards, established to be equivalent or superior to the above standards shall also be acceptable. However, in the event of any conflict between the requirements of the international codes and standards and the requirements of the Indian standards/regulations, the latter shall prevail.

5.5 *Consents*

The Seller shall be responsible for obtaining all Consents (other than those required for the Interconnection and Transmission Facilities) and the Initial Consents required for developing, financing, constructing, operating and maintenance of the Project and maintaining/ renewing all such Consents in order to carry out its obligations under this Agreement in general and this Article 5 in particular and shall supply the Procurer promptly with copies of each application that it submits, and copy/ies of each consent/approval/license which it obtains. For the avoidance of doubt, it is clarified that the Seller shall also be responsible for maintaining/renewing the Initial Consents and for fulfilling all conditions specified therein.

5.6 *Construction Documents*

The Seller shall retain at the Site and make available for inspection to the Procurer at all reasonable times copies of the results of all tests specified in Schedule 4 hereof.

5.7 *Co-ordination of Construction Activities*

5.7.1 Before the tenth (10th) day of each Month, during the Construction Period:

(a) the Seller shall prepare and submit to the Procurer a monthly progress report, in the Agreed Form; and

(b) The Procurer shall prepare and submit to the Seller a monthly progress report, in the Agreed Form, regarding the Interconnection and Transmission Facilities.

The Seller and the Procurer shall designate from time to time, by giving a written notice to the other Party up to five (5) of its/their employees who shall be responsible for coordinating all construction activities relating to the Project and who shall have access at all reasonable times to the other Party's land for the purpose of apprising the progress of the work being carried on, subject to such designated persons or the Party appointing them giving reasonable notice to the other Party of such visit and subject to their complying with all reasonable safety procedures.

For the avoidance of doubt, it is clarified that the total number of the representatives of the Procurer shall not exceed five (5).

6 ARTICLE 6 : SYNCHRONISATION, COMMISSIONING AND COMMERCIAL OPERATION

6.1 *Synchronization*

6.1.1 The Seller shall give the Procurer and RLDC or SLDC at least sixty (60) days advance preliminary written notice and at least thirty (30) days advance final written notice, of the date on which it intends to synchronise a Unit to the Grid System.

6.1.2 Subject to Article 6.1.1, a Unit may be synchronised by the Seller to the Grid System when it meets all connection conditions prescribed in any Grid Code then in effect and otherwise meets all other Indian legal requirements for synchronisation to the Grid System

6.2 *Commissioning*

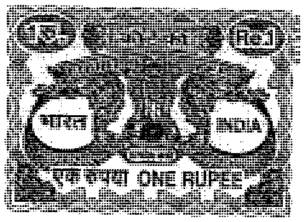
6.2.1 The Seller shall be responsible for ensuring that each Unit is Commissioned in accordance with Schedule 4 at its own cost, risk and expense.

6.2.2 The Seller shall give the Procurer and the Independent Engineer not less than ten (10) days prior written notice of Commissioning Test of each Unit.

6.2.3 The Seller, the Procurer and the Independent Engineer (individually) shall each designate qualified and authorised representatives to witness and monitor Commissioning Test of each Unit.

6.2.4 Testing and measuring procedures applied during each Commissioning Test shall be in accordance with the codes, practices and procedures mentioned in Schedule 4 of this Agreement.

6.2.5 Within five (5) days of a Commissioning Test, the Seller shall provide the Procurer and the Independent Engineer with copies of the detailed Commissioning Test results. Within five (5) days of receipt of the Commissioning Test results, the Independent Engineer shall provide to the Procurer and the Seller in writing, his findings from the evaluation of Commissioning Test results, either in the form of Final Test Certificate certifying the matters specified in Article 6.3.1 or the reasons for non-issuance of Final Test Certificate.



6.3 Commercial Operation

6.3.1 A Unit shall be Commissioned on the day after the date when the Procurer receives a Final Test Certificate of the Independent Engineer stating that:

a) the Commissioning Tests have been carried out in accordance with Schedule -4 and are acceptable to him; and

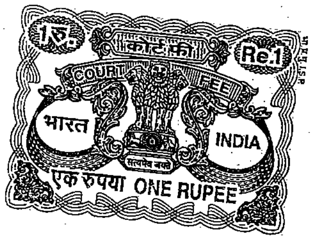
b) the results of the Performance Test show that the Unit's Tested Capacity, is not less than ninety five (95) percent of its Contracted Capacity, as existing on the Effective Date. .

6.3.2 If a Unit fails a Commissioning Test, the Seller may retake the relevant test, within a reasonable period after the end of the previous test, with three (3) day's prior written notice to the Procurer and the Independent Engineer. Provided however, the Procurer shall have a right to require deferment of any such re-tests for a period not exceeding fifteen (15) days, without incurring any liability for such deferment, if the Procurer are unable to provide evacuation of power to be generated, due to reasons outside the reasonable control of the Procurer or due to inadequate demand in the Grid.

6.3.3 The Seller may retake the Performance Test by giving at least fifteen (15) days advance notice in writing to the Procurer, up to eight (8) times, during a period of one hundred and eighty (180) days ("Initial Performance Retest Period") from a Unit's COD in order to demonstrate an increased Tested Capacity over and above as provided in Article 6.3.1 (b). Provided however, the Procurer shall have a right to require deferment of any such re-tests for a period not exceeding fifteen (15) days, without incurring any liability for such deferment, if the Procurer are unable to provide evacuation of power to be generated, due to reasons outside the reasonable control of the Procurer or due to inadequate demand in the Grid.

6.3.4 (i) If a Unit's Tested Capacity after the most recent Performance Test mentioned in Article 6.3.3 has been conducted, is less than its Contracted Capacityas existing on the Effective Date, the Unit shall be de-rated with the following consequences in each case with effect from the date of completion of such most recent test:

a) the Unit's Contracted Capacity shall be reduced to its Tested Capacity, as existing at the most recent Performance Test referred to in Article 6.3.3



and Capacity Charges shall be paid with respect to such reduced Contracted Capacity;

b) the Seller shall not be permitted to declare the Available Capacity of the Unit at a level greater than its Tested Capacity;

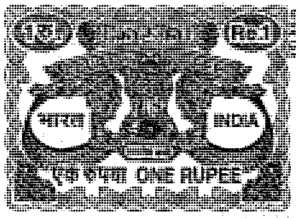
c) the Availability Factor of the derated Unit shall be calculated by reference to the reduced Contracted Capacity; and

d) the Capital Cost and each element of the Capital Structure Schedule shall be reduced in proportion to the reduction in the Contracted Capacity of the Power Station as a result of that derating (taking into account the Contracted Capacity of any Unit which has yet to be Commissioned).

(ii) If at the end of Initial Performance Retest Period or the date of the eighth Performance Test mentioned in Article 6.3.3, whichever is earlier, , the Tested Capacity is less than the Contracted Capacity as existing on the Effective Datethe consequences mentioned in Article 8.2.2 shall apply for a period of one year. Provided that such consequences shall apply with respect to the Tested Capacity existing at the end of Initial Performance Retest Period or the date of the eighth Performance Test mentioned in Article 6.3.3, whichever is earlier

6.3.5 If a Unit's Tested Capacity as at the end of the Initial Performance Retest Period or the date of the eighth Performance Test mentioned in Article 6.3.3, whichever is earlier, is found to be more than it's Contracted Capacity as existing on the Effective Date, the Tested Capacity shall be deemed to be the Unit's Contracted Capacity if the Procurer agrees and intimates the same to the Seller within thirty (30) days of receipt of the results of the last Performance Test to purchase such excess Tested Capacity and also provide to the Seller additional Letter of Credit and Collateral Arrangement for payments in respect of such excess Tested Capacity agreed to be purchased by the Procurer. In case the Procurer decides not to purchase such excess Tested Capacity, the Seller shall be free to sell such excess Tested Capacity to any third party and the Unit's Contracted Capacity shall remain unchanged, notwithstanding that the Tested Capacity exceeded the Contracted Capacity.

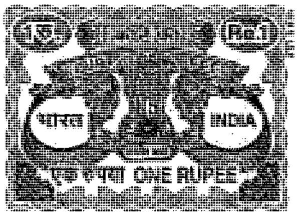
Provided that in all the above events, the Seller shall be liable to obtain/maintain all the necessary consents (including Initial Consents), permits



and approvals including those required under the environmental laws for generation of such excess Tested Capacity.

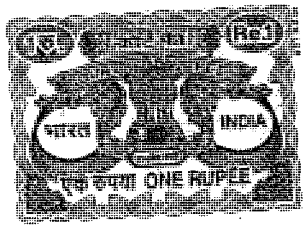
6.4 Costs Incurred

The Seller expressly agrees that all costs incurred by him in synchronising, connecting, Commissioning and / or Testing or Retesting a Unit shall be solely and completely to his account and the Procurer's liability shall not exceed the amount of the Energy Charges payable for such power output, as set out in Schedule 6.



7 ARTICLE 7 : OPERATION AND MAINTENANCE

The Parties shall comply with the provisions of the applicable Law including, in particular, Grid Code as amended form time to time regarding operation and maintenance of the Power Station and all matters incidental thereto. Provided however the Seller shall not schedule the Maintenance Outage of a Unit when another Unit of the project is shut down or expected to be shut down except under Force Majeure or when the operation of Unit is not permissible due to technical considerations.



8 ARTICLE 8: CAPACITY, AVAILABILITY AND DISPATCH

8.1 Repeat Performance Tests

8.1.1 The Procurer may from time to time during the Operating Period, but only if the Available Capacity has not been one hundred per cent (100%) of the Contracted Capacity of the commissioned units (excluding the unit(s) under planned outage for capital maintenance in consultation with the Regional Power Committee, if any) even for one continuous period of at least three (3) hours during any three continuous months, require the Seller to demonstrate a Unit's or (if all the Units have been Commissioned, the Power Station's) Tested Capacity by carrying out a further Performance Test (a **"Repeat Performance Test"**) in accordance with this Article 8.1. A Repeat Performance Test shall be carried out in accordance with Schedule 4, save that the test shall last twenty-four (24) hours instead of seventy two (72) hours. Provided that if the Tested Capacity after such test is less than one hundred percent (100%) of the Contracted Capacity as existing on the Effective Date of the Commissioned Units, the Seller shall also have a right to conduct not more than two (2) Repeat Performance Test within a period six (6) months, by giving a notice of not less than fifteen (15) days to the Procurer for each such test. Provided that the Procurer shall have a right to require deferment of each such re-tests for a period not exceeding five (5) days, without incurring any liability for such deferment, if the Procurer are unable to provide evacuation of power to be generated, due to reasons outside the reasonable control of the Procurer or due to inadequate demand in the Grid.

8.1.2 The Procurer shall give the Seller not less than seven (7) days' advance written notice of the time when a Repeat Performance Test of a Unit (or if all the Units have been Commissioned, of the Power Station's) is to begin. A Repeat Performance Test may not be scheduled for any period when the Unit to be tested is due to undergo a Scheduled Outage.

8.1.3 The Procurer and Seller shall jointly appoint the Independent Engineer to monitor the Repeat Performance Test and to certify the results in accordance with Article 8.2.

8.1.4 If the Seller wishes to take any Unit, out of service for repair before a Repeat Performance Test, it shall inform the Procurer in writing before its scheduled start of the repairs and the estimated time required to complete the repairs. The Parties shall then schedule a Maintenance Outage in accordance with the Grid

Code to enable the Seller to carry out those repairs and in such a case, the Procurer, , shall defer the Repeat Performance Test until such Unit is returned to service following that Maintenance Outage. Provided however the Seller shall not schedule the Maintenance Outage of a Unit when another Unit of the project is shut down or expected to be shut down except under Force Majeure or when the operation of Unit is not permissible due to technical considerations.

8.1.5 The Procurer, may for reasonable cause, defer any Repeat Performance Test for up to fifteen (15) days from the date originally notified to the Seller in accordance with Article 8.1.2 if the Procurer notifies the Seller in writing at least one (1) day before the Repeat Performance Test starts, the reason for the deferral and when the test is to be rescheduled.

Provided that, such deferment shall be permitted only once in respect of each of the Repeat Performance Tests.

8.1.6 The Seller, the Procurer and the Independent Engineer individually shall have the right to designate qualified and authorised representatives (but not more than three each) to monitor the Repeat Performance Test.

8.1.7 Testing and measurement procedures applied during the Repeat Performance Test shall be in accordance with the codes, practices of procedures as generally/normally applied for the Performance Tests.

8.1.8 Within five (5) days of a Repeat Performance Test, the Seller shall provide the Procurer and the Independent Engineer with copies of the detailed test results.

8.1.9 Within one (1) Month of the date by which all the Units have been Commissioned, the Seller shall conduct a Performance Test of the Power Station (hereinafter referred to as "Power Station Performance Test") whereafter the provisions of Article 8.2 shall apply. A Power Station Performance Test shall be carried out in accordance with Article 1.1 of Schedule 4, save that the test shall last twenty-four (24) hours instead of seventy two (72) hours.

8.2 Derating

8.2.1 A Repeat Performance Test shall be concluded when the Procurer receives the Final Test Certificate of the Independent Engineer stating that the Repeat Performance Test has been carried out satisfactorily in accordance with Schedule 4 and certified the Unit's (or if all the Units have been commissioned), the Power Station's) then current Tested Capacity as demonstrated by the results of the Repeat Performance Test.

8.2.2 (i) If a Unit's (or if all the Units have been Commissioned, of the Power Station's) then current Tested Capacity as established by the Repeat Performance Test and the Final Test Certificate issued by the Independent Engineer, is less than its Contracted Capacity as existing on the Effective Date, the Seller shall not be permitted to declare the Available Capacity of the Unit (or if all the Units have been Commissioned, of the Power Station's) at a level greater than its Tested Capacity, in which case:

a) the Unit's (or if all the Units have been Commissioned, of the Power Station's) Contracted Capacity shall be reduced to its most recent Tested Capacity and Capacity Charges shall be paid with respect to such reduced Contracted Capacity.

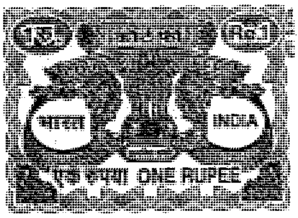
b) the Availability Factor of the derated Unit (or if all the Units have been Commissioned, of the Power Station's) shall be calculated by reference to the reduced Contracted Capacity, and:

c) the Capital Cost and each element of the Capital Structure Schedule shall be reduced in proportion to the reduction in the Contracted Capacity of the Power Station as a result of that derating (taking into account the Contracted Capacity of any Unit which has yet to be Commissioned);

(ii) The consequences mentioned in sub-Article (i) above shall apply from the completion date of each Repeat Performance Test.. If at the end of second Repeat Performance Test conducted by the Seller or the last date of the end of the six month period referred to in Article 8.1.1, whichever is earlier, the Tested Capacity is less than the Contracted Capacity as existing on the Effective Date the consequences mentioned in Article 8.2.2 shall apply for a period of at least one year after which the Seller shall have the right to undertake a Repeat Performance Test. Provided that such consequences shall apply with respect to the Tested Capacity existing at the end of second Repeat Performance Test conducted by the Seller or the last date of the end of the six month period referred to in Article 8.1.1, whichever is earlier

8.2.3 If the Independent Engineer certifies that it is unable to give a Final Test Certificate because events or circumstances beyond the Seller's reasonable control have prevented the Repeat Performance Test from being carried out in accordance with Schedule 4, the Procurer shall reschedule a Repeat Performance Test as soon as reasonably practicable.

8.2.4 If a Unit's or if all the Units have been Commissioned, of the Power Station's~~,~~ Tested Capacity is found to be more than it's Contracted Capacity, the provisions of Article 6.3.5 shall apply mutatis mutandis.

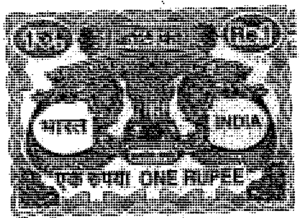


8.3 Availability

The Seller shall comply with the provisions of the applicable Law regarding Availability including, in particular, to the provisions of the ABT and Grid Code relating to intimation of Availability and the matters incidental thereto.

8.4 Dispatch

The Seller shall comply with the provisions of the applicable Law regarding Dispatch Instructions, in particular, to the provisions of the ABT and Grid Code relating to Dispatch and the matters incidental thereto.



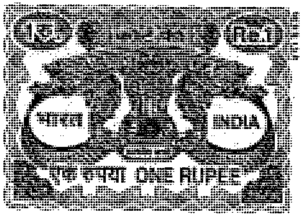
9 ARTICLE 9: METERING AND ENERGY ACCOUNTING

9.1 *Meters*

For installation of Meters, Meter testing, Meter calibration and Meter reading and all matters incidental thereto, the Seller and the Procurer shall follow and be bound by the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, the Grid Code and ABT as amended and revised from time to time. In addition, the Seller shall also allow and facilitate /STU in installation of one set of required main and standby special energy meters for accurate recording of energy supplied by Seller. For these /STU meters (110V, 1A, 4-wire), the Seller shall provide the required connection from EHV current transformers/ bushing CTs/ voltage transformers/ CVTs on EHV side of all generator-transformers, station transformers and outgoing lines, of meter accuracy of 0.2 class or better. The Seller may install any further meters for its own comfort at its own cost.

9.2 *RLDC / SLDC Charges*

All scheduling and RLDC / SLDC charges applicable shall be borne by the Procurer.



10 ARTICLE 10: INSURANCES

10.1 Insurance

The Seller shall effect and maintain or cause to be effected and maintained during the Construction Period and Operating Period , Insurances against such risks, with such deductibles and with such endorsements and co-insured(s), which the Prudent Utility Practices would ordinarily merit maintenance of and as required under the Financing Agreements.

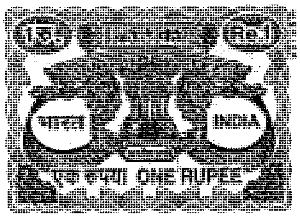
10.2 Application of Insurance Proceeds

Save as expressly provided in this Agreement or the Insurances, the proceeds of any insurance claim made due to loss or damage to the Project or any part of the Project shall be first applied to reinstatement, replacement or renewal of such loss or damage.

If a Natural Force Majeure Event renders the Project no longer economically and technically viable and the insurers under the Insurances make payment on a "total loss" or equivalent basis, the Procurer shall have no claim on such proceeds of such Insurance

10.3 Effect on liability of the Procurer

Notwithstanding any liability or obligation that may arise under this Agreement, any loss, damage, liability, payment, obligation or expense which is insured or for which the Seller can claim compensation, under any Insurance shall not be charged to or payable by the Procurer.



11 ARTICLE 11 : BILLING AND PAYMENT

11.1 General

From the COD of the first Unit, the Procurer shall pay the Seller the Monthly Tariff Payment, on or before the Due Date, , determined in accordance with this Article 11 and Schedule 6. All Tariff payments by the Procurer shall be in Indian Rupees.

The Procurer shall pay the seller for any Electrical Output from the Seller prior to the Commercial Operation Date ("**Infirm Power**") of a Unit the Energy Charges for Infirm Power generated by such Unit. The quantum of Infirm Power generated by Units synchronized but not have been put on COD shall be computed from the energy accounting and audit meters installed at the Power Station as per Central Electricity Authority (installation and operation of meters) Regulations 2006 as amended from time to time.

11.2 Delivery and content of Monthly Bills

11.2.1 The Seller shall issue to the Procurer a signed Monthly Bill for the immediately preceding Month.

Provided that:

i. if the COD of the first Unit falls during the period between the first (1st) day and up to and including the fifteenth (15th) day of a Month, the first Monthly Bill shall be issued for the period until the last day of such Month, or

ii. if the COD of the first Unit falls after the fifteenth (15th) day of a Month, the first Monthly Bill shall be issued for the period commencing from the COD of the first Unit until the last day of the immediately following Month.

Provided further that if a Monthly Bill is received on or before the second (2nd) day of a Month, it shall be deemed to have been received on the second (2nd) Business Day of such Month.

11.2.2 Each Monthly Bill and Provisional Bill shall include:

i. Availability and energy account for the relevant Month as per REA for

Monthly Bill and RLDC's daily energy account for Provisional Bill;

ii. the Seller's computation of the components of the Monthly Tariff Payment in accordance with Schedule 6 and

iii. supporting data, documents and calculations in accordance with this Agreement.

11.3 Payment of Monthly Bills

11.3.1 The Procurer shall pay the amount payable under Monthly Bill on the Due Date to such account of the Seller, as shall have been previously notified by the Seller to the Procurer in accordance with Article 11.3.3 below.

All payments made by the Procurer shall be appropriated by the Seller in the following order of priority:

1. towards Late Payment Surcharge, payable by the Procurer, if any;
2. towards earlier unpaid Monthly Bill, if any; and
3. towards the then current Monthly Bill.

11.3.2 All payments required to be made under this Agreement shall only include any deduction or set off for:

i. deductions required by the Law; and

ii. amounts claimed by the Procurer from the Seller, through an invoice duly acknowledged by the Seller, to be payable by the Seller, and not disputed by the Seller within thirty (30) days of receipt of the said invoice and such deduction or set-off shall be made to the extent of the amounts not disputed. It is clarified that the Procurer shall be entitled to claim any set off or deduction under this Article, after expiry of the said 30 day period.

Provided further, the maximum amounts that can be deducted or set-off by the Procurer under this Article in a Contract Year shall not exceed Rupees 13.5 crores only, except on account of payments under sub Article (i) above.

11.3.3 The Seller shall open a bank account at Patiala (the "Designated Account") for all Tariff Payments to be made by the Procurer to the Seller, and notify the Procurer of the details of such account at least ninety (90) days before the dispatch of the first Monthly Bill to the Procurer. The Procurer shall instruct its bankers to make all payments under this Agreement to the Designated Account and shall notify the Seller of such instructions on the same day. The Procurer shall also designate a bank account at Patiala for payments to be made by the Seller (including Supplementary Bills) to the Procurer and notify the Seller of the details of such account ninety (90) days before the COD of the first Unit.

11.3.4 In the event of delay in payment of a Monthly Bill by the Procurer beyond its Due Date month billing, a Late Payment Surcharge shall be payable by the Procurer to the Seller at the rate of two (2) percent in excess of the applicable SBAR per annum, on the amount of outstanding payment, calculated on a day to day basis (and compounded with Monthly rest), for each day of the delay.

11.3.5 For payment of any Bill before Due Date, the following rebate shall be paid by the Seller to the Procurer in the following manner.

a) Provisional Bill will be raised by the Seller on the last Business day of the Month where the Capacity Charges shall be based on the Declared Capacity for the full Month and the Energy Charges shall be based on the final implemented Scheduled Energy upto 25th day of the Month. Rebate shall be payable at the rate of two point two five percent (2.25%) of the amount (which shall be the full amount due under the Provisional Bill) credited to Seller's account on first day of the Month and rebate amount shall reduce at the rate of zero point zero five percent (0.05%) for each day, upto fifth (5th) day of the Month.

b) Applicable rate of rebate at (a) above shall be based on the date on which payment has been actually credited to the Seller's account. Any delay in transfer of money to the Seller's account, on account of public holiday, bank holiday or any other reasons shall be to the account of the Procurers.

c) Two percent (2%) rebate for credit to Sellers account made within one (1) Day of the presentation of Monthly Bill for the Month for which the Provisional Bill was raised earlier.

d) For credit to Seller's account made on other days the rebate on Monthly Bill shall be as under:

Number of days before Due Date of Monthly Bill	Rates of Rebate applicable
29	Two percent (2.00%)
Each day thereafter upto the Due Date	2% less [0.033% x {29 less number of days before Due Date when the payment is made by the Procurers}]

e) Rebate of two point two five percent (2.25%) to two point zero five percent (2.05%) will be available only if the Procurer credits one hundred percent (100%) of the Provisional Bill within first five (5) days of the Month to Seller's account/designated account and balance amount, if any, based on Monthly Bill (as per REA) within the Month.

f) In the event only part amount of Provisional Bill is credited to Seller's account, within first five (5) days and the balance amount is credited to Sellers account during other days of the Month, rebate will be paid on such part amount, at the rate of two percent (2%) plus zero point zero three three percent (0.033%) per day for the number of days earlier than the 6th day when such part amount is credited to Sellers' account;

g) The above rebate will be allowed only if the Procurer credits to Seller's account the full Monthly Bill.

h) No rebate shall be payable on the bills raised on account of Change in Law relating to taxes, duties and cess;

i) If the Provisional Bill has not been paid by the date of receipt of the Monthly Bill then such Provisional Bill shall not be payable, provided in case the Provisional Bill has already been paid, then only the difference between the Monthly Bill and Provisional Bill shall be payable.

11.4 Payment Mechanism

11.4.1 ***Letter of Credit:***

The Procurer shall provide to the Seller, in respect of payment of its Monthly Bills, a monthly unconditional, revolving and irrevocable letter of credit ("**Letter of Credit**"), opened and maintained by the Procurer, which may be drawn upon by the Seller in accordance with Articles 11.4.1.1 through 11.4.1.5. . The Letter of Credit shall be provided from the bank which is appointed as Default Escrow Agent under the Default Escrow Agreement.

11.4.1.1 Not later than one (1) Month prior to the the Scheduled COD `of the first Unit, the Procurer shall through a scheduled bank at Patiala open a Letter of Credit in favour of the Seller, to be made operative from a date prior to the Due Date of its first Monthly Bill under this Agreement. The Letter of Credit shall have a term of twelve (12) Months and shall be renewed annually, for an amount equal to:

i) for the first Contract Year, equal to one point one (1.1) times the estimated average monthly billing based on Normative Availability;

ii) for each subsequent Contract Year, equal to the one point one (1.1) times the average of the Monthly Tariff Payments of the previous Contract Year plus the estimated monthly billing during the current year from any additional Unit(s) expected to be put on COD during the current Contract Year based on Normative Availability.

Provided that the Seller shall not draw upon such Letter of Credit prior to the Due Date of the relevant Monthly Bill, and shall not make more than one drawal in a Month.

Provided further that if at any time, such Letter of Credit amount falls short of the amount specified in Article 11.4.1.1 or 11.4.1.8 otherwise than by reason of drawal of such Letter of Credit by the Seller, the Procurer shall restore such shortfall within seven (7) days.

11.4.1.2 The Procurer shall cause the scheduled bank issuing the Letter of Credit to intimate the Seller, in writing regarding establishing of such irrevocable Letter of Credit.

11.4.1.3 In case of drawal of the Letter of Credit by the Seller in accordance with the terms of this Article 11.4.1, the amount of the Letter of credit shall be reinstated in the manner stated in Article 11.4.2.3 of this Agreement.

11.4.1.4 If the Procurer fails to pay a Monthly Bill or part thereof within and including the Due Date, then, subject to Article 11.6.7, the Seller may draw upon the Letter of Credit, and accordingly the bank shall pay without any reference or instructions from the Procurer, an amount equal to such Monthly Bill or part thereof plus Late Payment Surcharge, if applicable, in accordance with Article 11.3.4 above, by presenting to the scheduled bank issuing the Letter of Credit, the following documents:

i) a copy of the Monthly Bill which has remained unpaid by the Procurer;
ii) a certificate from the Seller to the effect that the bill at item (i) above, or specified part thereof, is in accordance with the Agreement and has remained unpaid beyond the Due Date; and

iii) calculations of applicable Late Payment Surcharge, if any.

For the avoidance of doubt it is clarified that the Seller shall not be entitled to drawdown on the Letter of Credit for any failure of the Procurer to pay a Supplementary Bill.

11.4.1.5 The Procurer shall ensure that the Letter of Credit shall be renewed not later than forty five (45) days prior to its expiry.

11.4.1.6 All costs relating to opening and maintenance of the Letter of Credit shall be borne by the Procurer, however, Letter of Credit negotiation charges shall be borne and paid by the Seller.

11.4.1.7 Where necessary, the Letter of Credit may also be substituted by an unconditional and irrevocable bank guarantee or an equivalent instrument as mutually agreed by the Procurer and the Seller.

11.4.1.8 Upon fulfilment of the conditions mentioned under Article 11.4.2.2 the Letter of Credit amount as mentioned in Article 11.4.1.1 shall be changed to one (1) time the average of the Monthly Tariff Payments of the previous Contract Year instead of one point one (1.1) times the average of the Monthly Tariff Payments of the previous Contract Year.

11.4.2 **Collateral Arrangement**

11.4.2.1 As further support for the Procurer's obligations, on or prior to the Effective Date, the Procurer and the Seller shall execute Default Escrow Agreement (referred as "Default Escrow Agreement") for the establishment and operation of the Default Escrow Account in favour of the Seller, through which the revenues of the Procurer shall be routed and used as per the terms of the Default Escrow Agreement. The Procurer and the Seller shall contemporaneously with the execution of the Default Escrow Agreement enter into a separate Agreement to Hypothecate Cum Deed of Hypothecation, whereby the Procurer shall agree to hypothecate,to the Seller, effective from forty five (45) days prior to the Scheduled COD the amounts to the extent as required for the Letter of Credit as per Article 11.4.1.1 routed through the Default Escrow Account and the Receivables in accordance with the terms of the Agreement to Hypothecate Cum Deed of Hypothecation. The Default Escrow Agreements and the Agreement to Hypothecate Cum Deed of Hypothecation are collectively referred to as the "Collateral Arrangement". The minimum revenue flow in any Month in the Default Escrow Account shall be at least equal to the amount required for the Letter of Credit as per Article 11.4.1.1.

Provided that the Procurer shall ensure that the Seller has first ranking charge on the revenues routed through the Default Escrow Account and the 'Receivables' in accordance with the terms of the Agreement to Hypothecate Cum Deed of Hypothecation. However, such first ranking charge shall be on the amounts, in excess of amounts, which have already been charged or agreed to be charged prior to the date of the execution of the Default Escrow Agreement.

11.4.2.2 On the occurrence of all of the following events in respect of the Procurer:

(i) A period of not less than two (2) years from COD of Power Station, has elapsed; and

(ii) The Procurer has achieved, for its ability to honour its Tariff Payment obligations to the Seller under this Agreement, a credit rating of 'A' or better, from a SEBI registered Indian credit rating agency mutually agreed between Seller and the Lender/s, consistently for a period of at least three (3) years; and

(iii) Immediately prior to the three (3) year period mentioned in sub-clause (ii) above,, for a period of at least two (2) years there has been no Procurer Event of Default under Article 14 of the PPA, by the Procurer,

the Procurer shall intimate the Seller in writing of the occurrence of the same and its intention to discontinue the Collateral Arrangement. If the Seller desires to continue with the Collateral Arrangement, it shall intimate the same to the Procurer in writing within thirty (30) days of receipt of intimation from the Procurer and in such case the Seller shall be liable to bear the costs of continuation of the Collateral Arrangement with effect from such date. In case the Seller fails to respond or agrees to discontinue, the Collateral Arrangement shall forthwith cease and the Default Escrow Agreement and the routed through the Default Escrow Account and the 'Receivables' in accordance with the terms of the Agreement to Hypothecate Cum Deed of Hypothecation shall stand terminated as per terms thereof.

Provided that in case of any of conditions mentioned under (i), (ii) or (iii) in Article 11.4.2.2 ceases to be true, then within 90 days of the occurrence of such event, the Procurer shall reinstate the Collateral Arrangement, at its own cost.

11.4.2.3 If the Letter of Credit is insufficient to pay for the due payments to the Seller or is not replenished for the drawals made, then within a period of seven (7) days from the date such shortfall in the Letter of Credit occurs, the Letter of Credit shall be reinstated to the requisite amount specified in this Agreement, and in the manner specified in the Default Escrow Agreement.

11.5 Third Party Sales on default

11.5.1 Notwithstanding anything to the contrary contained in this Agreement, upon the occurrence of an event where the Procurer has not made payment by the Due Date of an Invoice through the payment mechanism provided in this Agreement, the Seller shall follow the steps as enumerated in Articles 11.5.2 and 11.5.3.

11.5.2 On the occurrence of the event mentioned in Article 11.5.1 and after giving a notice of at least seven (7) days to the Procurer,-the Seller shall have the right to offer twenty five (25) per cent of the Contracted Capacity ("Default Electricity") to third parties.

11.5.3 On the occurrence of the event mentioned in Article 11.5.1 and after giving a notice of at least seven (7) days to the Procurer,-the Seller shall have the right (but not the obligation) to make available and sell the Default Electricity or a part thereof to a third party, namely:

(a) any consumer, subject to applicable Law; or

(b) any licensee under the Electricity Act, 2003;

11.5.4 If the Collateral Arrangement is not fully restored by the Procurer within thirty (30) days of the non-payment of a Invoice by its Due Date,the provisions of Article 11.5.2 and Article 11.5.3 shall apply with respect to one hundred (100) per cent of the Contracted Capacity. Provided that in case the events mentioned in Article 11.4.2.2 (i), (ii) and (iii) are true, then this Article 11.5.4 shall be applicable as per Article 11.4.2.2.

11.5.5 Provided that, in the case of Article 11.5.3 or 11.5.4, the Seller shall ensure that sale of power to the shareholders of the Seller or any direct or indirect affiliate of the Seller/shareholders of the Seller, is not at a price less than the Energy Charges.

11.5.6 In case of third party sales as permitted by this Article 11.5, the adjustment of the surplus revenue over Energy Charge attributable to such electricity sold, shall be adjusted as under :

(a) the surplus upto the Tariff shall be used towards the extinguishment of the subsisting payment liability of the Procurer towards the Seller; and
(b) the surplus if any above the Tariff shall be retained by the Seller.

The liability of the Procurer towards making Capacity Charge payments to the Seller even for electricity sold to third parties or remaining unsold during such periods will remain unaffected. Provided such Capacity Charge payment liability shall cease on the date which occurs on the Expiry of a period of three (3) years and hundred (100) days from the date of occurrence of the Procurer Event of Default under Article 14.2 (i), provided if prior to such date, the Procurer Event of Default has not ceased and regular supply of electricity for a period of at least ninety (90) continuous days has not occurred.

11.5.7 Sales to any person or Party, under Article 11.5, shall cease and regular supply of electricity to the Procurer in accordance with all the provisions of this Agreement shall commence and be restored on the later of the two following dates or any date before this date at the option of Seller:

(a) the day on which the Procurer pays the amount due to the Seller and renews the Letter of Credit and restores Default Escrow Account (if applicable) as mentioned in Article 11.4.2.1 ; or

(b) the date being "x" days from the date on which the defaulting Procurer pays the amount due to the Seller, where "x" days shall be calculated in accordance with Schedule 12.

11.6 ***Disputed Bill***

11.6.1 If a Party does not dispute a Monthly Bill, Provisional Bill or a Supplementary Bill raised by the other Party within thirty (30) days of receiving it, such bill shall be taken as conclusive.

11.6.2 If a Party disputes the amount payable under a Monthly Bill, Provisional Bill or a Supplementary Bill, as the case may be, that Party shall, within thirty (30) days of receiving such bill, issue a notice (the "Bill Dispute Notice") to the invoicing Party setting out:

i) the details of the disputed amount;
ii) its estimate of what the correct amount should be; and
iii) all written material in support of its claim.

11.6.3 If the invoicing Party agrees to the claim raised in the Bill Dispute Notice issued pursuant to Article 11.6.2, the invoicing Party shall revise such bill within seven (7) days of receiving such notice and if the disputing Party has already made the excess payment , refund to the disputing Party such excess amount within fifteen (15) days of receiving such notice. In such a case excess amount shall be refunded along with interest at the same rate as Late Payment Surcharge which shall be applied from the date on which such excess payment was made to the invoicing Party and upto and including the date on which such payment has been received.

11.6.4 If the invoicing Party does not agree to the claim raised in the Bill Dispute Notice issued pursuant to Article 11.6.2, it shall, within fifteen (15) days of receiving the Bill Dispute Notice, furnish a notice to the disputing Party providing:

i) reasons for its disagreement;
ii) its estimate of what the correct amount should be; and
iii) all written material in support of its counter-claim.

11.6.5 Upon receipt of notice of disagreement to the Bill Dispute Notice under Article 11.6.4, authorised representative(s) or a director of the board of directors/member of board of each Party shall meet and make best endeavours to amicably resolve such dispute within fifteen (15) days of receiving such notice of disagreement to the Bill Dispute Notice.

11.6.6 If the Parties do not amicably resolve the Dispute within fifteen (15) days of receipt of notice of disagreement to the Bill Dispute Notice pursuant to Article 11.6.4, the matter shall be referred to Dispute Resolution in accordance with Article 17.

11.6.7 In case of Disputed Bills, it shall be open to the aggrieved party to approach the Appropriate Commission for Dispute Resolution in accordance with Article 17 and also for interim orders protecting its interest including for orders for interim payment pending Dispute Resolution and the Parties shall be bound by the decision of the Appropriate Commission, including in regard to interest or Late Payment Surcharge, if any directed to be paid by the Appropriate Commission.

11.6.8 If a Dispute regarding a Monthly Bill, Provisional Bill or a Supplementary Bill is settled pursuant to Article 11.6 or by Dispute resolution mechanism provided in this Agreement in favour of the Party that issues a Bill Dispute Notice, the other Party shall refund the amount, if any incorrectly charged and collected from the disputing Party or pay as required, within five (5) days of the Dispute either being amicably resolved by the Parties pursuant to Article 11.6.5 or settled by Dispute resolution mechanism along with interest at the same rate as Late Payment Surcharge from the date on which such payment had been made to the invoicing Party or the date on which such payment was originally due, as may be applicable.

11.6.9 For the avoidance of doubt, it is clarified that despite a Dispute regarding an Invoice, the Procurer shall, without prejudice to its right to Dispute, be under an obligation to make payment, of the lower of (a) an amount equal to simple average of last three (3) Months invoices (being the undisputed portion of such three Months invoices) and (b) Monthly Invoice which is being disputed, provided such Monthly Bill has been raised based on the REA and in accordance with this Agreement.

11.7 Quarterly and Annual Reconciliation

Both Parties acknowledge that all payments made against Monthly Bills, Provisional Bill and Supplementary Bills shall be subject to quarterly reconciliation at the beginning of the following quarter of each Contract Year and annual reconciliation at the end of each Contract Year to take into account REA, Tariff Adjustment Payments, Tariff Rebate Payments, Late Payment Surcharge, or any other reasonable circumstance provided under this Agreement. The Parties, therefore, agree that as soon as all such data in respect of any quarter of a Contract Year or a full Contract Year as the case may be has been finally verified and adjusted, the Seller and the Procurer shall jointly sign such reconciliation statement. Within fifteen (15) days of signing of a reconciliation statement, the Seller or the Procurer, as the case may be, shall raise a Supplementary Bill for the Tariff Adjustment Payments for the relevant quarter/ Contract Year and shall make payment of such Supplementary Bill for the Tariff Adjustment Payments for the relevant quarter/Contract Year. Late Payment Surcharge shall be payable in such a case from the date on which such payment had been made to the invoicing Party or the date on which any payment was originally due, as may be applicable. Any dispute with regard to the above reconciliation shall be dealt with in accordance with the provisions of Article 17.

11.8 Payment of Supplementary Bill

11.8.1 Either Party may raise a bill on the other Party ("Supplementary Bill") for payment on account of:

i) Adjustments required by the Regional Energy Account (if applicable);
ii) Tariff Payment for change in parameters, pursuant to provisions in Schedule 6; or
iii) Change in Law as provided in Article 13,

and such Bill shall be paid by the other Party.

11.8.2 The Procurer shall remit all amounts due under a Supplementary Bill raised by the Seller to the Seller's Designated Account by the Due Date and notify the Seller of such remittance on the same day. Similarly, the Seller shall pay all amounts due under a Supplementary Bill raised by the Procurer by the Due

Date to the Procurer's designated bank account and notify the Procurer of such payment on the same day. For such payments by the Procurer, rebates as applicable to Monthly Bills pursuant to Article 11.3.5 shall equally apply.

11.8.3 In the event of delay in payment of a Supplementary Bill by either Party beyond its Due Date, a Late Payment Surcharge shall be payable at the same terms applicable to the Monthly Bill in Article 11.3.4.

11.9 Payment for Start up Power

The Seller shall be liable to pay, for the power and energy consumed for start-up of the Project and commissioning, to the Procurer at the then prevalent rates payable by such industrial consumers.

11.10 The copies of all notices/offers which are required to be sent as per the provisions of this Article 11, shall be sent by either Party, simultaneously to both Parties.

12 ARTICLE 12 : FORCE MAJEURE

12.1 Definitions

In this Article 12, the following terms shall have the following meanings:

12.2 Affected Party

An affected Party means the Procurer or the Seller whose performance has been affected by an event of Force Majeure.

An event of Force Majeure affecting the CTU/STU or any other agent of the Procurer, which has affected the Interconnection Facilities, shall be deemed to be an event of Force Majeure affecting the Procurer.

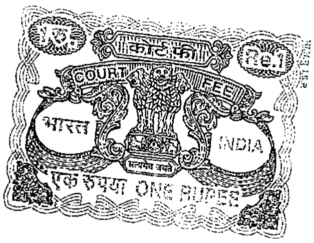
Any event of Force Majeure affecting the performance of the Seller's contractors, shall be deemed to be an event of Force Majeure affecting Seller only if the Force Majeure event is affecting and resulting in:

a. late delivery of plant, machinery, equipment, materials, spare parts, Fuel, water or consumables for the Project; or
b. a delay in the performance of any of the Seller's contractors.

Similarly, any event of Force Majeure affecting the performance of the Procurer's contractor for the setting up or operating Interconnection Facilities shall be deemed to be an event of Force Majeure affecting Procurer only if the Force Majeure event is resulting in a delay in the Performance of Procurer's contractors.

12.3 Force Majeure

A 'Force Majeure' means any event or circumstance or combination of events and circumstances including those stated below that wholly or partly prevents or unavoidably delays an Affected Party in the performance of its obligations under this Agreement, but only if and to the extent that such events or circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided if the Affected Party had taken reasonable care or complied with Prudent Utility Practices:



i. Natural Force Majeure Events:

act of God, including, but not limited to lightning, drought, fire and explosion (to the extent originating from a source external to the Site), earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, or exceptionally adverse weather conditions which are in excess of the statistical measures for the last hundred (100) years,

ii. Non-Natural Force Majeure Events:

1. Direct Non - Natural Force Majeure Events

a) Nationalization or compulsory acquisition by any Indian Governmental Instrumentality of any material assets or rights of the Seller or the Seller's contractors; or

b) the unlawful, unreasonable or discriminatory revocation of, or refusal to renew, any Consent required by the Seller or any of the Seller's contractors to perform their obligations under the Project Documents or any unlawful, unreasonable or discriminatory refusal to grant any other consent required for the development/ operation of the Project. Provided that an appropriate court of law declares the revocation or refusal to be unlawful, unreasonable and discriminatory and strikes the same down.

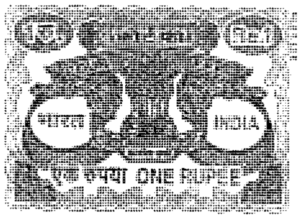
c) any other unlawful, unreasonable or discriminatory action on the part of an Indian Government Instrumentality which is directed against the Project. Provided that an appropriate court of law declares the revocation or refusal to be unlawful, unreasonable and discriminatory and strikes the same down.

2. Indirect Non - Natural Force Majeure Events

a) any act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo;, revolution, riot, insurrection, terrorist or military action; or

b) Radio active contamination or ionising radiation originating from a source in India or resulting from another Indirect Non Natural Force Majeure Event excluding circumstances where the source or cause of contamination or radiation is brought or has been brought into or near the site by the Affected Party or those employed or engaged by the Affected Party.

c) Industry wide strikes and labor disturbances having a nationwide impact in India.



12.4 Force Majeure Exclusions

Force Majeure shall not include (i) any event or circumstance which is within the reasonable control of the Parties and (ii) the following conditions, except to the extent that they are consequences of an event of Force Majeure:

a. Unavailability, late delivery, or changes in cost of the plant, machinery, equipment, materials, spare parts, Fuel or consumables for the Project;

b. Delay in the performance of any contractor, sub-contractors or their agents excluding the conditions as mentioned in Article 12.2;

c. Non-performance resulting from normal wear and tear typically experienced in power generation materials and equipment;

d. Strikes or labour disturbance at the facilities of the Affected Party;

e. Insufficiency of finances or funds or the agreement becoming onerous to perform; and

f. Non-performance caused by, or connected with, the Affected Party's:

    i) Negligent or intentional acts, errors or omissions;

    ii) Failure to comply with an Indian Law; or

    iii) Breach of, or default under this Agreement or any Project Documents.

12.5 Notification of Force Majeure Event

The Affected Party shall give notice to the other Party of any event of Force Majeure as soon as reasonably practicable, but not later than seven (7) days after the date on which such Party knew or should reasonably have known of the commencement of the event of Force Majeure. If an event of Force Majeure results in a breakdown of communications rendering it unreasonable to give notice within the applicable time limit specified herein, then the Party claiming Force Majeure shall give such notice as soon as reasonably practicable after reinstatement of communications, but not later than one (1) day after such reinstatement. Provided that such notice shall be a pre-condition to the Seller's entitlement to claim relief under this Agreement. Such notice shall include full particulars of the event of Force Majeure, its effects on the Party claiming relief and the remedial measures proposed. The Affected Party shall give the other Party regular (and not less than monthly) reports on the progress of those remedial measures and such other information as the other Party may reasonably request about the situation.

The Affected Party shall give notice to the other Party of (i) the cessation of the relevant event of Force Majeure; and (ii) the cessation of the effects of such event of Force Majeure on the performance of its rights or obligations under this Agreement, as soon as practicable after becoming aware of each of these cessations.

12.6 Duty to perform and duty to mitigate

To the extent not prevented by a Force Majeure event pursuant to Article 12.3, the Affected Party shall continue to perform its obligations pursuant to this Agreement. The Affected Party shall use its reasonable efforts to mitigate the effect of any event of Force Majeure as soon as practicable.

12.7 Available Relief for a Force Majeure Event

Subject to this Article 12:

(a) no Party shall be in breach of its obligations pursuant to this Agreement to the extent that the performance of its obligations was prevented, hindered or delayed due to a Force Majeure Event;

(b) both the Parties shall be entitled to claim relief in relation to a Force Majeure Event in regard to its obligations, including but not limited to those specified under Article 4.5.

(c) For the avoidance of doubt, it is clarified that no Tariff shall be paid by the Procurer for the part of Contracted Capacity affected by a Natural Force Majeure Event affecting the Seller, for the duration of such Natural Force Majeure Event. For the balance part of the Contracted Capacity, the Procurer shall pay the Tariff to the Seller, provided during such period of Natural Force Majeure Event, the balance part of the Power Station is declared to be Available for scheduling and dispatch as per ABT for supply of power by the Seller to the Procurer.

(d) If the average Availability of the Power Station is reduced below sixty (60) percent for over two (2) consecutive months or for any non consecutive period of four (4) months both within any continuous period of sixty (60) months, as a result of an Indirect Non Natural Force Majeure, then, with effect from the end of that period and for so long as the daily average Availability of the Power Station continues to be reduced below sixty (60) percent as a result of an Indirect Non Natural Force Majeure of any kind, the Procurer shall make payments for Debt Service, subject to a maximum of Capacity Charges based on Normative Availability, relatable to such Unit, which are due under the Financing Agreements and these amounts shall be paid from the date, being the later of a) the date of cessation of such Indirect Non Natural Force Majeure Event and b) the completion of sixty (60) days from the receipt of the Financing Agreements by the Procurer from the Seller, in the form of an increase in Capacity Charge. Provided such Capacity Charge increase shall be determined by Appropriate Commissionon the basis of putting the Seller in the same economic position as the Seller would have been in case the Seller had been paid Debt Service in a situation where the Indirect Non Natural Force Majeure had not occurred.

Provided that the Procurer will have the above obligation to make payment for the Debt Service only (a) after the Unit(s) affected by such Indirect Non Natural Force Majeure Event has been Commissioned, and (b) only if in the absence of such Indirect Non Natural Force Majeure Event, the Availability of such Commissioned Unit(s) would have resulted in Capacity Charges equal to Debt Service.

e) If the average Availability of the Power Station is reduced below eighty (80) percent for over two (2) consecutive months or for any non consecutive period of four (4) months both within any continuous period of sixty (60) months, as a result of a Direct Non Natural Force Majeure, then, with effect from the end of that period and for so long as the daily average Availability of the Power Station continues to be reduced below eighty (80) percent as a result of a Direct Non Natural Force Majeure of any kind, the Seller may elect in a written notice to the Procurer, to deem the Availability of the Power Station to be eighty (80) percent from the end of such period, regardless of its actual Available Capacity. In such a case, the Procurer shall be liable to make payment to the Seller of Capacity Charges calculated on such deemed Normative Availability, after the cessation of the effects of Direct Non Natural Direct Force Majeure in the form of an increase in Capacity Charge. Provided such Capacity Charge increase shall be determined by Appropriate Commission on the basis of putting the Seller in the same economic position as the Seller would have been in case the Seller had been paid Capacity Charges in a situation where the Direct Non Natural Force Majeure had not occurred.

(f) For so long as the Seller is claiming relief due to any Non Natural Force Majeure Event (or Natural Force Majeure Event affecting the Procurer under this Agreement, the Procurer may from time to time on one (1) days notice inspect the Project and the Seller shall provide Procurer's personnel with access to the Project to carry out such inspections, subject to the Procurer's personnel complying with all reasonable safety precautions and standards. Provided further the Procurer shall be entitled at all times to request Repeat Performance Test, as per Article 8.1, of the Unit(s) Commissioned earlier and now affected by Direct or Indirect Non Natural Force Majeure Event (or Natural Force Majeure Event affecting the Procurer, where such Testing is possible to be undertaken in spite of the Direct or Indirect Non Natural Force Majeure Event (or Natural Force Majeure Event affecting the Procurer), and the Independent Engineer accepts and issues a Final Test Certificate certifying such Unit(s) being capable of delivering the Contracted Capacity and being Available, had there been no such Direct or Indirect Non Natural Force Majeure Event (or Natural Force Majeure Event affecting the Procurer). In case, the Available Capacity as established by the said Repeat Performance Test (provided that for such Repeat Performance Test, the limitation imposed by Article 8.1.1 shall not apply) and Final Test Certificate issued by the Independent Engineer is less than the Available Capacity corresponding to which the Seller would have been paid Capacity Charges equal to Debt Service in case of Indirect Non Natural Force Majeure Event (or Natural Force Majeure Event affecting the Procurer), then the Procurer shall make pro-rata payment of Debt Service but only with respect to such reduced Availability. For the avoidance of doubt, if Debt Service would have been payable at an Availability of 60% and pursuant to a Repeat Performance Test it is established that the Availability would have been 40%, then the Procurer shall make payment equal to Debt Service multiplied by 40% and divided by 60%. Similarly, the payments in case of Direct Non Natural Force Majeure Event (and Natural Force Majeure Event affecting the Procurer) shall also be adjusted pro-rata for reduction in Available Capacity.

g) In case of a Natural Force Majeure Event affecting the Procurer which adversely affects the performance obligations of the Seller under this Agreement, the provisions of sub-proviso (d) and (f) shall apply.

12.8 Additional Compensation and Procurer's Subrogation

If the Seller is entitled, whether actually or contingently, to be compensated by any person other than the Procurer as a result of the occurrence of a Non Natural Force` Majeure Event (or Natural Force Majeure Event affecting the Procurer) for which it has received compensation from the Procurer pursuant to this Article 12, including without limitation, payments made which payments would not have been made in the absence of Article 4.7.1, the Procurer shall be fully subrogated to the Seller's rights against that person to the extent of the compensation paid by the Procurer to the Seller. Provided that in case the Seller has actually received compensation from the any person other than the Procurer as well as the Procurer as a result of the occurrence of a Non Natural Force` Majeure Event (or Natural Force Majeure Event affecting the Procurer), then the Seller shall forthwith refund the compensation received by it from the Procurer but only to the extent of the compensation received by the Seller from any person other than the Procurer.

13 ARTICLE 13 : CHANGE IN LAW

13.1 Definitions

In this Article 13, the following terms shall have the following meanings:

13.1.1 "Change in Law" means the occurrence of any of the following events

(i) the enactment, bringing into effect, adoption, promulgation, amendment, modification or repeal, of any Law or (ii) a change in interpretation of any Law by a Competent Court of law, tribunal or Indian Governmental Instrumentality provided such Court of law, tribunal or Indian Governmental Instrumentality is final authority under law for such interpretation or (iii) change in any consents, approvals or licenses available or obtained for the Project, otherwise than for default of the Seller, which results in any change in any cost of or revenue from the business of selling electricity by the Seller to the Procurer under the terms of this Agreement,

but shall not include (i) any change in any withholding tax on income or dividends distributed to the shareholders of the Seller, or (ii) change in respect of UI Charges or frequency intervals by an Appropriate Commission.

13.1.2 "Competent Court" means:

The Supreme Court or any High Court, or any tribunal or any similar judicial or quasi-judicial body in India that has jurisdiction to adjudicate upon issues relating to the Project.

13.2 Application and Principles for computing impact of Change in Law

While determining the consequence of Change in Law under this Article 13, the Parties shall have due regard to the principle that the purpose of compensating the Party affected by such Change in Law, is to restore through Monthly Tariff payments, to the extent contemplated in this Article 13, the affected Party to the same economic position as if such Change in Law has not occurred.

a) **Construction Period**

As a result of any Change in Law, the impact of increase/decrease of Capital Cost of the Project in the Tariff shall be as approved by PSERC:

b)Operation Period

As a result of Change in Law, the compensation for any increase/decrease in revenues or cost to the Seller shall be determined and effective from such date, as decided by the Punjab State Electricity Regulatory Commission whose decision shall be final and binding on both the Parties, subject to rights of appeal provided under applicable Law.

Provided that the above mentioned compensation shall be payable only if and for increase/ decrease in revenues or cost to the Seller is in excess of an amount equivalent to 1% of the Letter of Credit in aggregate for a Contract Year.

13.3 Notification of Change in Law

13.3.1 If the Seller is affected by a Change in Law in accordance with Article 13.2 and wishes to claim a Change in Law under this Article, it shall give notice to the Procurer of such Change in Law as soon as reasonably practicable after becoming aware of the same or should reasonably have known of the Change in Law.

13.3.2 Notwithstanding Article 13.3.1, the Seller shall be obliged to serve a notice to the Procurer under this Article 13.3.2 if it is beneficially affected by a Change in Law. Without prejudice to the factor of materiality or other provisions contained in this Agreement, the obligation to inform the Procurer contained herein shall be material. Provided that in case the Seller has not provided such notice, the Procurer shall have the right to issue such notice to the Seller.

13.3.3 Any notice served pursuant to this Article 13.3.2 shall provide, amongst other things, precise details of:

(a) the Change in Law; and

(b) the effects on the Seller of the matters referred to in Article 13.2.

13.4 Tariff Adjustment Payment on account of Change in Law

13.4.1 Subject to Article 13.2, the adjustment in Monthly Tariff Payment shall be effective from:
(i) the date of adoption, promulgation, amendment, re-enactment or repeal of the Law or Change in Law; or
(ii) the date of order/judgment of the Competent Court or tribunal or Indian Governmental Instrumentality, if the Change in Law is on account of a change in interpretation of Law.

13.4.2 The payment for Changes in Law shall be through Supplementary Bill as mentioned in Article 11.8. However, in case of any change in Tariff by reason of Change in Law, as determined in accordance with this Agreement, the Monthly Invoice to be raised by the Seller after such change in Tariff shall appropriately reflect the changed Tariff.

14 ARTICLE 14 : EVENTS OF DEFAULT AND TERMINATION

14.1 Seller Event of Default

The occurrence and continuation of any of the following events, unless any such event occurs as a result of a Force Majeure Event or a breach by the Procurer of their obligations under this Agreement, shall constitute a Seller Event of Default:

i) the failure to Commission any Unit by the date falling twelve (12) Months after its Scheduled Commercial Operation Date, or

ii) after the commencement of construction of the Project, the abandonment by the Seller or the Seller's Construction Contractors of the construction of the Project for a continuous period of two (2) Months and such default is not rectified within thirty (30) days from the receipt of first notice from the Procurer in this regard, or

iii) if at any time following a Unit being Commissioned and during its retest, as per Article 8, such Unit's Tested Capacity is less than ninety two (92) percent of its Contracted Capacity , as existing on the Effective Date, and such Tested Capacity remains below ninety two (92) percent even for a period of three (3) Months thereafter; or

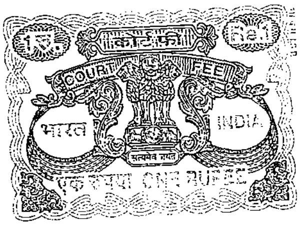
iv) after Commercial Operation Date of all the Units of the Power Station, the Seller fails to achieve Average Availability of sixty five percent (65%), for a period of twelve (12) consecutive Months or within a non-consecutive period of twelve (12) Months within any continuous aggregate period of thirty six (36) Months, or

v) the Seller fails to make any payment (a) of an amount exceeding Rupees One (1) Crore required to be made to the Procurer under this Agreement, within three (3) Months after the Due Date of an undisputed invoice /demand raised by the Procurer on the Seller or (b) of an amount upto Rupees One (1) Crore required to be made to the Procurer under this Agreement within six (6) Months after the Due Date of an undisputed invoice/demand, or

vi) any of the representations and warranties made by the Seller in Schedule 8 of this Agreement; being found to be untrue or inaccurate. Provided however, prior to considering any event specified under this sub-article to be an Event of Default, the Procurer shall give a notice to the Seller in writing of at least thirty (30) days, or

vii) if the Seller:

a) assigns or purports to assign any of its assets or rights in violation of this Agreement; or



b) transfers or novates any of its rights and/or obligations under this agreement, in violation of this Agreement; or

viii) if (a) the Seller becomes voluntarily or involuntarily the subject of any bankruptcy or insolvency or winding up proceedings and such proceedings remain uncontested for a period of thirty (30) days, or (b) any winding up or bankruptcy or insolvency order is passed against the Seller, or (c) the Seller goes into liquidation or dissolution or has a receiver or any similar officer appointed over all or substantially all of its assets or official liquidator is appointed to manage its affairs, pursuant to Law,
Provided that a dissolution or liquidation of the Seller will not be an Event of Default if such dissolution or liquidation is for the purpose of a merger, consolidation or reorganization and where the resulting company continues to meet the financial and technical requirements of the seller as certified by the lenders till COD of the Power Station, and retains creditworthiness similar to the Seller and expressly assumes all obligations of the Seller under this Agreement and is in a position to perform them; or

ix) the Seller repudiates this Agreement and does not rectify such breach even within a period of thirty (30) days from a notice from the Procurer in this regard; or

x) except where due to any Procurer's failure to comply with its material obligations, the Seller is in breach of any of its material obligations pursuant to this Agreement, and such material breach is not rectified by the Seller within thirty (30) days of receipt of first notice in this regard given by the Procurer to the Seller.

xi) the Seller fails to complete/fulfill the activities/conditions specified in Article 3.1.2, beyond a period of 8 Months from the specified period in Article 3.1.2 and the right of termination under Article 3.3.2 is invoked by the Procurer; or

xii) The Seller fails to provide additional bank guarantee to the Procurer in accordance with Article 3.3 of this Agreement, or

xiii) Occurrence of any other event which is specified in this Agreement to be a material breach/default of the Seller.

14.2 Procurer Event of Default

The occurrence and the continuation of any of the following events, unless any such event occurs as a result of a Force Majeure Event or a breach by the Seller of its obligations under this Agreement, shall constitute the Event of Default on the part of the Procurer:

i) the Procurer fails to pay (with respect to a Monthly Bill or a Supplementary Bill) an amount exceeding fifteen (15%) of the undisputed part of the most recent Monthly/Supplementary Bill for a period of ninety (90) days after the Due Date and the Seller is unable to recover the amount outstanding to the Seller through the Collateral Arrangement and Letter of Credit; or

ii) the Procurer repudiates this Agreement and does not rectify such breach even within a period of thirty (30) days from a notice from the Seller in this regard; or

iii) except where due to any Seller's failure to comply with its obligations, the Procureris in material breach of any of its obligations pursuant to this Agreement, and such material breach is not rectified by the Procurer within thirty (30) days of receipt of notice in this regard from the Seller to the Procurer;

iv) any representation and warranties made by the Procurer in Schedule – 8 of this Agreement, being found to be untrue or inaccurate. Provided however, prior to considering any event specified under this sub-article to be an Event of Default, the Seller shall give a notice to the Procurer in writing of at least thirty (30) days; or

v) if (a) the Procurer becomes voluntarily or involuntarily the subject of any bankruptcy or insolvency or winding up proceedings and such proceedings remain uncontested for a period of thirty (30) days, or (b) any winding up or bankruptcy or insolvency order is passed against the Procurer, or (c) the Procurer goes into liquidation or dissolution or has a receiver or any similar officer appointed over all or substantially all of its assets or official liquidator is appointed to manage its affairs, pursuant to Law, except where such dissolution or liquidation of the Procurer is for the purpose of a merger, consolidation or reorganization and where the resulting entity has the financial standing to perform its obligations under this Agreement and has creditworthiness similar to the Procurer and expressly assumes all obligations of the Procurer under this Agreement and is in a position to perform them; or;

vi) occurence of any other event which is specified in this Agreement to be a material breach or default of the Procurer.

14.3 Procedure for cases of Seller Event of Default

14.3.1 Upon the occurrence and continuation of any Seller Event of Default under Article 14.1, the Procurer shall have the right to deliver to the Seller a Procurer Preliminary Default Notice, which shall specify in reasonable detail, the circumstances giving rise to the issue of such notice.

14.3.2 Following the issue of Procurer Preliminary Default Notice, the Consultation Period of ninety (90) days or such longer period as the Parties may agree, shall apply.

14.3.3 During the Consultation Period, the Parties shall, save as otherwise provided in this Agreement, continue to perform their respective obligations under this Agreement.

14.3.4 Within a period of seven (7) days following the expiry of the Consultation Period unless the Parties shall have otherwise agreed to the contrary or the Seller Event of Default giving rise to the Consultation Period shall have been remedied, the Lenders may exercise or the Procurer may require the Lenders to exercise their substitution rights and other rights provided to them, if any, under Financing Agreements and the Procurer would have no objection to the Lenders exercising their rights if it is in consonance with provisions of Schedule 10. Alternatively, in case the Lenders do not exercise their rights as mentioned herein above, the Capacity Charge of the Seller shall be reduced by 20% for the period of Seller Event of Default.

14.4 Termination for Procurer Events of Default

14.4.1 Upon the occurrence and continuation of any Procurer Event of Default pursuant to Article 14.2 (i), the Seller shall follow the remedies provided under Articles 11.5.2

14.4.2 Without in any manner affecting the rights of the Seller under Article 14.4.1, on the occurrence of any Procurer Event of Default specified in Article 14.2 the Seller shall have the right to deliver to the Procurer a Seller Preliminary Default Notice, which notice shall specify in reasonable detail the circumstances giving rise to its issue.

14.4.3 Following the issue of a Seller Preliminary Default Notice, the Consultation Period of ninety (90) days or such longer period as the Parties may agree, shall apply.

14.4.4 During the Consultation Period, the Parties shall continue to perform their respective obligations under this Agreement.

14.4.5 (i) After a period of seven (7) days following the expiry of the Consultation Period and unless the Parties shall have otherwise agreed to the contrary or the Procurer Event of Default giving rise to the Consultation Period shall have been remedied, the Seller shall be free to sell the then existing Contracted Capacity to any third party of his choice. Provided the Procurer shall have the liability to make payments for Capacity Charges based on Normative Availability to the Seller for the period three (3) years from the eighth day after the expiry of the Consultation Period. Provided further that in such three year period, in case the Seller is able to sell electricity to any third party at a price which is in excess of the Energy Charges, then such excess realization will reduce the Capacity Charge payments due from the Procurer. For the avoidance of doubt, the above excess adjustment would be applied on a cumulative basis for the three year period. During such period, the Seller shall use its best effort to sell the Contracted Capacity of the Procurer generated or capable of being generated to such third parties at the most reasonable terms available in the market at such time, having due regard to the circumstances at such time and the pricing of electricity in the market at such time. Provided further, the Seller shall ensure that sale of power to the shareholders of the Seller or any direct or indirect affiliate of the Seller/shareholders of the Seller, is not at a price less than the Tariff, without obtaining the prior written consent of the Procurer. Such request for consent would be responded to within a maximum period of 3 days failing which it would be deemed that the Procurer has given his consent. Provided further that at the end of the three year period, this Agreement shall automatically terminate and thereafter, the Procurer shall have no further Capacity Charge liability towards the Seller. Provided further, the Seller shall have the right to terminate this Agreement with respect to the Procurer even before the expiry of such three year period provided on such termination, the future Capacity Charge liability of the Procurer shall cease immediately.

15 ARTICLE 15 : LIABILITY AND INDEMNIFICATION

15.1 Indemnity

15.1.1 The Seller shall indemnify, defend and hold the Procurer harmless against:

(a) any and all third party claims, actions, suits or proceedings against the Procurer for any loss of or damage to property of such third party, or death or injury to such third party, arising out of a breach by the Seller of any of its obligations under this Agreement, except to the extent that any such claim, action, suit or proceeding has arisen due to a negligent act or omission, breach of this Agreement or breach of statutory duty on the part of the Procurer, its contractors, servants or agents; and

(b) any and all losses, damages, costs and expenses including legal costs, fines, penalties and interest actually suffered or incurred by the Procurer from third party claims arising by reason of (i) breach by the Seller of any of its obligations under this Agreement, (provided that this Article 15 shall not apply to such breaches by the Seller, for which specific remedies have been provided for under this Agreement) except to the extent that any such losses, damages, costs and expenses including legal costs, fines, penalties and interest (together to constitute "Indemnifiable Losses") has arisen due to a negligent act or omission, breach of this Agreement or breach of statutory duty on the part of the Procurer, its contractors, servants or agents or (ii) any of the representations or warranties of the Seller under this Agreement being found to be inaccurate or untrue.

15.1.2 Procurer shall indemnify, defend and hold the Seller harmless against:

(a) any and all third party claims, actions, suits or proceedings against the Seller, for any loss of or damage to property of such third party, or death or injury to such third party, arising out of a breach by the Procurer of any of its obligations under this Agreement except to the extent that any such claim, action, suit or proceeding has arisen due to a negligent act or omission, breach of this Agreement or breach of statutory duty on the part of the Seller, its contractors, servants or agents; and

(b) any and all losses, damages, costs and expenses including legal costs, fines, penalties and interest ('Indemnifiable Losses') actually suffered or incurred by the Seller from third party claims arising by reason of (i) a breach by the Procurer of any of its obligations under this Agreement (Provided that this Article 15 shall not apply to such breaches by the Procurer, for which specific remedies have been provided for under this Agreement.), except to the extent that any such Indeminifiable Losses have arisen due to a negligent act or omission, breach of this Agreement or breach of statutory duty on the part of the Seller, its contractors, servants or agents or (ii) any of the representations or warranties of the Procurer under this Agreement being found to be inaccurate or untrue.

15.2 Monetary Limitation of liability

Each Party shall notify the other Party promptly of its entitlement, and intention, to make any claim for indemnification pursuant to this Article 15.

A Party ("Indemnifying Party") shall not be liable to indemnify the other Party ("Indemnified Party") under this Article 15 for any indemnity claims made in a Contract Year until the aggregate of all indemnity claims of the Indemnified Party in a given Contract Year exceeds half a percent (0.5%) of the average annual Tariff Payment for all the Contract Years up to the Contract Year in which the indemnity claim is made

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15.3 Procedure for claiming indemnity

15.3.1 Third party claims

(a) Where the Indemnified Party is entitled to indemnification from the Indemnifying Party pursuant to Article 15.1.1(a) or 15.1.2(a), the Indemnified Party shall promptly notify the Indemnifying Party of such claim, proceeding, action or suit referred to in Article 15.1.1(a) or 15.1.2(a) in respect of which it is entitled to be indemnified. Such notice shall be given as soon as reasonably practicable after the Indemnified Party becomes aware of such claim, proceeding, action or suit. The Indemnifying Party shall be liable to settle the indemnification claim within thirty (30) days of receipt of the above notice. Provided however that, if:

(i) the Parties choose to contest, defend or litigate such claim, action, suit or proceedings in accordance with Article 15.3.1(b) below; and;

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(ii) the claim amount is not required to be paid/deposited to such third party pending the resolution of the Dispute,

the Indemnifying Party shall become liable to pay the claim amount to the Indemnified Party or to the third party, as the case may be, promptly following the resolution of the Dispute, if such Dispute is not settled in favour of the Indemnified Party.

(b) The Indemnified Party may contest, defend and litigate a claim, action, suit or proceeding for which it is entitled to be indemnified under Article 15.1.1(a) or 15.1.2(a) and the indemnifying Party shall reimburse to the indemnified Party all reasonable costs and expenses incurred by the indemnified party. However, such indemnified Party shall not settle or compromise such claim, action, suit or proceedings without first getting the consent of the indemnifying Party, which consent shall not be unreasonably withheld or delayed.

An Indemnifying Party may, at its own expense, assume control of the defence of any proceedings brought against the Indemnified Party if it acknowledges its obligation to indemnify such Indemnified Party, gives such Indemnified Party prompt notice of its intention to assume control of the defence, and employs an independent legal counsel at its own cost that is reasonably satisfactory to the Indemnified Party.

15.4 Indemnifiable Losses

Where an Indemnified Party is entitled to Indemnifiable Losses from the Indemnifying Party pursuant to Article 15.1.1(b) or 15.1.2(b), the Indemnified Party shall promptly notify the Indemnifying Party of the Indemnifiable Losses actually incurred by the Indemnified Party. The Indemnifiable Losses shall be reimbursed by the Indemnifying Party within thirty (30) days of receipt of the notice seeking Indemnifiable Losses by the Indemnified Party. In case of non payment of such losses after a valid notice under this Article 15.4, such event shall constitute a payment default under Article 14.

15.5 Limitation on Liability

Except as expressly provided in this Agreement, neither the Seller nor the Procurer nor their respective officers, directors, agents, employees or Affiliates (or their officers, directors, agents or employees), shall be liable or responsible to the other Party or its Affiliates, officers, directors, agents, employees, successors or permitted assigns (or their respective insurers) for incidental, indirect or consequential damages, connected with or resulting from performance or non-performance of this Agreement, or anything done in connection herewith, including claims in the nature of lost revenues, income or profits (other than payments expressly required and properly due under this Agreement), any increased expense of, reduction in or loss of power generation production or equipment used therefore, irrespective of whether such claims are based upon breach of warranty, tort (including negligence, whether of the Procurer, the Seller or others), strict liability, contract, breach of statutory duty, operation of law or otherwise. The Procurer shall have no recourse against any officer, director or shareholder of the Seller or any Affiliate of the Seller or any of its officers, directors or shareholders for such claims excluded under this Article. The Seller shall have no recourse against any officer, director or shareholder of the Procurer, or any affiliate of the Procurer or any of its officers, directors or shareholders for such claims excluded under this Article.

16 ARTICLE 16: ASSIGNMENTS AND CHARGES

16.1 Assignments

This Agreement shall be binding upon, and inure to the benefit of the Parties and their respective successors and permitted assigns. Subject to Article 16.2, this Agreement shall not be assigned by any Party (and no Party shall create or permit to subsist any encumbrance over all or any of its rights and benefits under this Agreement) other than by mutual consent between the Parties to be evidenced in writing:

Provided that, such consent shall not be withheld if the Procurer seeks to transfer to any transferee all of its rights and obligations under this Agreement; and

(a) such transferee is either the owner or operator of all or substantially all of the distribution system of the Procurer and /or such transferee is a successor entity of the Procurer; and

(b) this Agreement and the other Project Documents shall continue to remain valid and binding on such successor.

Seller shall be entitled to assign its rights and obligations under this Agreement in favor of the Selectee duly appointed pursuant to the terms of Schedule 10 of this Agreement.

16.2 Permitted Charges

16.2.1 Notwithstanding anything contained in Article 16.1, the Seller may create any encumbrance over all or part of the receivables, Payment Mechanism or the other assets of the Project or the Project Documents in favour of the Lenders or the Lender's Representative on their behalf, as security for: .

(a) amounts payable under the Financing Agreements; and

(b) any other amounts agreed by the Parties,

Provided that:

I the Lenders or the Lender's Representative on their behalf shall have agreed in writing to the provisions of Schedule 10 of this Agreement; and

II any encumbrances granted by the Seller in accordance with this Article 16.2.1 shall contain provisions pursuant to which the Lenders or the Lender's Representative on their behalf agrees unconditionally with the Seller acting for itself and as trustee of the Procurer to release from such encumbrances all of the right, title and interest to Additional Compensation so as to enable the Procurer to claim its right of subrogation. For the purposes of this Article, Additional Compensation shall mean the compensation that the Seller is entitled, whether actually or contingently, to receive from the Procurer as well as compensated by any person other than the Procurer for the same event.

16.2.2 Article 16.1 does not apply to:

(a) liens arising by operation of law (or by an agreement evidencing the same) in the ordinary course of the Seller carrying out the Project;

(b) pledges of goods, the related documents of title and / or other related documents, arising or created in the ordinary course of the Seller carrying out the Project; or

(c) security arising out of retention of title provisions in relation to goods acquired in the ordinary course of the Seller carrying out the Project.

17 ARTICLE 17: GOVERNING LAW AND DISPUTE RESOLUTION

17.1 Governing Law

This Agreement shall be governed by and construed in accordance with the Laws of India.

17.2 Amicable Settlement

17.2.1 Either Party is entitled to raise any claim, dispute or difference of whatever nature arising under, out of or in connection with this Agreement including its existence or validity or termination (collectively "Dispute") by giving a written notice to the other Party, which shall contain:

(i) a description of the Dispute;
(ii) the grounds for such Dispute; and
(iii) all written material in support of its claim.

17.2.2 The other Party shall, within thirty (30) days of issue of dispute notice issued under Article 17.2.1, furnish:

(i) counter-claim and defences, if any, regarding the Dispute; and
(ii) all written material in support of its defences and counter-claim.

17.2.3 Within thirty (30) days of issue of notice by any Party pursuant to Article 17.2.1 or Article 17.2.2, both the Parties to the Dispute shall meet to settle such Dispute amicably. If the Parties fail to resolve the Dispute amicably within thirty (30) days of receipt of the notice referred to in the preceding sentence, the Dispute shall be referred to Dispute Resolution in accordance with Article 17.3.

17.3 Dispute Resolution

17.3.1 Where any Dispute arises from a claim made by any Party for any change in or determination of the Tariff or any matter related to Tariff or claims made by any Party which partly or wholly relate to any change in the Tariff or determination of any of such claims could result in change in the Tariff or (ii) relates to any matter agreed to be referred to the Appropriate Commission under Articles 4.7.1, 13.2, 18.1 or clause 10.1.3 of Schedule 10 hereof, such

Dispute shall be submitted to adjudication by the Appropriate Commission. Appeal against the decisions of the Appropriate Commission shall be made only as per the provisions of the Electricity Act, 2003, as amended from time to time.

17.3.2 If the Dispute arises out of or in connection with any claims not covered in Article 17.3.1, such Dispute shall be resolved by arbitration under the Indian Arbitration and Conciliation Act, 1996 and the Rules of the Indian Council of Arbitration, in accordance with the process specified in this Article. In the event of such Dispute remaining unresolved as referred to in Article 17.2.3 hereof, any party to such Dispute may refer the matter to registrar under the Rules of the Indian Council of Arbitration.

(i) The Arbitration tribunal shall consist of three (3) arbitrators to be appointed in accordance with the Indian Council of Arbitration Rules

(ii) The place of arbitration shall be Chandigarh, India. The language of the arbitration shall be English.

(iii) The arbitration tribunal's award shall be substantiated in writing. The arbitration tribunal shall also decide on the costs of the arbitration proceedings and the allocation thereof.

(iv) The award shall be enforceable in any court having jurisdiction, subject to the applicable Laws.

(v) The provisions of this Clause shall survive the termination of this PPA for any reason whatsoever.

17.4 Parties to Perform Obligations

Notwithstanding the existence of any Dispute and difference referred to the Appropriate Commission or the arbitral tribunal as provided in Article 17.3 and save as the Appropriate Commission or the arbitral tribunal may otherwise direct by a final or interim order, the Parties hereto shall continue to perform their respective obligations (which are not in dispute) under this Agreement.

18 ARTICLE 18 : MISCELLANEOUS PROVISIONS

18.1 Amendment

This Agreement may only be amended or supplemented by a written agreement between the Parties and after duly obtaining the approval of the Appropriate Commission, where necessary.

18.2 Third Party Beneficiaries

This Agreement is solely for the benefit of the Parties and their respective successors and permitted assigns and shall not be construed as creating any duty, standard of care or any liability to, any person not a party to this Agreement.

18.3 No Waiver

A valid waiver by a Party shall be in writing and executed by an authorized representative of that Party. Neither the failure by any Party to insist on the performance of the terms, conditions, and provisions of this Agreement nor time or other indulgence granted by any Party to the other Party shall act as a waiver of such breach or acceptance of any variation or the relinquishment of any such right or any other right under this Agreement, which shall remain in full force and effect.

18.4 Entirety

18.4.1 This Agreement and the Schedules are intended by the Parties as the final expression of their agreement and are intended also as a complete and exclusive statement of the terms of their agreement.

18.4.2 Except as provided in this Agreement, all prior written or oral understandings, offers or other communications of every kind pertaining to this Agreement or the sale or purchase of Electrical Output and Contracted Capacity under this Agreement to the Procurer by the Seller shall stand superseded and abrogated.

18.5 Confidentiality

The Parties undertake to hold in confidence this Agreement and Project Documents and not to disclose the terms and conditions of the transaction contemplated hereby to third parties, except:

(a) to their professional advisors;

(b) to their officers, contractors, employees, agents or representatives, financiers, who need to have access to such information for the proper performance of their activities; or

(c) disclosures required under Law.

without the prior written consent of the other Party.

Provided that the Seller agrees and acknowledges that the Procurer may at any time, disclose the terms and conditions of the Agreement and the Project Documents to any person, to the extent stipulated under the Law .

18.6 Affirmation

The Seller and the Procurer, each affirm that:

(i) neither it nor its respective directors, employees, or agents has paid or undertaken to pay or shall in the future pay any unlawful commission, bribe, pay-off or kick-back; and

(ii) it has not in any other manner paid any sums, whether in Indian currency or foreign currency and whether in India or abroad to the other Party to procure this Agreement, and the Seller and the Procurer hereby undertake not to engage in any similar acts during the Term of Agreement.

18.7 Severability

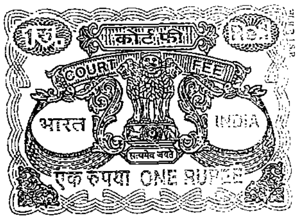
The invalidity or enforceability, for any reason, of any part of this Agreement shall not prejudice or affect the validity or enforceability of the remainder of this Agreement, unless the part held invalid or unenforceable is fundamental to this Agreement.

18.8 No Partnership

None of the provisions of this Agreement shall constitute a partnership or agency or any such similar relationship between the Seller and the Procurer.

18.9 Survival

Notwithstanding anything to the contrary herein, the provisions of this Agreement, including Article 3.3.2, Article 10.2 (Application of Insurance



Proceeds), Article 12 (Force Majeure), Article 14 (Events of Default and Termination), Article 15 (Liability and Indemnification), Article 17 including Article 17.3.2 (Governing Law and Dispute Resolution), Article 18 (Miscellaneous), and other Articles and Schedules of this Agreement which expressly or by their nature survive the term or termination of this Agreement shall continue and survive any expiry or termination of this Agreement.

18.10 Notices

All notices to be given under this Agreement shall be in writing and in the English Language.

All notices must be delivered personally, by registered ~~or certified mail~~post or any method duly acknowledged or facsimile to the addresses below:

Seller :
The Managing Director
GVK Power (Goindwal Sahib) Limited
Paigah House, 156-159, S. P. Road
Secunderabad – 500 003
Fax : 040 - 27902665

Procurer :
The Chairman
Punjab State ElectricityBoard
The Mall
Patiala – 147 001

All notices or communications given by email or facsimile shall be confirmed by sending a copy of the same via post office in an envelope properly addressed to the appropriate Party for delivery by registered mail. All Notices shall be deemed validly delivered upon receipt evidenced by an acknowledgement of the recipient, unless the Party delivering the notice can prove in case of delivery through the registered post that the recipient refused to acknowledge the receipt of the notice despite efforts of the post authorities..

Any Party may by notice of at least fifteen (15) days to the other Parties change the address and / or addresses to which such notices and communications to it are to be delivered or mailed.

18.11 Language

The language of this Agreement and all written communication between the Parties relating to this Agreement shall be in English.

18.12 Breach of Obligations

The Parties acknowledge that a breach of any of the obligations contained herein would result in injuries. The Parties further acknowledge that the amount of the liquidated damages or the method of calculating the liquidated damages specified in this Agreement is a genuine and reasonable pre-estimate of the damages that may be suffered by the non-defaulting party in each case specified under this Agreement.

18.13 Nomination Restriction

Notwithstanding anything contained to the contrary in this Agreement, wherever a reference is made to the right of the Procurer to nominate a third Party to receive benefits under this Agreement, such Third Party shall have a financial standing comparable to that of the Procurer in question.

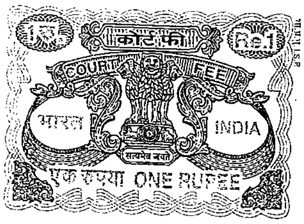
18.14 Commercial Acts

The Procurer and Seller unconditionally and irrevocably agree that the execution, delivery and performance by each of them of this Agreement and those agreements included in the Collateral Arrangement to which it is a Party constitute private and commercial acts rather than public or governmental acts;

18.15 Restriction of Shareholders/Owners Liability

Both Parties expressly agree and acknowledge that none of the shareholders of the Parties hereto shall be liable to the other Parties for any of the contractual obligations of the concerned party under this Agreement. Further, the financial liabilities of the shareholder/s of each Party to this Agreement, in such Party, shall be restricted to the extent provided in Section 426 of the Indian Companies Act, 1956.

The provisions of this Article shall supercede any other prior agreement or understanding, whether oral or written, that may be existing between the Procurer, Seller, shareholders/ owners of the Seller, shareholders/ owners of



the Procurer before the date of this Agreement, regarding the subject matter of this Agreement.

18.16 No Consequential or Indirect Losses

The liability of the Seller and the Procurer shall be limited to that explicitly provided in this Agreement. Provided that notwithstanding anything contained in this Agreement, under no event shall the Procurer or the Seller claim from one another any indirect or consequential losses or damages.

IN WITNESS WHEREOF the Parties have executed these presents through their authorized representatives at Patiala.

For and on behalf of
Punjab State Electricity Board

Harinder Singh Brar.

(Er. H. S. Brar), Chairman
Signature with seal
CHAIRMAN
P.S.E.B. PATIALA

For and on behalf of
GVK Power (Goindwal Sahib) Limited

Madhusudan

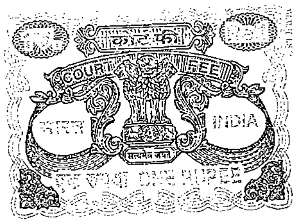
(S. Madhusudan), Director
Signature with seal
GVK POWER (GOINDWAL SAHIB) LTD. HYD'BAD.

Witness:

1. Er. G.S. Sra
   Member/Generation
2. Er. V. K. Singal
   Chief Engineer/Hydel Projects

Witness:

1. Debashis Ghosh
   General Manager
2. Oliver Tyagi
   Dy. G.M. (PD)

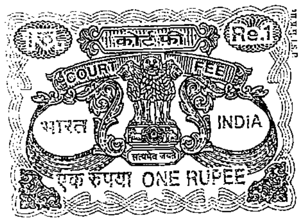


1. SCHEDULE 1: SITE

2x270 MW Goindwal Sahib Thermal Power Project:

SITE DESCRIPTION

Sr.No.	Item	Details
1.	Location	About 45 Km from Amritsar, 24 km. from Tarn-Taran and 40 km from Jalandhar, Tarn Taran- Kapurthala Road about 3 km to Amrtisar, Punjab (India).
2.	Nearest Railway Station	Khadoor Sahib terminal station .
3.	Nearest air port	Amritsar
4.	Plant Elevation	222.5 m above MSL
5.	Ambient Air temperature	
	a) Maximum	46.7 Degree Centigrade
	b) Minimum	- 2.8 Degree Centigrade
	c) Reference Temp. for design of Electricla/I&C equipment.	50 Degree Centigrade
6.	Relateive humidity a) Maximum b) Minimum	 74% 46%
7.	Rainfall a) Annual average b) Maximum for one day	South Westerly summer monsoons 649.1 mm 169 mm
8.	Wind data a) Prevailing wind direction	 North west to south east for nine months and reverse for 3 months.
	b) Mean wind speed	1.3 km/hr to 12.3km/hr
	c) Basic wind speed	47 meters/second
	d) Wind pressure	As per IS 875 (Part-3)-1987
9.	SEISMIC DATA	
	a) Zone	IV as per latest revision of IS:1893
10.	Climate	Generally dry except the brief south westerly monsoon season, a hot summer and a bracing winter.


कोर्ट फी
Re.1
COURT FEE
भारत
INDIA
एक रुपया ONE RUPEE

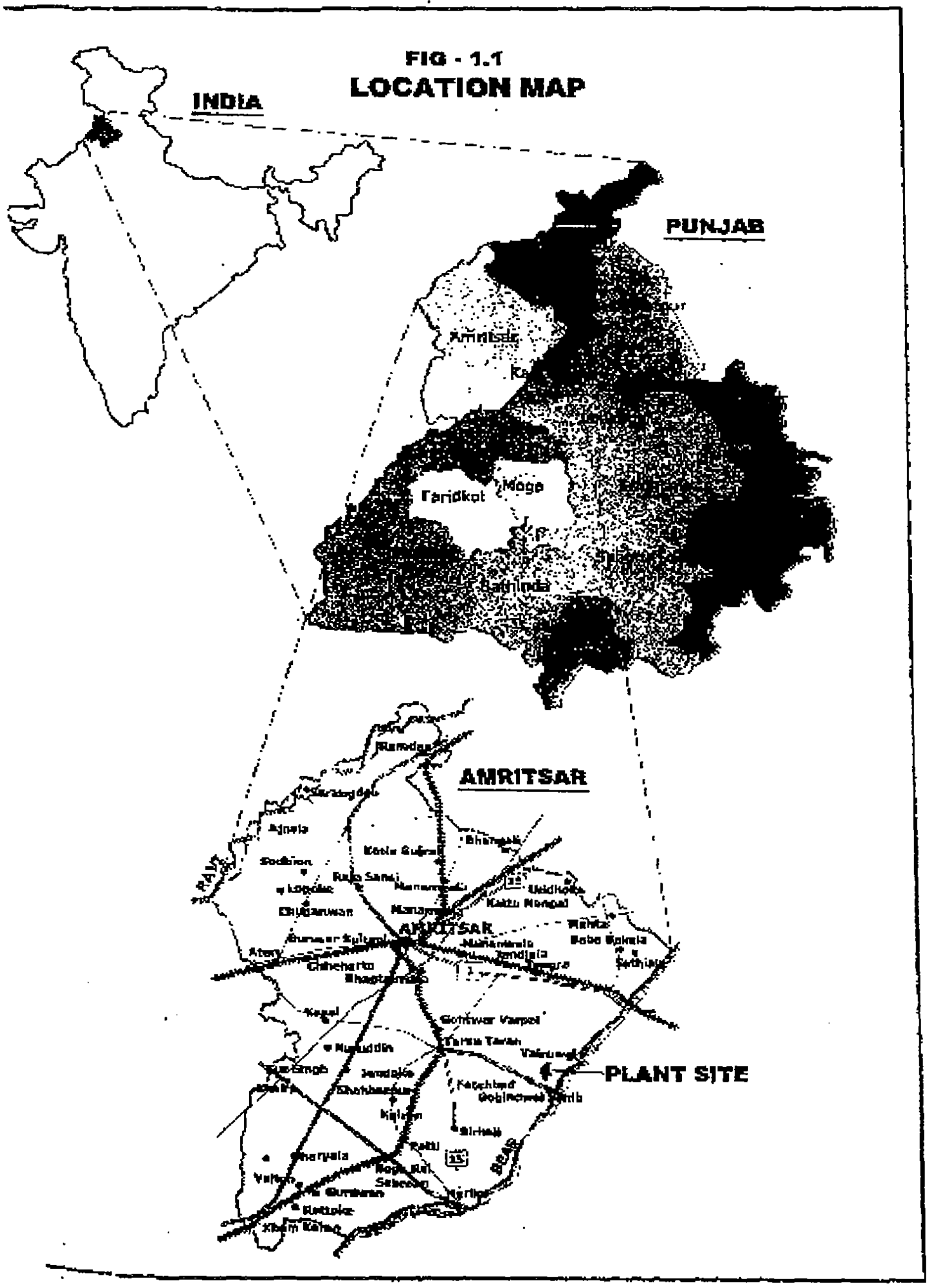
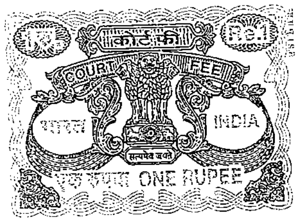


FIG - 1.1
LOCATION MAP
INDIA
PUNJAB
Amritsar
Faridkot
Moga
Bathinda
AMRITSAR
PLANT SITE



2. SCHEDULE 2: INITIAL CONSENTS

S.No	Name of the Clearance
1	Approval from Government of Punjab
2	No Objection Certificate from Punjab State Pollution Control Board
3	Environmental and Forest Clearance from MOEF, GOI
4	Water Availability from State Government and Water Supply Agreement
5	Civil Aviation Clearance for Chimney height from National Airports Authority
6	NOC from Ministry of Defence
7	Permission to discharge effluents

3. SCHEDULE 3: FUNCTIONAL SPECIFICATION

S No. Description **Unit** **Particulars**

1.1 Grid Conditions at Interconnection Point

(i) Voltage :Nominal KV [220]

Variation ±10% Min.- 200KV Max.-245 KV

(ii) Frequency : Nominal Hz. [50]

Variation % -3% to +1.5%

(iii) Combined Voltage and Frequency variation for Contracted Capacity % [±5]

(iv) Power Factor : Nominal [.85] lag

Variation [0.8] to [0.95]
lag lead

(v) Basic Impulse Level (Peak) kV [1050]

1.2 Fault Levels:

(i) 3 Phase Minimum S.C Current rating and duration for Switchgear- 40kA for 1second
(ii) Target fault Clearance time Maximum ms 100

1.3 Ramp Rates

All Units of the Power Station shall be capable of increasing or decreasing their output (generation level) by not less than one percent (1%) per minute. Such capability shall be demonstrated during the Unit load of more than 50%.

4. SCHEDULE 4: COMMISSIONING AND TESTING

1.1 Performance Test

(i) (a) The Performance Test shall be conducted under any and all ambient conditions (temperature, humidity etc.) and any and all Fuel qualities that may exist during the time of the Performance Test and no corrections in final gross and net output of the Unit will be allowed as a result of prevailing ambient conditions or Fuel quality.

(b) The correction curves will only be used if the Grid System operation during the Performance Test exceeds electrical system limits.

(c) The Performance Test shall be deemed to have demonstrated the Contracted Capacity of the Unit under all designed conditions and therefore no adjustments shall be made on account of fuel quality or ambient conditions.

(d) The Seller shall perform in respect of each Unit a Performance Test, which such Unit shall be deemed to have passed if it operates continuously for seventy two consecutive hours at or above ninety five (95) percent of its Contracted Capacity ,as existing on the Effective Date,and within the electrical system limits and the Functional Specifications.

(ii) For the purposes of any Performance Test pursuant to this sub-article 1.1, the electrical system limits to be achieved shall be as follows:

(a) Voltage

The Unit must operate within the voltage levels described in the Functional Specification for the duration of the Performance Test. If, during the Performance Test, voltage tests cannot be performed due to Grid System, data supplied from tests of the generator step-up transformers and generators supplied by the manufacturers shall be used to establish the ability of the Unit to operate within the specified voltage limits.

(b) Grid System Frequency

The Unit shall operate within the Grid System frequency levels described in the Functional Specification for the duration of the Performance Test.

(c) Power Factor

The Unit shall operate within the power factor range described in the Functional Specification for the duration of the Performance Test. If, during the Performance Test, power factor tests cannot be performed due to the Grid System, data supplied from tests of the generators and the generator step-up transformers supplied by the manufacturers shall be used to establish the ability of the Unit to operate within the specified power factor range.

(d) **Fuel quality and cooling water temperature**

The Unit must operate to its Contracted Capacity with Fuel quality and water temperature available at the time of Testing and no adjustment shall be allowed for any variation in these parameters.

iii As a part of the Performance Test, the Seller shall demonstrate that the Unit meets the Functional Specifications for Ramping rate as mentioned in Schedule 3 . For this purpose, representative samples of ramp rates shall be taken, by ramping up or down the gross turbine load while maintaining the required temperatures and temperature differences associated with each ramp rate within the turbine while maintaining all other operational parameters within equipment limits;.

1.2 Testing and Measurement procedures applied during Performance Test shall be in accordance with codes, practices or procedures as generally/ normally applied for the Performance Tests

1.3 The Seller shall comply with the prevalent Laws, rules and regulations as applicable to the provisions contained in this Schedule from time to time.

5. SCHEDULE 5 : AVAILABILITY FACTORS

The following matters shall be determined as per the provisions of the Grid Code and ABT:

a. Availability declaration and calculation of Availability or Availability Factor;

b. Requirement for Spinning Reserves;

c. Procedure for revision of Availability;

d. Consequences of failure to demonstrate capacity or misdeclarations of capacity; and

e. Other matters which may be related to Availability or Availability Factor.

6 SCHEDULE 6: TARIFF

1.1 General

i. The method of determination of Tariff Payments for any Contract Year during the Term of Agreement shall be in accordance withthis Schedule. For the purpose of payments, the Tariff will be determined by the PSERC after the receipt of an application for determination of the Tariff from the Seller
ii. The Tariff shall be paid in two parts comprising of Capacity and Energy Charge.

iii. The full Capacity Charges shall be payable based on the Contracted Capacity at Normative Availability and Incentive shall be provided for Availability beyond 85% as provided in this Schedule. In case of Availability being lower than the Normative Availability, the Capacity Charges shall be payable on proportionate basis in addition to the penalty to be paid by Seller as provided in this Schedule.

1.2 Monthly Tariff Payment

1.2.1 Components of Monthly Tariff Payment

The Monthly Bill for any Month in a Contract Year shall consist of the following:

i. Monthly Capacity Charge Payment in accordance with Article 1.2.2 below;
ii. Monthly Energy Charge for Scheduled Energy in accordance with Article 1.2.3 below;
iii. Incentive Payment determined in accordance with Article 1.2.4 below (applicable on annual basis and included only in the Monthly Tariff Payment for the first month of the next Contract Year);
iv. Penalty Payment determined in accordance with Article 1.2.5 below (applicable on annual basis and included only in the Monthly Tariff Payment for the first month of the next Contract Year);
v. Penalty Payment determined in accordance with Article 1.2.8 below (applicable on annual basis and included only in the Monthly Tariff Payment for the first month of the next Contract Year)

1.2.2 Monthly Capacity Charge Payment - The Monthly Capacity Charges based on the Capital Cost as approved by PSERC shall be paid as per CERC (Terms & Conditions of tariff) Regulations as applicable.Provided, no Capacity Charges shall be paid for the Settlement Period during which the RLDC has not allowed the operation of the Power Station due to Seller's failure to operate the Power Station as per the provisions of Grid Code.

1.2.3 Monthly Energy Charges

1.2.3.1 The Energy Charges shall be calculated and paid as approved by PSERC as per CERC (Terms & Conditions of tariff) Regulations as applicable.

1.2.3.2 Source and Cost of Coal and Secondary Fuel

1.2.3.2.1. The fuel charges linked to Coal cost based on the quantity and quality of coal delivered at the Project Site (Goindwal Sahib) are not to exceed the cost as prevailing in the PSEB's existing Pachhawara Captive Coal Mine. Thus the coal cost of Pachhawara mine will be the maximum price at which coal would be supplied to GSTPS. The Seller in association with the procurer shall resort to a competitive bidding process, preferably international both for developing and operating the captive coal block at Tokisud North subblock and any other block allocated to the project and the lowest cost emanating as a result of this exercise shall not be more than the cost of the existing Pachhawara captive coal block which will form part of the mining agreement and be adopted for the purpose of working out the variable (fuel) charges. However the discount rate for 'F' grade coal will be decided by PSERC.

1.2.3.2.2 If the coal production rate from the Captive Coal Mine and the additional coal block partly allocated for the project is higher than the requirement of the Project such surplus coal production, if any, will be delivered to other thermal projects of the Procurer, as directed by the Procurer. In case the Project is shut down due to Force Majeure, the coal produced by the Captive Coal Mine and the additional coal block shall be supplied to any or all of the existing power projects of Procurer as directed by Procurer. Similarly in case Captive Coal Mine commences the production of coal ahead of the COD of the project, coal so produced shall be supplied to the existing thermal power stations of Procurer as directed by Procurer. The coal shall be supplied to the Procurer's other Projects at the same coal price as mentioned in the Fuel Supply Agreement for the Project. Sale to the existing projects of the Procurer shall be subject to the approval of Ministry of Coal, Govt. of India. The delivery point for supply of coal to the Procurer's other Projects shall be the premises of the Captive Coal Mine. However the Seller shall arrange for transportation of coal to other projects by diverting the supplies under the fuel transportation agreement with the Railways for which freight charges shall be payable by PSEB.

1.2.3.2.3 The Seller shall purchase the Secondary Fuel from the Public Sector Undertakings like Indian Oil Corporation Ltd., Bharat Petroleum Corporation Ltd, Hindustan Petroleum Corporation Ltd etc. through Competitive Bidding.

1.2.4 Contract Year Energy Incentive Payment.

If and to the extent the Availability in a Contract Year exceeds eighty five percent (85%), an incentive at the rate of forty (40%) of the Capacity Charges (in Rs./kWh) for such Contract Year subject to a maximum of twenty five (25) paise /kwhr, shall be allowed on the energy (in kwh) corresponding to the Availability in excess of eighty five percent (85%).

1.2.5 Contract Year Penalty for Availability below 75% during the Contract Year

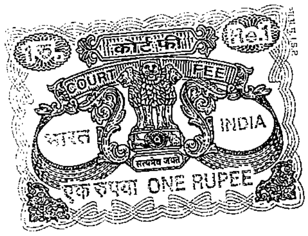
In case the Availability for a Contract Year is less than 75%, the Seller shall pay a penalty at the rate of twenty percent (20%) of the simple average Capacity Charge (in Rs./kWh) for all months in the Contract Year applied on the energy (in kwh) corresponding to the difference between 75% and Availability during such Contract Year.

1.2.6 Deviation from the schedule

Variation between Scheduled Energy and actual energy at the Delivery Point shall be accounted for through Unscheduled Interchange (UI) Charges as detailed in the Grid Code and ABT.

1.2.7 Transmission/Wheeling Charges and Scheduling Charges

The payment of transmission/wheeling charges shall be settled between the CTU/STU and the Procurer. The payment of scheduling charges to the respective nodal agency (RLDC or SLDC) shall be the responsibility of the Procurer.



1.2.8 ***Penalty and rights relating to minimum guaranteed quantity of fuel***

In case Seller has to pay penalty to the Fuel supplier for not purchasing the minimum guaranteed quantity of Fuel mentioned in the Fuel Supply Agreement and if during that Contract Year Availability of the Commissioned Units is greater than the Minimum Offtake Guarantee but the Procurer has not Scheduled Energy corresponding to such Minimum Off-take Guarantee during that Contract Year, then Seller will raise an invoice for the lower of the following amount, (a) penalty paid to the Fuel supplier under the Fuel Supply Agreement in that Contract Year, along with documentary proof for payment of such penalty, or

(b) an amount corresponding to twenty percent (20%) of cumulative Monthly Capacity Charge Payment (in Rs.) by the Procurer made for all the months in that Contract Year multiplied by (1- x/y) where:

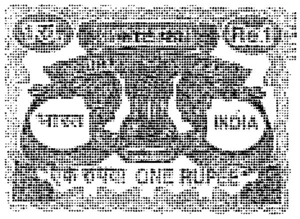
X is the Scheduled Energy during the Contract Year for the Procurer (in kwh); and

Y is the Scheduled Energy corresponding to Minimum Offtake Guarantee for the Procurer during the Contract Year (in kwh).

Provided within ten (10) days of the end of each Month after the COD of the Ist Unit, the Seller shall provide a statement to the Procurer, providing a comparison of the cumulative despatch for all previous months during the Contract Year with the Minimum Offtake Guarantee of the Procurer. Further, such statement shall also list out the deficit, if any, in the Fuel Offtake under the Fuel Supply Agreement, due to Cumulative Despatch being less than the Minimum Offtake Guarantee. In case of a Fuel Offtake Deficit within a period of fifteen (15) days from the date of receipt of the above statement from the Seller and after giving a prior written notice of atleast seven (7) days to the Seller, the Procurer shall have the rights to avail himself such deficit at the same price at which such deficit fuel was available to the Seller under the Fuel Supply Agreement and to sell such deficit to third parties.

1.2.9 Sale of Infirm Power:

The procurer shall pay only the primary & secondary fuel charges for all infirm power delivered to it by the seller.



1.3 ***Settlement of Bills:***

1. The penalty of actual Availability shortfall during the Contract Year, Deviation from the schedule, Transmission & Scheduling Charges~~,~~ and Penalty to be paid to fuel supplier will be settled as detailed in Article 1.2.2, Article 1.2.5, Article 1.2.6, Article 1.2.7 and Article 1.2.8 of this Schedule.

2. Notwithstanding anything contained in this agreement, no separate reimbursement shall be allowed for the cost of the secondary fuel.

7 SCHEDULE 7: DETAILS OF INTERCONNECTION POINT AND FACILITIES

1. **Supply of Information**

   The Seller shall within a period of two (2) Month after the date of Financial Closing (or such other date as is mutually agreed between the Parties), provide the Procurer with such information about the design of the Project as it may reasonably require to enable it to design the Interconnection Facilities.

2. **Cost of Interconnection Facilities**

   The Procurer shall be responsible for the financing, design, construction, installation commissioning, operation and maintenance of the Interconnection Facilities and shall bear all costs associated with its rights and obligations under this Schedule 7 in accordance with the terms of this Agreement.

3. **Ownership of Interconnection Facilities**

   The Procurer shall own the Interconnection Facilities.

4. **Interconnection Equipment on Seller's side of Interconnection Point**

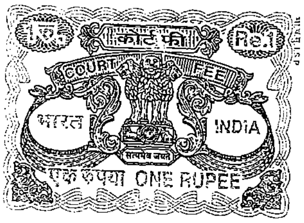
   The Seller shall be responsible for designing, constructing, installing and maintaining all auxiliary and interconnecting equipment on the Seller's side of the Interconnection Point and the Seller shall have ownership rights in all such auxiliary and Interconnection Equipment.

5. **Protection Devices**

   Protection devices shall be approved by the Procurer (which devices shall conform to the Procurer's system requirements) on or prior to the date of Financial Closing. After the date of Financial Closing, subject to giving the Seller reasonable notice, the Procurer may require the Seller to modify or expand the requirements for protective devices and the Procurer shall reimburse the Seller for the reasonable costs of such modification or expansion.

6. **Power Line Carrier Communication (PLCC)**

   The Seller and Procurer will liase with each other for design, installation of PLCC equipment on or prior to the date of Financial Closing. The Seller and



the Procurer will bear the cost of the equipment at their ends of the Interconnection Facility.

7. Changes Affecting Protective Devices

Each Party shall notify the other Party as soon as is reasonably practical any changes to either the Project's or the Procurer's transmission system that may affect the proper co-ordination of protective devices between the two systems.

8. Testing

The Parties shall co-operate in testing the Interconnection Facilities prior to Synchronisation of a Generating Unit and from time to time as either Party may reasonably require. All such testing shall be carried out on a timely basis.

8 SCHEDULE 8: REPRESENTATION AND WARRANTIES

1. ***Representations and Warranties by the Procurer***

The Procurer hereby represents and warrants to and agrees with the Seller as follows and acknowledges and confirms that the Seller is relying on such representations and warranties in connection with the transactions described in this Agreement:

1.1 The said Procurer has all requisite powers authorising and has been duly authorised to execute and consummate this Agreement ;

1.2 This Agreement is enforceable against the said Procurer in accordance with its terms;

1.3 The consummation of the transactions contemplated by this Agreement on the part of the said Procurer will not violate any provision of nor constitute a default under, nor give rise to a power to cancel any charter, mortgage, deed of trust or lien, lease, agreement, license, permit, evidence of indebtedness, restriction, or other contract to which the said Procurer is a party or to which said Procurer is bound, which violation, default or power has not been waived;

1.4The said Procurer is not insolvent and no insolvency proceedings have been instituted, nor threatened or pending by or against the said Procurer;

1.5There are no actions, suits, claims, proceedings or investigations pending or, to the best of the said Procurer's knowledge, threatened in writing against the said Procurer at law, in equity, or otherwise, and whether civil or criminal in nature, before or by, any court, commission, arbitrator or governmental agency or authority, and there are no outstanding judgements, decrees or orders of any such courts, commission, arbitrator or governmental agencies or authorities, which materially adversely affect its ability to comply with its obligations under this Agreement.

1.6 The Procurers makes all the representations and warranties above to be valid as on the date of this Agreement.

2. ***Representation and Warranties of the Seller***

The Seller hereby represents and warrants to and agrees with the Procurer as follows and acknowledges and confirms that the Procurer is relying on such representations and warranties in connection with the transactions described in this Agreement:

2.1The Seller has all requisite power authorising and has been duly authorised to execute and consummate this Agreement;

2.2This Agreement is enforceable against the Seller in accordance with its terms;

2.3The consummation of the transactions contemplated by this Agreement on the part of the Seller will not violate any provision of nor constitute a default under, nor give rise to a power to cancel any charter, mortgage, deed of trust or lien, lease, agreement, license, permit, evidence of indebtedness, restriction, or other contract to which the Seller is a party or to which the Seller is bound which violation, default or power has not been waived;

2.4The Seller is not insolvent and no insolvency proceedings have been instituted, or not threatened or pending by or against the Seller;

2.5There are no actions, suits, claims, proceedings or investigations pending or, to the best of Seller's knowledge, threatened in writing against the Seller at law, in equity, or otherwise, and whether civil or criminal in nature, before or by, any court, commission, arbitrator or governmental agency or authority, and there are no outstanding judgements, decrees or orders of any such courts, commission, arbitrator or governmental agencies or authorities, which materially adversely affect its ability to execute the Project or to comply with its obligations under this Agreement.

2.6The Seller has neither made any statement nor provided any information, which was materially inaccurate or misleading at the time when such statement was made or information was provided. Further, all the confirmations, undertakings, declarations and representations made by the Seller are true and accurate and there is no breach of the same.

2.7 The Seller makes all the representations and warranties above to be valid as on the date of this Agreement,.

9. SCHEDULE 9: FORMAT OF THE PERFORMANCE GUARANTEE

In consideration of the [Insert name of the Selected Bidder or Selected Bidder on behalf of the Seller] agreeing to undertake the obligations under the PPA and the other Project Documents and [Insert the name of the Procurer], agreeing to execute the PPA and the other Project Documents inter alia with the Seller, regarding setting up the Power Station of the capacity of .... MW, at ....[Insert name of the place] for supply of power there from on long term basis, the ______________ (insert name of bank] (hereinafter referred to as "Guarantor Bank") hereby agrees unequivocally, irrevocably and unconditionally to pay to [Insert Name of the Procurer] at [insert the Place from the address of the respective Procurer indicated in PPA] forthwith on demand in writing from [Name of the Procurer] or any Officer authorised by it in this behalf, any amount upto and not exceeding Rupees ____________________only [Insert the amount of the bank guarantee in respect of the respective Procurer as per the terms of PPA], on behalf of M/s. ______________________ [Insert name of the Seller or the Selected Bidder on behalf of the Seller].

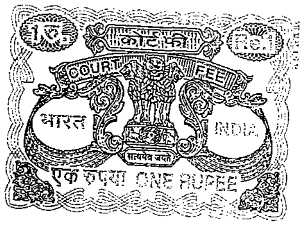
This guarantee shall be valid and binding on this Bank up to and including ________________ and shall not be terminable by notice or any change in the constitution of the Bank or the term of contract or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement.

Our liability under this Guarantee is restricted to Rs. __________ (Rs. _______________________ only). Our Guarantee shall remain in force until _________________. The Procurer shall be entitled to invoke this Guarantee till _____ [Insert date which is 30 days after the date in the preceding sentence].

The Guarantor Bank hereby agrees and acknowledges that the Procurer shall have a right to invoke this BANK GUARANTE in part or in full, as it may deem fit.

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand by the Procurer, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to the Procurer.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by the Seller and/or any other person. The Guarantor Bank shall not require the Procurer to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against the Procurer in respect of any payment made hereunder



This BANK GUARANTEE shall be interpreted in accordance with the laws of India.

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

This BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank.

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly the Procurer shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the Seller, to make any claim against or any demand on the Seller or to give any notice to the Seller or to enforce any security held by the Procurer or to exercise, levy or enforce any distress, diligence or other process against the Seller.

The Guarantor Bank acknowledges that this BANK GUARANTEE is not personal to the Procurer and may be assigned, in whole or in part, (whether absolutely or by way of security) by Procurer to any entity to whom the Procurer is entitled to assign its rights and obligations under the PPA.

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to Rs. __________ (Rs. ______________________ only) and it shall remain in force until __________ [Date to be inserted on the basis of Article 3.1.1 of PPA] with an additional claim period of thirty (30) days thereafter. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if the Procurer serves upon us a written claim or demand.

Signature __________________

Name ____________________

Power of Attorney No_______________

For

____

Banker's Stamp and Full Address.

Dated this ____ day of ____, 20_

10. SCHEDULE 10: SUBSTITUTION RIGHTS OF THE LENDERS

1. Substitution of the Seller

a) Subject to the terms of the PPA, upon occurrence of a Seller Event of Default under the PPA, the Lenders shall, have the right to seek substitution of the Seller by a Selectee for the residual period of the PPA, for the purposes of securing the payments of the Total Debt Amount from the Seller and performing the obligations of the Seller, in accordance with the provisions of this Schedule.

b) The Lenders may seek to exercise right of substitution by an amendment or novation of the PPA and other Project Documents executed between the Procurer and the Seller in favour of the Selectee, the Procurer and the Seller shall cooperate with the Lenders to carry out such substitution.

2. The Procurer Notice of Default

The Procurer shall, simultaneously also issue a copy of the same to the Lenders.

3. Substitution Notice

In the event of failure of the Seller to rectify the Event Of Default giving rise to Preliminary Default Notice, the lenders, upon receipt of a written advice from the procurer confirming such failure, either on their own or through its representative ("the Lenders' Representative") shall be entitled to notify the Procurer and the Seller of the intention of the Lenders to substitute the Seller by the Selectee for the residual period of the PPA (the "Substitution Notice").

4. Omitted

5. Interim operation of Project

a) On receipt of a Substitution Notice, no further action shall be taken by any Party to terminate the PPA, except under and in accordance with the terms of this Schedule 10 of this Agreement.

b) On issue of a Substitution Notice, the Lenders shall have the right to request the Procurer to enter upon and takeover the Project for the interim and till the substitution of the Selectee is complete and to otherwise take all such steps as are necessary for the continued operation and maintenance of the Project, including levy, collection and appropriation of payments thereunder, subject to, the servicing of monies owed in respect of the Total Debt Amount as per the Financing Agreements and the Seller shall completely cooperate in any such takeover of the Project by the Procurer. If the Procurer, at his sole and exclusive discretion agrees to enter upon and takeover the Project, till substitution of the Selectee in accordance with this Agreement, the Procurer shall be compensated for rendering such services in accordance with clause10.1.3 herein.

c) If the Procurer refuses to takeover the Project on request by the Lenders in accordance with clause 5(b) above, the Seller shall have the duty and obligation to

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continue to operate the Project in accordance with the PPA till such time as the Selectee is finally substituted under clause 8.8 hereof.

d) The Lenders and the Procurer shall, simultaneously have the right to commence the process of substitution of the Seller by the Selectee in accordance with these terms and the Seller hereby irrevocably consents to the same.

6. Process of Substitution of Seller

The Lenders' Representative may, on delivery of a Substitution Notice notify the Procurer and the Seller on behalf of all the Lenders about the Lenders' decision to invite and negotiate, at the cost of the Lenders, offers from third parties to act as Selectee, either through private negotiations or public auction and / or a tender process, for the residual period of the PPA. Subject to and upon approval of the Procurer referred to in clause 8.5, such Selectee shall be entitled to receive all the rights of the Seller and shall undertake all the obligations of the Seller under the PPA and other Project Documents executed between the Seller and the Procurers, in accordance with these terms of substitution.

The Lenders and the Seller shall ensure that, upon the Procurer approving the Selectee, the Seller shall transfer absolutely and irrevocably, the ownership of the Project to such Selectee simultaneously with the amendment or novation of the PPA and other Project Documents executed between the Seller and the Procurers in favour of the Selectee as mentioned in clause 1 (b).

7. Modality for Substitution

7.1 Criteria for selection of the Selectee.

The Lenders and / or the Lenders' Representative shall in addition to any other criteria that they may deem fit and necessary, apply the following criteria in the selection of the Selectee:

(a) if the Seller is proposed to be substituted during the Construction Period, the Selectee shall possess the technical and financial capability comparable to that of the seller to perform and discharge all the residual duties, obligations and liabilities of the Seller under the PPA. If the Seller is proposed to be substituted during the Operation Period, this criteria shall not be applicable.

(b) the Selectee shall have the capability and shall unconditionally consent to assume the liability for the payment and discharge of dues, if any, of the Seller to the Procurer under and in accordance with the PPA and also payment of the Total Debt Amount to the Lenders upon terms and conditions as agreed to between the Selectee and the Lenders;

(c) the Selectee shall have not been in breach of any agreement between the Selectee and any Bank or any Lender or between the Selectee and any of the Procurer, involving sums greater than Rupees twenty (20) crores at any time in the last two (2) years as on the date of the substitution of the Seller.

(d) any other appropriate criteria, whereby continuity in the performance of the Selectee's obligations under the PPA is maintained and the security in favour of the Lenders under the Financing Agreements is preserved.

8. Modalities

The following modalities shall be applicable to any substitution of the Seller by the Selectee pursuant to this Agreement:

8.1 The Lenders' Representative shall on behalf of the Lenders propose to the Procurer (the "Proposal") pursuant to sub-clause 8.2 below, the name of the Selectee for acceptance, seeking:

(a) grant of all the rights and obligations under the PPA and the other Project Documents executed between the Procurer and the Seller, to the Selectee (as substitute for the Seller);

(b) amendment of the PPA and the other Project Documents executed between the Procurer and the Seller, to the effect that the aforementioned grant to the Selectee, shall be such that the rights and obligations assumed by the Selectee are on the same terms and conditions for the residual period of the PPA as existed in respect of the Seller under the original PPA and the other Project Documents executed between the Procurer and the Seller; and

(c) the execution of new agreements as necessary, by the proposed Selectee for the residual period of the PPA on the same terms and conditions as are included in this Agreement.

8.2 The Proposal shall contain the particulars and information in respect of the Selectee the data and information as the Procurer may reasonably require. The Procurer may intimate any additional requirement within thirty (30) days of the date of receipt of the Proposal.

8.3 The Proposal shall be accompanied by an unconditional undertaking by the Selectee that it shall, upon approval by the Procurer of the Proposal:

(a) observe, comply, perform and fulfil the terms, conditions and covenants of the PPA and all Project Documents executed between Seller and the Procurer or a new power purchase agreement or respective Project Document (in the case of the novation thereof), which according to the terms therein are required to be observed, complied with, performed and fulfilled by the Seller, as if such Selectee was the Seller originally named under the PPA; or the respective Project Document; and

(b) be liable for and shall assume, discharge and pay the Total Debt Amount or then outstanding dues to the Lenders under and in accordance with the Financing Agreements or in any other manner agreed to by the Lenders and the Procurer as if such Selectee was the Seller originally named under such Financing Agreements.

8.4 At any time prior to taking a decision in respect of the Proposal received under clause 8.1, the Procurer may require the Lender / Lenders' Representative to satisfy it as to the eligibility of the Selectee. The decision of the Procurer as to acceptance or rejection of the Selectee, shall be made reasonably and when made shall be final, conclusive and binding on the Parties.

8.5 The Procurer shall convey his approval or disapproval of such Proposal, , to the Lender / Lender's Representative. Such decision shall be made by the Procurer at his reasonably exercised discretion within twenty one (21) days of:

(a) the date of receipt of the Proposal by the Procurer; or
(b) the date when the last of further and other information and clarifications in respect of any data, particulars or information included in the Proposal requested by the Procurer under clause 8.2 above is received;
whichever is later.

Notwithstanding anything to the contrary mentioned in this Agreement, the approval of the Procurer for the Selectee shall not be withheld in case the Selectee meets the criteria mentioned in Clause 7.1.

8.6 Upon approval of the Proposal and the Selectee by the Procurer, the Selectee mentioned in the Proposal shall become the Selectee hereunder.

8.7 Following the rejection of a Proposal, the Lenders and/or the Lenders' Representative shall have the right to submit a fresh Proposal, proposing another Selectee (if the rejection was on the grounds of an inappropriate third party proposed as Selectee) within sixty (60) days of receipt of communication regarding rejection of the Selectee previously proposed. The provisions of this clause shall apply mutatis mutandis to such fresh Proposal.

8.8 The substitution of the Seller by the Selectee shall be deemed to be complete upon the Selectee executing all necessary documents and writings with or in favour of the Seller, the Procurer and the Lenders so as to give full effect to the terms and conditions of the substitution, subject to which the Selectee has been accepted by the Lenders and the Procurer and upon transfer of ownership and complete possession of the Project by the Procurer or the Seller, as the case may be, to the Selectee. The Procurer shall novate all the Project Documents, which they had entered in to with the Seller in order to make the substitution of the Seller by the Selectee effective. The quantum and manner of payment of the consideration payable by the Selectee to the Seller towards purchase of the Project and assumption of all the rights and obligations of the Seller under the PPA and the Project Documents as mentioned in this Agreement shall be entirely between the Seller, Selectee and the Lenders and the Procurer shall in no way be responsible to bear the same.

8.9 Upon the substitution becoming effective pursuant to sub-clause 8.8 above, all the rights of the Seller under the PPA shall cease to exist:
Provided that, nothing contained in this sub-clause shall prejudice any pending / subsisting claims of the Seller against the Procurer or any claim of the Procurer against the erstwhile Seller or the Selectee.

8.10 The Selectee shall, subject to the terms and conditions of the substitution, have a period of ninety (90) days to rectify any breach and / or default of the Seller subsisting on the date of substitution and required to be rectified and shall incur the liability or consequence on account of any previous breach and / or default of the Seller.

8.11 The decision of the Lenders and the Procurers in the selection of the Selectee shall be final and binding on the Seller and shall be deemed to have been made with the concurrence of the Seller. The Seller expressly waives all rights to object or to challenge such selection and appointment of the Selectee on any ground whatsoever.

8.12 The Lenders shall be solely and exclusively responsible for obtaining any and all consents/approvals or cooperation, which may be required to be obtained from the Seller under this Agreement and the Procurer shall not be liable for the same.

8.13 All actions of the Lenders' Representative hereunder shall be deemed to be on behalf of the Lenders and shall be binding upon them. The Lenders' Representative shall be authorised to receive payment of compensation and any other payments, including the consideration for transfer, if any, in accordance with the Proposal and the Financing Agreements and shall be bound to give valid discharge on behalf of all the Lenders.

9. Seller's Waiver

9.1 The Seller irrevocably agrees and consents (to the extent to which applicable law may require such consent) to any actions of the Lenders, the Lender's Representative and the Procurer or exercise of their rights under and in accordance with these terms.

9.2 The Seller irrevocably agrees and consents (to the extent to which applicable law may require such consents) that from the date specified in clause 8.9, it shall cease to have any rights under the PPA or the Financing Agreements other than those expressly stated therein.

9.3 The Seller warrants and covenants that any agreement entered into by the Seller, in relation to the Project, shall include a legally enforceable clause providing for automatic novation of such agreement in favour of the Selectee, at the option of the Lenders or the Procurer. The Seller further warrants and covenants that, in respect of any agreements which have already been executed in relation to the Project and which lack a legally enforceable clause providing for automatic novation of such agreement, the Seller shall procure an amendment in the concluded agreement to incorporate such clause.

10. Interim Protection Of Service And Preservation Of Security

10.1 Appointment of a Receiver

10.1.1 In every case of the Lenders issuing a Substitution Notice and the Procurer refusing to takeover the Project and the Seller failing to operate the Project in accordance with Clause 5(c) above and the Procurer not electing to act as Receiver as per sub-clause 10.1.1A hereof, the Lenders may institute protective legal proceedings for appointment of a receiver (the "Receiver") to maintain, preserve and protect the assets held as security by the Lenders if such right is granted under the terms of the Financing Agreements.

10.1.1A Provided that in event of the Procurer refusing to take over the Project and the Seller failing to operate the Project in accordance with Clause 5 (c) above, and if the assets of the Project are, in the opinion of the Procurer, necessary and required for the operation and maintenance of the Project, the Procurer shall be entitled to elect to act as the Receiver for the purposes of this Clause and be entitled to maintain, preserve and protect the said assets by engaging an operator/service provider to act on their behalf and the Lenders and Seller hereby consent and agree to the same. Upon the Procurer so intimating the Seller and the Lender's representative their desire to act as Receiver, the Seller and the Lender's representative shall co-operate with the Procurer to facilitate the same.

10.1.2 Upon appointment of the Court appointed Receiver or the Procurer acting as Receiver, all the Receivables received by such Receiver shall be deposited by the Receiver in the bank account jointly designated by the Procurer and the Lenders. The Receiver shall be responsible for protecting the assets in receivership and shall render a true and proper account of the receivership to the lenders in accordance with the terms of its appointment.

10.1.3 When acting as a Receiver or operator in accordance with this clause 10 or clause 5(b), the Procurer shall be entitled to be remunerated for such services as may be determined by Punjab State Electricity Regulatory Commission. Furthermore, when acting as a Receiver, the Procurer shall not be liable to the Lenders, the Lenders' Representative, Seller or any third party for any default under the PPA, damage or loss to the Power Station or for any other reason whatsoever, except for wilful default of the Procurer.

11. Substitution Consideration

11.1 The Lenders and the Procurer shall be entitled to appropriate any consideration received for the substitution of the Seller as hereinabove provided, from the Selectee towards the payment of Lenders' and the Procurer's respective dues, to the exclusion of the Seller.

11.2 The Seller shall be deemed to have nominated, constitutes and appoints the Lenders' Representative as its constituted attorney for doing all acts, deeds and things as may be required to be done for the substitution of the Seller by the Selectee pursuant to these terms.

12. Change in Lenders:

The Parties hereto acknowledge that during the subsistence of the PPA, it is possible that any Lender may cease to remain as a Lender by reason of repayment of the debt or otherwise. Further it may possible that any Lender may be substituted or a new Lender may be added. In the event of any Lender ceasing to be a party to the Financing Agreement, the term and conditions as prescribed in this Schedule shall cease to automatically apply to such Lender. Further, upon any entity being added as a Lender and in the event such entity is given the right to substitute the Seller under the Financing Agreement and then the contents of this Schedule shall be applicable to the exercise of such right by the said new entity.

11. SCHEDULE 11: ESTIMATE OF CAPITAL COST AS APPROVED BY PSERC VIDE ORDERS DATED 29.04.2008 & 06.08.2008 AND MODIFIED AS PER APPELLATE TRIBUNAL ORDER DATED 08.04.2009)

Sr. No.	Item	Estimates of Capital Cost accepted by PSERC and modified as per Appellate Tribunal order dated 08.04.2009 (in Rs. Crore)
1	Land	109.35
2	Rehabilitation & Resettlement	5.00
3	Preliminary Expenses	0.25
4	Boiler Turbine Generator Package	1070.58 (See Notes 5a & 5b)
5	Balance Of Plant	955.00 (See Notes 6a & 6b)
6	Engineering , Erection , Civil Works	Included in BTG BOP contracts
7	Taxes and Duties	Included in BTG BOP contracts
8	Recommended spares for BTG and BOP package	39.65
9	Non EPC	86.00
10	Site grading and Ash Pond	49.00
11	Start-up Expenses	15.00
12	Power and Water for Construction	12.00
13	Consultancy and Engineering	7.50
14	Pre-operative Expenses	50.00
15	Operator Training & Mobilisation	5.00
16	Insurance	11.44
17	Capital Cost excluding IDC , Financing Charges & Contingency	2415.77
18	Interest During Construction (IDC)	365.19 (See Notes 3 & 4)
19	Financing Charges	70.00

20	Contingency	66.85
21	Estimated Capital Cost excluding WCM	2917.81
22	Working Capital Margin(WCM)	46.00
23	Estimated Capital Cost	2963.81

Notes :

1.Estimated Costs against Sr. No. 1,2, 3,4,5,9,13,15&16 are as per PSERC orders dated 29.04.2008 & 06.08.2008.

2.Estimated Costs against Sr. No.8,10,11,12,14,18,19,20&22 are as per PSERC orders dated 29.04.2008 & 06.08.2008 and modified as per the Appellate Tribunal order dated 08.04.2009.

3. Interest During Construction will be at actuals, based on phasing of expenditure consistent with the finalized packages with various contractors.

4. IDC at actuals as per Financing Agreements will be considered for completed Capital Cost determination.

5a. BTG contract price will be subject to price variation formulae for supply price component , freight charges and erection testing & commissioning as indicated in the LOI dated 12 November 2007 issued to M/s BHEL.

5b. Contract price in the order placed with BHEL for the BTG package is payable in Indian Rupee only and the exchange rates for the Euro and US Dollar will be applicable on the date of payment. The BHEL contract price is based on the following exchange rates :

- US $ = Rs.41.00
- Euro =Rs.57.50

6a. The BOP contract price of Rs.955 Crore is for execution of the contract with 'Induced Draft Cooling Towers'. If Natural Draft Cooling Towers are provided instead of Induced Draft Cooling Towers the increase in the BOP contract price will be Rs 50 crore for both the Units.

6b. BOP contract price will be subject to change as per any variation in cement and steel prices at the time of supply , upto the estimated quantities , as indicated in the LOI dated 14 April 2008 issued to M/s Punj Lloyd Ltd.

SCHEDULE 12: CALCULATION OF 'X' DAYS

(Refer Article 11.5.7)

Percentage of Monthly Invoice which is the subject of default under Article 11.4 as notified in the Notice (issued under Article 11.5.2) relatable to the present occurrence	Number of times a Notice has been issued under Article 11.5.2 to the defaulting Procurer prior to present occurrence			
	1st time	2nd time	3rd time	4th time and onwards
Less than 25%	x = 20 days	x = 25 days	x = 40 days	x = 60 days
25% to 30%	x = 20 days	x = 30 days	x = 45 days	x = 65 days
More than 30% to 35%	x = 20 days	x = 35 days	x = 50 days	x = 70 days
More than 35% to 40%	x = 20 days	x = 40 days	x = 55 days	x = 75 days
More than 40%	x = 20 days	x = 45 days	x = 60 days	x =90 days

BEFORE THE HON'BLE PUNJAB STATE ELECTRICITY REGULATORY COMMISSION

Petition No. _____ of 2017

IN THE MATTER OF:

GVK Power (Goindwal Sahib) Limited ...Petitioner

Versus

Punjab State Power Corporation Limited ...Respondent

INDEX

GVK Power (Goindwal Sahib) Limited/Petitioner

Through:

J. Sagar Associates
Advocates for the Petitioner
B-303, Ansal Plaza, HUDCO Place
August Kranti Marg
New Delhi 110049

Place:
Date: 29/12/2017

ANNEXURE P-7

Before the Appellate Tribunal for Electricity (Appellate Jurisdiction)

Appeal No. 70 of 2009

Dated: 13 -01-2011

Present: Hon'ble Mr. Justice M. Karpaga Vinayagam, Chairperson
Hon'ble Mr. Rakesh Nath, Technical Member

In the matter of:

GVK (GOINDWAL SAHIB) LIMITED
PAIGAH HOUSE, 156-159
SARDAR PATEL ROAD
SECUNDERABAD-500 003
ANDHRA PRADESH. ... Appellant(s)

Versus

1. **Punjab State Electricity Regulatory Commission**
   SCO 220-221, Sector 34A
   Chandigarh.

2. **Punjab State Electricity Board**
   The Mall, Patiala-147 001
   Punjab. ... Respondents

Counsel for Appellant(s)	**Mr. M.G.Ramachandran** **Mr. Anand K. Ganesan**
Counsel for the Respondent(s):	**Mr. Avijit Kr. Lala for R.1** **Mr. Jayshree Anand for R.2** **Mr. J.C. Shukla (Registrar, PSERC)**

JUDGMENT

PER HON'BLE JUSTICE M. KARPAGA VINAYAGAM, CHAIRPERSON

M/s GVK Power (Goindwal Sahib) Limited is the Appellant. The Punjab State Commission is the 1st Respondent. Punjab State Electricity Board is the 2nd Respondent.

2. Aggrieved by the impugned order dated 6.3.2009, passed by the Punjab State Commission in the petition filed by the Punjab State Electricity Board for approval of the amended and restated Power Purchase Agreement entered into between the Appellant and the Respondents for the generation and sale of electricity by the Appellant to the Respondents, the Appellant has filed this Appeal.

3. The necessary facts for the disposal of this Appeal are as follows:

(i) M/s GVK Power Limited, the Appellant, is a generating company setting up a Thermal Power Project at Goindwal Sahib to supply electricity to the Electricity Board.

(ii) In the year 1996, the Government of Punjab formulated an international competitive bidding process for inviting proposal and selection of competitors to establish a Coal-based Thermal Power Generating Project at Goindwal Sahib in the State of Punjab.

(iii) In the process of the bidding, the Appellant was selected to bid, own and operate the Coal-based Generation Station at Goindwal Sahib for the sale of electricity to Punjab State Electricity Board. Between the Appellant and the Electricity Board,

Power Purchase Agreement was entered into on 17.4.2000.

(iv) Subsequent to the above, the negotiations were held by the Electricity Board with the Appellants whereby the Electricity Board sought better norms and Tariff for the purchase of electricity from the above project, consistent with the parameters notified by the Central Commission under its Tariff Regulation. In pursuance of the negotiations in November 3rd, 2006, the Appellants and the Respondents agreed to fresh norms and parameters which, in overall terms, substantially reduced the Tariff for the generation of electricity from the above Generating Station. Accordingly, the parties agreed to initial an amended and restated Power

Purchase Agreement in the interest of the consumers of the Electricity Board.

(v) In terms of the Section 86(1)(b) of the Act of 2003, the amended PPA, finalized between the Appellants and the Respondents has to get the approval of the State Commission. Therefore, the Electricity Board filed the petition before the said Commission being No.3 of 2007 on 20.3.2007 for the approval of the said amended and restated PPA.

(vi) The Appellants also filed a separate petition being No.4 of 2007 on 23.3.2007 before the State Commission for in-principle approval of the Capital Cost of the Project and Financing Plan of the Project. The State Commission decided the said petition No.4 of 2007 filed by the Appellants

first in regard to in-principle approval to the Estimated Project Cost of the Power Project.

(vii) In the said Order, the State Commission approved the Capital Cost of Rs.2,622.487 crores as against the proposed Capital Cost of Rs.2,987.86 crores by the Appellant. Aggrieved by the said order dated 29.4.2008, the Appellants filed the Appeal being Appeal No.104 of 2008 before the Tribunal on 30.6.2008.

(viii) In the meantime, the State Commission disposed of the Petition No.3/2007 filed by the Electricity Board on 20.03.2007 in regard to the approval of the amended and re-stated PPA between the Electricity Board and the Appellants on 6.3.2009 giving the following direction to both the parties:

(a) To modify the amended and re-stated PPA in line with the standard bidding documents

instead of examining the proposal contained in the amended PPA on merits.

(b) As regards the coal price, the Appellants should initiate a competitive bidding for selection of the contractor and coal cost determination as per the competitive bidding for development of the mine or coal price as stated in the amended and re-stated PPA whichever is lower shall be applicable to the coal price.

(c) The amended and re-stated PPA has got to be executed totally as per the draft PPA and as per the standard bid documents forming part of the guidelines notified by the Government of India under Section 63 of the Act, 2003. The provisions relating to the Performance Guarantee, Liquidated Damages, Performance

Test, appointment of Engineers and various other terms should be brought in line with the draft PPA forming part of the guidelines under Section 63 of the Act, 2003 instead of those incorporated in the amended and re-stated PPA.

4. Challenging this order giving the directions referred to above, the Appellant has filed the present Appeal No.70 of 2009 on 25.3.2009.

5. During the pendency of this Appeal, this Tribunal passed interim order, as requested by the parties on 19.5.2009 allowing the Appellant to execute PPA as per the order of the State Commission without prejudice to the Appellant's rights in this Appeal to enable the implementation of the project subject to the outcome of this Appeal. In pursuance of this order, the Appellant has proceeded to implement the Project.

6. In the meantime, the Appeal filed by the Appellant being Appeal No.104 of 2008 was allowed by judgment dated 8.4.2009 in favour of the Appellant directing the in-principle approval of the Capital Cost to be allowed.

7. In this Appeal, the basic submissions of the Appellant challenging the order impugned are as follows:

(i) There is no justification for the State Commission to have directed the Appellant to undertake competitive bidding process for selection of Developers or Contractors for mining operation keeping the Coal India price minus discount of 15%/12% as the ceiling and such a course is impracticable and would lead to anomaly besides being contrary to the scheme of the development of Coal blocks.

(ii) There is no justification for directing the Appellant to revise the amended and re-stated

PPA as per the standard bid documents including and, in particular, on various norms contained in the standard bidding documents to a competitive bidding which had taken place prior to the issue of the standard bidding document.

(iii) Though the challenge in the Appeal in regard to the direction to follow the standard bidding documents in all aspects, the Appellant is restricting the challenge to the following 3 aspects alone as the Project is being implemented in pursuance of the interim order:

(a) Performance Guarantee;

(b) Liquidated Damages;

(c) Coal Cost;

8. In reply to the above, the learned counsel for the Respondents submitted that the order impugned is well justified in view of the fact that the State Commission has

followed the electricity Tariff Policy issued by the Central Government dated 6.1.2006, especially when Section 86(4) of the Act provides that the State Commission shall be guided by the Tariff Policy in discharge of its functions under the Act. It is also submitted that the Central Government after detailed and long consultation with stake holders have notified standard documents including the standard PPA which are the accepted benchmark in the terms of the standard PPA often designed to ensure efficiency and economical operation of the Generating Station and any deviation from the standard documents would defeat the guidelines issued by the Central Government to the Tariff Policy.

9. In the light of the above rival contentions, the following Questions would arise for consideration:

I. Whether in the facts and circumstances of the case, the State Commission was right in directing the Appellant and the Electricity Board to modify the amended and re-

stated PPA agreed to and initialed between the parties to be in line with the Standard Bidding Documents issued by the government of India, when the process for International Competitive Bidding was formulated and concluded much prior to the issue of the Standard Bidding Documents by the Government of India?

II. Whether the State Commission in exercise of its powers under Section 86(i)(b) of the Act, 2003 can mechanically direct the Electricity Board to modify the amended and re-stated PPA concluded between the parties to be in line with the Standard Bidding Documents, instead of examining the proposal contained in the amended and re-stated PPA on merits?

10. On these questions, elaborate arguments were advanced by the learned Counsel for the parties.

11. At the outset, is to be stated that though the application originally had been filed by the Electricity Board, the 2nd Respondent herein, in Petition No.3 of 2007 on 20.3.2007 for approval of the amended and restated PPA and the same had been dismissed by the State Commission with the direction by order dated 6.3.2009 directing the parties to modify the amended and restated PPA in line with the Standard Bidding Documents and the amended and restated PPA to be executed totally as per the PPA of the Standard Bidding Documents, the Electricity Board, the 2nd Respondent has not chosen to file any Appeal as against the order dated 6.3.2009 on the other hand, GVK Power Limited, the Appellant herein, had chosen to file the Appeal challenging the said order dated 6.3.2009 on the ground that such a direction is not valid in law. On the contrary the Electricity Board, the 2nd Respondent had not chosen to support the claim of the

Appellant and filed the reply in justification of the impugned order praying for the dismissal of the Appeal.

12. Bearing this fact in our mind, let us analyse the Grounds of Appeal urged by the learned Counsel for the Appellant. As pointed out by the Appellant, the Appellant had restricted their contentions to the 3 aspects, alone i.e. (i) Performance Guarantee; (ii) Liquidated Damages; and (iii) Coal Costs, and also to the principal issue of a decision of the State Commission to incorporate the terms of the Standard Bidding Documents and the Power Purchase Agreement.

13. Let us first refer to the powers and duties of the State Commission with reference to the approval of the Power Purchase Agreements. The Central Government in compliance with Section 3(1) of the Act 2003 has notified

the Tariff Policy by the Notification dated 6.1.2006. In line with the objective of the Act of promoting competition in different segments of the Electricity industries, Tariff Policy notified provided that all future procurement of power by Distribution Licensees shall be through competitive route. That apart, the Central Government, in exercise of its power under section 63 of the Act 2003, has notified the Guidelines for determination of Tariff by bidding process for procurement of power by Distribution Licensees. The Central Government after detailed consultations with the stake holders have notified the Standard Documents including the PPA which are the accepted Bench Mark in the sector. Any deviation from the Standard Documents requires prior approval of the Appropriate Commission.

14. Section 86(4) of the Act provides that the State Commission shall be guided by the Tariff Policy in discharge of its functions under the Act. Section 86(1)(b) of the Act entrusts the State Commission with the power to regulate electricity purchase and procurement process of the Distribution Licensees including the price at which electricity shall be procured from Generating Companies. The power to regulate procurement process of a Distribution Licensee is wide ranging power. There is no provision in the Act which overrides the said powers of the State Commission.

15. The word "regulate" has wide import. It carries with it the powers to reject, modify, alter or vary the terms of the Agreement. The scope and ambit of the word "regulate" has found conclusive interpretation by the Hon'ble Supreme Court. In the case of Cellular Operators

Association Vs. Union of India – AIR 2003 SC 899, the Hon'ble Supreme Court has held as follows:

> ***"The regulatory bodies exercises wide jurisdiction. They lay down the law. They may prosecute. They may punish. Intrinsically, they act like an internal audit. They may fix the price, they may fix the area of operation and so on and so forth. While doing so, they may, as in the present case, interfere with the existing rights of the licensees."***

16. From the above observations, it is clear that the scope of approval under Section 86(1)(b) of the Act includes the power to reject, modify, alter or vary the terms of the agreements for purchase of power and to further direct the distribution licensee to re-write the terms found reasonable by the State Commission.

17. In view of the above, the powers of the State Commission under the Act to take measures conducive to the development of the electricity industry, promoting competition, protecting the interest of the consumers and the supply of electricity to all areas cannot be questioned.

18. In the present case, the Memorandum of Understanding was entered into between the Appellant GVK Power Limited and the Respondent Punjab State Electricity Board on 8.2.2006. In the said Memorandum of Understanding, both the parties had expressly agreed to enter into an Amended and Restated PPA in line with the draft Power Purchase Agreement published by the Ministry of Power to the extent applicable. It is also to be noticed that the parties in the said Memorandum of Understanding agreed to limit the value of the liquidated

damages as per the final Guidelines of the Government of India.

19. The relevant clause of the Memorandum of Understanding would clearly indicate that the Electricity Board shall have the option to terminate the Agreement for breach on the part of the company and claim an amount equivalent to six months of the billing, at the approved quarter Tariff and energy corresponding to 80% of the contracted capacity, as liquidated damages. Further, the Company shall not sell power to any third party till such termination payment is made to the Electricity Board. Since these are the conditions agreed to by the parties as per the Standard Draft Bid Documents, the Liquidated Damages shall be limited to the value as per the final Guidelines of the Government of India.

20. Admittedly the standard bidding documents and PPA issued by Government of India are for procurement of power through tariff based competition bidding in terms of Section 63. However, both the parties in this case mutually agreed to follow the PPA draft to the extent applicable for Goindwal Sahib Project even though the procurement is in terms of Section 62 where the tariff is to be determined by the State Commission. The Appellant having agreed to enter into an Amended and Restated PPA in line with the draft Power Purchase Agreement published by the Ministry of Power cannot retract and state that the Standard PPA is not applicable to their case.

21. The State Commission while examining the Amended and Restated PPA for considering the prayer made by the Electricity Board in Petition No.3/2007 for the approval, found that there were substantial deviations introduced by

the parties from the provisions of the Standard PPA with regard to the Operating Standards of the Project and other financial terms. The Amended and Restated PPA incorporated all the 18 Articles of the Standard PPA with substantial deviations resulting in the Articles losing their sanctity of purpose and they no longer remain equitable. According to the State Commission, in the impugned order, the Appellant and the Electricity Board-Respondent were unable to provide any reasonable justification for such deviation introduced by them in the Amended and Restated PPA. As a matter of fact, admittedly, both the parties had agreed to adopt the terms and conditions of the draft Power Purchase Agreement published by the Ministry of Power as part of the Standard Bidding Documents. Therefore, the conclusion arrived at by the State Commission with reference to the substantial

deviations found in the Amended and Restated PPA is perfectly justified.

22. Let us now discuss over the three aspects which are referred to earlier as urged by the Appellant:

(i) <u>Performance Guarantee</u>:

The Standard PPA provides for Performance Guarantee in the form of Bank Guarantee at the rate of Rs.7.5 lakhs per MW. The Amended and Restated PPA, on the contrary, provides for a Security Deposit in the form of Bank Guarantee of Rs.3.9 crores but the parameter provided under the Standard PPA, the Performance Guarantee comes to Rs.40.5 crores. Thus, it is apparent that the Security Deposit agreed between the parties under the Amended and Restated PPA is substantially poor. It is true that such a deviation could be justified only on the ground that

there was a higher risk associated with the developer in developing the project. But in this case, the facts and records show that the risk of the Appellant in the matter of land acquisition, obtaining clearances and fuel linkage, etc; was minimal and mostly achieved even prior to entering into the Amended and Restated PPA with the support of the State Government. Therefore, this did not constitute a valid ground for deviating from the Standard PPA clause.

(ii) <u>Liquidated Damages</u>:

The next aspect is Liquidated Damages. The Standard PPA provides that the Liquidated Damages for the first 60 days will be calculated at the rate of Rs.10,000/MW/day. It is also noticed that the rate provided after expiry of 60 days in the Standard PPA is Rs.15,000/MW/day. But Amended and Restated PPA provides that

the Liquidated Damages for the first 60 days will be calculated at the rate of Rs.4,000/MW/day. After expiry of 60 days, for calculating the Liquidated Damages will be enhanced to Rs.5,000/MW/day. Thus, the Liquidated Damages provided under the Amended and Restated PPA is insufficient to compensate loss which may be suffered by the Electricity Board. Further, the Liquidated Damage of Rs.78 lakhs is substantially low and does not provide adequate relief to the Electricity Board for the default of the Appellant.

If the said amount is compared with the Liquidated Damages as provided in the Standard PPA, the Liquidated Damages for the first 270 MW in the first month will come out to

Rs.8.1 crores as compared to Rs.78 lakhs as agreed between the parties in the Amended and Restated PPA. Therefore, the State Commission did not find justification for taking into account the inadequate amount of Liquidated Damages agreed between the parties. Therefore, the State Commission directed that the Liquidated Damages should be amended to be in accordance with the corresponding provisions of the Standard PPA.

(iii) Coal Cost:

The 3rd aspect relates to Coal Cost. It cannot be debated that the State Commission has been entrusted with the duty to protect the interest of the consumers. The competitive bid process was directed to ensure the discovery of the most competitive coal

prices in order to ensure cheap power to consumers. The cost of coal being a pass-through cost to the consumers has to be determined on an actual basis.

Though the fuel charges were intended under the Standard PPA to be linked to the cost of coal, it should not exceed the prevailing cost for the captive coal mines of the Electricity Board in Pachhwara. This does not mean that the energy charged had to be fixed at Pachhwara level automatically.

Energy charges are chargeable at actual cost of fuel. Hence, the actual coal cost for the project needs to be determined and the energy charges for the project had to be fixed on the basis of such actual cost.

23. In view of the above reasonings the State Commission had directed the Appellant to determine the actual coal cost on a competitive basis. The Electricity Board and its consumers are entitled as a matter of right to get the best value of the coal mine from the Tokisund coal block because this coal block was allotted to the Appellant exclusively for the Project at the request of the Electricity Board as well as the Government of Punjab.

24. According to the State Commission, in case the Appellant, GVK Power Limited wants to develop and operate the coal mines itself, the Appellant is free to match the lowest bid received in the bidding process and can reserve its rights for developing and operating the captive coal mines at such lowest bid received. Unless the Appellant undertakes the process of competitive bidding, the competitive rate for developing the coal mine will not be

discovered. The State Commission and its consumers are entitled to get the coal at the lowest rate possible, since the actual price of coal is a complete pass through to the consumers.

25. It is contended by the Appellant that the coal brought from different coal blocks will mix up thereby causing difficulty in determining the price of coal mined from separate blocks. This contention has no merit. The Appellant will always be aware of the coal received from each mine and can accordingly make payment as per the coal received from each mine. The payment for the coal has to be done on the basis of the quantum of coal sourced from each coal block and not where the coal is unloaded. Therefore, the mixing up of the coals from the different mines is irrelevant and inconsequential for determining the coal prices. In the power sector, it is an accepted practice

for thermal Power Plants to have coal linkages from more than one coal block.

26. Learned Counsel for the Appellant has argued that if the Appellant proceeds with competitive bidding for selection of coal mine developer, the developer may quote price of coal with escalable factors and the price may be higher than the reference coal price in future. We feel that if the competitive bidding is done on the same basis as applicable to Pachhwara captive coal mine of PSEB i.e. coal price based on percentage of discount on the Coal India Ltd. price from time to time, for like to like comparison with the beach mark price of Pachhwara mine. Linking the price to CIL Ltd. Price will also take care of future price escalation.

27. Learned Counsel for the Appellant has also informed that out of two coal blocks allotted to the Appellant one

block namely Tokisud North has been allotted exclusively to the Appellant's project but the second coal block namely Saregerha block has been allotted jointly with another developer where the Appellant has shared only to extent of 45%. The balance 55% has been allotted to Arcelor Mittal Steel Company. He has argued that International Competitive Bidding as directed by the State Commission may not be acceptable to the other developer. We find that this aspect has not been dealt with in the Impugned Order where reference has been made only to one coal block. Perhaps allotment of the second coal mine is a subsequent event. We give liberty to the Appellant to approach the State Commission if they experience any problem in development of the coal block through International Competitive Bidding as directed by the State Commission.

28. In view of the discussion made in the above paragraphs, the findings rendered by the State

Commission with reference to the issues referred to above, as pointed out by the Respondent Electricity Board itself, does not suffer from any infirmity.

29. <u>Summary of findings</u>:

<u>(i) Amended and restated PPA in line with standard PPA issued by the Government of India:</u>

The first issue is regarding direction of the State Commission to modify the amended and restated PPA agreed and initialed between the Appellant and Respondent No. 2 to be in line with the standard PPA issued by the Government of India. Section 86(1)(b) of the Act entrusts the State Commission with the power to regulate electricity purchase and procurement process of the distribution licensee including the price at which electricity shall be procured from the generating companies. The power to regulate

procurement process of a distribution licensee is wide ranging power. The approval under Section 86(1)(b) of the Act includes the power to reject, modify or vary the terms of agreement for purchase of power and to direct the distribution licensee to revise the terms of PPA. In the present case, the memorandum of understanding entered between the parties on 8.8.2006 expressly provided for amended and restated PPA in line with the draft PPA of the Ministry of Power to the extent applicable. Admittedly, the standard bidding documents and PPA of the Government of India are for procurement of power through tariff based competitive bidding in terms of Section 63 of the 2003 Act. However, both the parties in this case mutually agreed to follow the standard PPA to the extent applicable. The Appellant having agreed to

enter into an amended and restated PPA in line with the draft PPA of Ministry of Power can not retract and state that standard PPA is not applicable in their case.

ii) <u>Performance Guarantee</u>

The performance guarantee agreed in the amended and restated PPA is much lower than that is provided in the standard PPA issued by the Government of India. The facts and record show that risk of the Appellant in the matter of land acquisition, obtaining clearance, fuel linkages, etc., was minimal and mostly achieved even prior to entering into amended and restated PPA with the support of the State Government. Therefore, it did not construe a valid

ground for deviating from the standard PPA clause.

iii) <u>Liquidated Damages</u>

The liquidated damages provided in the amended and restated PPA are much lower than that is provided in the standard PPA. The liquidated damages as provided in the amended and restated agreement do not provide adequate relief to the Electricity Board for the default of the Appellant.

iv) <u>Coal Cost</u>

The State Commission has directed Respondent No. 2 to go through the competitive bid process for development of coal block to ensure discovery of most

competitive coal price in order to ensure cheap power to the consumers. According to the State Commission in case the Appellant wants to develop the coal mine itself, the Appellant is free to do so by matching lowest bid received in the bidding process.

The Appellant has pointed out difficulty in determining the price if coal is received from two separate coal blocks. This contention also has no merit as payment of coal has to be done on the quantum of coal sourced from each coal block. It is quite normal for thermal power plants to have coal linkages from more than one coal block.

The learned counsel for the Appellant expressed difficulty in development of Saragerha Coal block as per the directions of the State Commission as this block has been allotted to the Appellant jointly with another developer who has a share of 55% in the coal block. We find that this aspect has not been dealt with in the impugned order. Perhaps allotment of the second coal block is a subsequent event. We give liberty to the Appellant to approach the State Commission if they experience any problem in development of Saragerha coal block through competitive bidding as directed by the State Commission.

30.. In view of our finding referred to above, we conclude that there is no merit in the Appeal. Hence the Appeal is dismissed. No order as to costs.

(Rakesh Nath) (Justice M. Karpaga Vinayagam)
Technical Member Chairperson

Dated: 13 -01-2011

REPORTABLE/NON-REPORTABLE

ANNEXURE P-8

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION
SCO NO. 220-221, SECTOR 34-A, CHANDIGARH

Petition No.33 of 2015

In the matter of : Petition under Section 86 of the Electricity Act, 2003 and Articles 12, 13 and 17 of the Amended and Restated Power Purchase Agreement dated 26.05.2009 executed between GVK Power (Goindwal Sahib) Limited and Punjab State Power Corporation Limited (formerly known as Punjab State Electricity Board) for declaration of the occurrence of Change in Law and Force Majeure events

AND

In the matter of: GVK Power (Goindwal Sahib) Limited, Paigah House, 156-159, Sardar Patel Road, Secunderabad-500003, Andhra Pradesh

Versus

Punjab State Power Corporation Limited, T-8, Thermal Design Complex, PSPCL, Patiala-147001, Punjab

To

1. Shri Amit Kapur Advocate,
   J.Sagar Associates,
   B-303, 3rd Floor, Ansal Plaza,
   Hudco Place, August Kranti Marg,
   New Delhi-110049
   Mobile: 9818644755

2. M/s GVK Power (Goindwal Sahib) Limited,
   Paigah House, 156-159, Sardar Patel Road,
   Secunderabad-500003,
   Andhra Pradesh.

3. Shri Oliver Tyagi,
   GVK Power (Goindwal Sahib) Ltd.
   SCO 1, Second Floor, Sector 17-E,
   Chandigarh-160017.
   Phone: 0172 2700264

4. Chief Engineer/ARR & TR,
Punjab State Power Corporation Limited,
Shed No.F-4, Shakti Vihar,
Patiala.

No.PSERC/Reg / 4692/95

Dated: 12/8/15

A copy of the Order dated 12.08.2015, passed by the Commission, in Petition No. 65 of 2013 and Petition No. 33 of 2015, is enclosed herewith.

DA/As above.

Registrar

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION
SCO NO. 220-221, SECTOR 34-A, CHANDIGARH

Date of hearing: 11.08.2015
Date of Order: 12.08.2015

Present: Smt. Romila Dubey, Chairperson
Shri Gurinder Jit Singh, Member

Petition No.65 of 2013

In the matter of : Petition under Section 86 (1) (a), (b) and (f) and other applicable provisions of the Electricity Act, 2003 for adjudication of the disputes and for directions - Power Purchase Agreement for purchase of power from 2 x 250 MW (+20%) Goindwal Sahib Thermal Power Plant at Goindwal Sahib, Punjab.

AND

In the matter of: GVK Power (Goindwal Sahib) Limited, Paigah House, 156-159, Sardar Patel Road, Secunderabad-540003.

-------Petitioner

Versus

Punjab State Power Corporation Limited, The Mall, Patiala

-------Respondent

Petition No.33 of 2015

In the matter of : Petition under Section 86 of the Electricity Act, 2003 and Articles 12, 13 and 17 of the Amended and Restated Power Purchase Agreement dated 26.05.2009 executed between GVK Power (Goindwal Sahib) Limited and Punjab State Power Corporation Limited (formerly known as Punjab State Electricity Board) for declaration of the occurrence of Change in Law and Force Majeure events.

AND

In the matter of: GVK Power (Goindwal Sahib) Limited, Paigah House, 156-159, Sardar Patel Road, Secunderabad-500003, Andhra Pradesh

------- Petitioner

Versus

Punjab State Power Corporation Limited, T-8, Thermal Design Complex, PSPCL, Patiala-147001, Punjab

-------Respondent

For petitioner: Shri Amit Kapoor, Advocate
Shri Vishrov Mukerjee, Advocate
Shri T.V.Bhaskar, Advocate,
Shri M. Ramamurty
Shri Bhavani Shankar,
Shri Oliver Tyagi

For PSPCL: Ms. Suparna Srivastava, Advocate
Shri J.P.S.Trehan, SE/TR-2
Shri D.S.Sidhu, Addl.SE/TR-5
Shri Kewal Singh, Sr.XEN

ORDER

GVK Power (Goindwal Sahib) Limited filed Petition No.65 of 2013 under Section 86 (1) (a), (b) and (f) and other applicable provisions of The Electricity Act, 2003 for adjudication of the disputes and for directions. It was submitted that disputes have arisen between the petitioner and PSPCL about the PPA on rejection of the requests of the petitioner by PSPCL for extension of SCOD. It was prayed to:-

(a) direct the extension of the SCOD for completion and commercial operation of the project for a period of 9 months in the case of Unit 1 and a further period of 6 months for Unit 2 to be calculated from the closure of the Force Majeure events, namely approval of railway drawings both in regard to Power Project and in regard to coal mine siding and availability of land to enter upon and commence mining operations.

(b) Pass any such further order or orders as this Commission may deem fit and proper in the circumstances of the case.

From the perusal of the petition, it was noted that grant of some approvals by Railway were still pending and handing over of some forest land by Forest Department to the petitioner's company was yet to take place, after which the mine (Tokisud North Block) opening could be taken up; after completion of formalities for tree-felling etc. The parties were directed vide Order dated 21.01.2014 to file their responses by

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25.02.2014. The petition was listed for admission on 04.03.2014. On the request of both parties for granting extension in time to file responses, the hearing for admission was re-scheduled to 25.03.2014. PSPCL filed reply on the issue of admissibility and on merit on 24.03.2014. The petitioner submitted that the alleged Force-Majeure events shall take more time to be over and prayed for adjournments of 90 days and then for further 45 days vide letters dated 18.03.2015 and 21.05.2015.

It was submitted during hearing on 15.07.2015 that all the Force Majeure events have ended on 09.07.2015 and as such, the petition was mature to be admitted. The petitioner was directed vide Order dated 16.07.2014 to file evidentry proof of end of the Force-Majeure events in detail with supporting documents / record by 01.08.2014. After hearing the counsels of the petitioner and PSPCL on 12.08.2014, the Commission directed the petitioner to file its written arguments by 25.08.2014 with copy to PSPCL. PSPCL was directed to file its written arguments by 12.09.2014. Order was reserved to decide the matter for admission of the petition. The petitioner and PSPCL filed their written submissions on 26.08.2014 and 11.09.2014.

Meanwhile the petitioner filed Interlocutory Application on 08.09.2014 for grant of Interim Relief as under:-

(a) to direct the Respondent / PSPCL not to take any coercive steps to recover the Liquidated Damages imposed by it vide its letter dated 14.05.2014.

(b) to direct the Respondent not to take any coercive steps under Article 14 of the Restated PPA including termination of Restated PPA pending adjudication of the Petition for extension of SCOD;

(c) to grant ex-parte ad-interim relief prayed in para (a) and (b) above; and

(d) to pass such other and further reliefs as the Commission deems just and proper in the nature and circumstances of the present case.

Keeping in view the facts and circumstances of the case and considering the submissions of the parties, the Commission admitted the Petition and IA vide Order dated 29.09.2014 and directed PSPCL to file its reply to IA.

The parties were heard at length on 29.10.2014 on issue of invocation of Bank Guarantee furnished by the petitioner. After hearing the parties, the Commission stayed the invocation and encashment of Bank Guarantee for recovering the Liquidated Damages on account of delay in achieving SCOD as per PPA imposed by PSPCL vide letter dated 14.05.2014. The order of stay was extended from hearing to hearing against Notice dated 14.05.2014 for 1st Unit and against Notice dated 14.11.2014 for the second Unit of the Project, against the delay in SCOD and consequential liquidated damages.

The petitioner filed Application dated 11.05.2015 placing on record subsequent events submitting that the project was ready for commissioning, but for certain events that have occurred after 01.08.2014 causing further delay in SCOD. The petitioner submitted that judgment dated 25.08.2014 of Hon'ble Supreme Court regarding de-allocation of the Coal Blocks, consequential Order dated 29.09.2014 vide which Hon'ble Supreme Court cancelled allocation of 204 Coal Blocks and all captive coal blocks including Tokisud North Coal Block and Saregarah Coal Block allocated to GVK Power (Goindwal Sahib) Limited and the other subsequent events e.g. the Coal Mines (Special Provisions) First Ordinance, 2014 dated 21.10.2014 and Second Ordinance dated 26.12.2014 and 'The Coal Mines (Special Provisions) Act, 2015 notified on 30.03.2015 repealing the above Ordinances, are events that have effected the SCOD. The petitioner further submitted that bid for Tokisud Coal Block has been unsuccessful and on losing the bid, the project was left without any coal linkage, due to these alleged Change-in-Law / Force-Majeure Events. The prayer of the petitioner vide this Application is to:

(a) Grant extension of SCOD pending adjudication of the Change in Law Petition and till such time an alternative arrangement for procurement of fuel is in place; and

(b) Extend the stay granted vide Order dated 22.04.2015 in I.A.No.03 of 2015 on the invocation and encashment of the

Bank Guarantee against the Notices of the Respondent dated 14.05.2014 and 14.11.2014, until the Change in Law Petition is decided by this Commission.

(c) Pass such further orders as this Commission deems fit in the interest of justice.

This Application in Petition No.65 of 2013 was admitted and PSPCL was directed to file reply vide Order dated 13.05.2015. PSPCL filed reply during hearing on 07.07.2015. GVK prayed for time to file rejoinder to the reply of PSPCL. GVK has filed rejoinder dated 24.07.2015.

The petitioner had also filed another petition on 25.05.2015 being Petition No.33 of 2015 under Section 86 of The Electricity Act, 2003 and Articles 12, 13 and 17 of the Amended and Restated Power Purchase Agreement dated 26.05.2009 executed between GVK Power (Goindwal Sahib) Limited and erstwhile Punjab State Electricity Board (now Punjab State Power Corporation Limited) and praying to the Commission to:

(a) Declare that the Cancellation of the Coal Blocks pursuant to the judgment of the Hon'ble Supreme Court dated 25.08.2014 and Order dated 24.09.2014 is Change in Law Event in terms of Article 13 of the PPA.

(b) Declare that the Promulgation of the Ordinance is a Change in Law event in terms of Article 13 of the PPA.

(c) Declare that the Cancellation of the Coal Blocks pursuant to the judgment of the Hon'ble Supreme Court dated 25.08.2014 and Order dated 24.09.2014 is Force Majeure Event in terms of Article 12 of the PPA.

(d) Declare that the Promulgation of the Ordinance is a Force Majeure Event in terms of Article 12 of the PPA.

(e) Devise an alternate mechanism for the sourcing of Fuel in terms of the suggestions provided by the Petitioner in Paragraph 109to 115 above including necessary amendments to the Amended and Restated PPA;

(f) Grant consequential extension of SCOD till the issue of procurement of fuel is decided by this Commission.

PSPCL has filed reply dated 06.07.2015 and the petitioner has filed rejoinder dated 24.07.2015 to the reply of PSPCL.

The Commission has perused the entire record filed by the petitioner and PSPCL in both the petitions i.e. 65 of 2013 and 33 of 2015 through petitions, replies, rejoinders and various submissions. The Commission notes that there remains a wide difference in the respective positions of the petitioner and PSPCL with regard to alleged Force-Majeure and Change-in-Law events, which according to the petitioner are Change-in-Law and / or Force-Majeure events and have caused delay in SCOD of the project and according to PSPCL these events are irrelevant and also are not 'Change-in-Law' and / or Force Majeure events. The issues can be decided only after taking the evidence. In the view of the Commission, all the disputes arisen between the parties regarding alleged Force-Majeure Events and Change-in-Law events resulting in delay in SCOD can be better decided through Arbitration after taking evidence, documentary and oral. The Commission, therefore, decides to refer this dispute for arbitration. The Petitioner and PSPCL have agreed to propose names of three arbitrators each on or before 24.08.2015. The Petitioner and PSPCL are directed to file names of three arbitrators each alongwith their consents. The Commission further directs that two of the arbitrators out of three to be proposed by the parties shall be one from judicial and another from technical backgrounds i.e. Retired Supreme Court/High Court Judge and Retired Technical Member of APTEL, SERCs, CEA, CERC, Large Electricity Distribution / Generation Company etc.

The Commission notes that Project has come at the stage of commissioning and requires immediate arrangement of coal supply for commissioning and operation of the Project till an alternate permanent arrangement is made by the concerned authorities, which may take some time. As such this issue raised by the petitioner vide prayer (e) of Petition No.33 of 2015 is of urgent nature and needs to be decided by the Commission forthwith in the interest of the project. Therefore, the petitioner and PSPCL are directed to file reply to following queries of the Commission by 24.08.2015:

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(i) Action(s) presently being taken by the petitioner for allotment of alternative coal mine / coal linkage by Ministry of Coal ?

(ii) Status of re-bidding of Saregarah Coal Mine allotted as a supplementary captive coal block to the petitioner jointly with Arcelor Mittal Group in 45:55 ratio to meet the full coal requirement for its project?

(iii) Premise on which the petitioner's claim that the plant is ready for commissioning rests?

(iv) Efforts made by the petitioner to arrange commissioning coal from CEA?

The petition shall be taken up for further hearing on 26.08.2015 on the aspect of alternate arrangement of coal supply for the project and for considering the proposed names of Arbitrators for nomination for referring the disputes for Arbitration.

The stay granted vide Order dated 08.07.2015 on invocation and encashment of Bank Guarantee against Notices dated 14.05.2014 and 14.11.2014 in respect of delay in SCOD of the project and consequential liquidated damages is extended till the next date of hearing i.e. 26.08.2015.

(Gurinder Jit Singh)
Member

(Romila Dubey)
Chairperson

Chandigarh
Dated: 12.08.2015

Authenticated
Registrar
Punjab State Electricity Regulatory Commission
Chandigarh

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION
SCO NO. 220-221, SECTOR 34-A, CHANDIGARH

Petition No.65 of 2013

In the matter of : Petition under Section 86 (1) (a), (b) and (f) and other applicable provisions of the Electricity Act, 2003 for adjudication of the disputes and for directions - Power Purchase Agreement for purchase of power from 2 x 250 MW (+20%) Goindwal Sahib Thermal Power Plant at Goindwal Sahib, Punjab.

AND

In the matter of: GVK Power (Goindwal Sahib) Limited, Paigah House, 156-159, Sardar Patel Road, Secunderabad-540003.

Versus

Punjab State Power Corporation Limited, The Mall, Patiala

To

1. M/s GVK Power (Goindwal Sahib) Limited,
   Paigah House, 156-159,
   Sardar Patel Road,
   Secunderabad-500 003.
   Andhra Pradesh, India

2. Chief Engineer/ARR & TR,
   Punjab State Power Corporation Limited,
   Shed No.F-4, Shakti Vihar,
   Patiala.

3. Shri Oliver Tyagi,
   GVK Power (Goindwal Sahib) Ltd.
   SCO 1, Second Floor, Sector 17-E,
   Chandigarh-160017.
   Phone: 0172 2700264

No.PSERC/Reg / 4689/91

Dated: 12/8/15

A copy of the Order dated 12.08.2015, passed by the Commission, in Petition No. 65 of 2013 and Petition No. 33 of 2015, is enclosed herewith.

DA/As above.

Registrar

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION
SCO NO. 220-221, SECTOR 34-A, CHANDIGARH

Date of hearing: 11.08.2015
Date of Order: 12.08.2015

Present: Smt. Romila Dubey, Chairperson
Shri Gurinder Jit Singh, Member

Petition No.65 of 2013

In the matter of : Petition under Section 86 (1) (a), (b) and (f) and other applicable provisions of the Electricity Act, 2003 for adjudication of the disputes and for directions - Power Purchase Agreement for purchase of power from 2 x 250 MW (+20%) Goindwal Sahib Thermal Power Plant at Goindwal Sahib, Punjab.

AND

In the matter of: GVK Power (Goindwal Sahib) Limited, Paigah House, 156-159, Sardar Patel Road, Secunderabad-540003.

-------Petitioner

Versus

Punjab State Power Corporation Limited, The Mall, Patiala

-------Respondent

Petition No.33 of 2015

In the matter of : Petition under Section 86 of the Electricity Act, 2003 and Articles 12, 13 and 17 of the Amended and Restated Power Purchase Agreement dated 26.05.2009 executed between GVK Power (Goindwal Sahib) Limited and Punjab State Power Corporation Limited (formerly known as Punjab State Electricity Board) for declaration of the occurrence of Change in Law and Force Majeure events.

AND

In the matter of: GVK Power (Goindwal Sahib) Limited, Paigah House, 156-159, Sardar Patel Road, Secunderabad-500003, Andhra Pradesh

------- Petitioner

Versus

Punjab State Power Corporation Limited, T-8, Thermal Design Complex, PSPCL, Patiala-147001, Punjab

-------Respondent

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION

For petitioner: Shri Amit Kapoor, Advocate
Shri Vishrov Mukerjee, Advocate
Shri T.V.Bhaskar, Advocate,
Shri M. Ramamurty
Shri Bhavani Shankar,
Shri Oliver Tyagi

For PSPCL: Ms. Suparna Srivastava, Advocate
Shri J.P.S.Trehan, SE/TR-2
Shri D.S.Sidhu, Addl.SE/TR-5
Shri Kewal Singh, Sr.XEN

ORDER

GVK Power (Goindwal Sahib) Limited filed Petition No.65 of 2013 under Section 86 (1) (a), (b) and (f) and other applicable provisions of The Electricity Act, 2003 for adjudication of the disputes and for directions. It was submitted that disputes have arisen between the petitioner and PSPCL about the PPA on rejection of the requests of the petitioner by PSPCL for extension of SCOD. It was prayed to:-

(a) direct the extension of the SCOD for completion and commercial operation of the project for a period of 9 months in the case of Unit 1 and a further period of 6 months for Unit 2 to be calculated from the closure of the Force Majeure events, namely approval of railway drawings both in regard to Power Project and in regard to coal mine siding and availability of land to enter upon and commence mining operations.

(b) Pass any such further order or orders as this Commission may deem fit and proper in the circumstances of the case.

From the perusal of the petition, it was noted that grant of some approvals by Railway were still pending and handing over of some forest land by Forest Department to the petitioner's company was yet to take place, after which the mine (Tokisud North Block) opening could be taken up; after completion of formalities for tree-felling etc. The parties were directed vide Order dated 21.01.2014 to file their responses by

25.02.2014. The petition was listed for admission on 04.03.2014. On the request of both parties for granting extension in time to file responses, the hearing for admission was re-scheduled to 25.03.2014. PSPCL filed reply on the issue of admissibility and on merit on 24.03.2014. The petitioner submitted that the alleged Force-Majeure events shall take more time to be over and prayed for adjournments of 90 days and then for further 45 days vide letters dated 18.03.2015 and 21.05.2015.

It was submitted during hearing on 15.07.2015 that all the Force Majeure events have ended on 09.07.2015 and as such, the petition was mature to be admitted. The petitioner was directed vide Order dated 16.07.2014 to file evidentry proof of end of the Force-Majeure events in detail with supporting documents / record by 01.08.2014. After hearing the counsels of the petitioner and PSPCL on 12.08.2014, the Commission directed the petitioner to file its written arguments by 25.08.2014 with copy to PSPCL. PSPCL was directed to file its written arguments by 12.09.2014. Order was reserved to decide the matter for admission of the petition. The petitioner and PSPCL filed their written submissions on 26.08.2014 and 11.09.2014.

Meanwhile the petitioner filed Interlocutory Application on 08.09.2014 for grant of Interim Relief as under:-

(a) to direct the Respondent / PSPCL not to take any coercive steps to recover the Liquidated Damages imposed by it vide its letter dated 14.05.2014.

(b) to direct the Respondent not to take any coercive steps under Article 14 of the Restated PPA including termination of Restated PPA pending adjudication of the Petition for extension of SCOD;

(c) to grant ex-parte ad-interim relief prayed in para (a) and (b) above; and

(d) to pass such other and further reliefs as the Commission deems just and proper in the nature and circumstances of the present case.

Keeping in view the facts and circumstances of the case and considering the submissions of the parties, the Commission admitted the Petition and IA vide Order dated 29.09.2014 and directed PSPCL to file its reply to IA.

The parties were heard at length on 29.10.2014 on issue of invocation of Bank Guarantee furnished by the petitioner. After hearing the parties, the Commission stayed the invocation and encashment of Bank Guarantee for recovering the Liquidated Damages on account of delay in achieving SCOD as per PPA imposed by PSPCL vide letter dated 14.05.2014. The order of stay was extended from hearing to hearing against Notice dated 14.05.2014 for 1st Unit and against Notice dated 14.11.2014 for the second Unit of the Project, against the delay in SCOD and consequential liquidated damages.

The petitioner filed Application dated 11.05.2015 placing on record subsequent events submitting that the project was ready for commissioning, but for certain events that have occurred after 01.08.2014 causing further delay in SCOD. The petitioner submitted that judgment dated 25.08.2014 of Hon'ble Supreme Court regarding de-allocation of the Coal Blocks, consequential Order dated 29.09.2014 vide which Hon'ble Supreme Court cancelled allocation of 204 Coal Blocks and all captive coal blocks including Tokisud North Coal Block and Saregarah Coal Block allocated to GVK Power (Goindwal Sahib) Limited and the other subsequent events e.g. the Coal Mines (Special Provisions) First Ordinance, 2014 dated 21.10.2014 and Second Ordinance dated 26.12.2014 and 'The Coal Mines (Special Provisions) Act, 2015 notified on 30.03.2015 repealing the above Ordinances, are events that have effected the SCOD. The petitioner further submitted that bid for Tokisud Coal Block has been unsuccessful and on losing the bid, the project was left without any coal linkage, due to these alleged Change-in-Law / Force-Majeure Events. The prayer of the petitioner vide this Application is to:

(a) Grant extension of SCOD pending adjudication of the Change in Law Petition and till such time an alternative arrangement for procurement of fuel is in place; and
(b) Extend the stay granted vide Order dated 22.04.2015 in I.A.No.03 of 2015 on the invocation and encashment of the

Bank Guarantee against the Notices of the Respondent dated 14.05.2014 and 14.11.2014, until the Change in Law Petition is decided by this Commission.

(c) Pass such further orders as this Commission deems fit in the interest of justice.

This Application in Petition No.65 of 2013 was admitted and PSPCL was directed to file reply vide Order dated 13.05.2015. PSPCL filed reply during hearing on 07.07.2015. GVK prayed for time to file rejoinder to the reply of PSPCL. GVK has filed rejoinder dated 24.07.2015.

The petitioner had also filed another petition on 25.05.2015 being Petition No.33 of 2015 under Section 86 of The Electricity Act, 2003 and Articles 12, 13 and 17 of the Amended and Restated Power Purchase Agreement dated 26.05.2009 executed between GVK Power (Goindwal Sahib) Limited and erstwhile Punjab State Electricity Board (now Punjab State Power Corporation Limited) and praying to the Commission to:

(a) Declare that the Cancellation of the Coal Blocks pursuant to the judgment of the Hon'ble Supreme Court dated 25.08.2014 and Order dated 24.09.2014 is Change in Law Event in terms of Article 13 of the PPA.

(b) Declare that the Promulgation of the Ordinance is a Change in Law event in terms of Article 13 of the PPA.

(c) Declare that the Cancellation of the Coal Blocks pursuant to the judgment of the Hon'ble Supreme Court dated 25.08.2014 and Order dated 24.09.2014 is Force Majeure Event in terms of Article 12 of the PPA.

(d) Declare that the Promulgation of the Ordinance is a Force Majeure Event in terms of Article 12 of the PPA.

(e) Devise an alternate mechanism for the sourcing of Fuel in terms of the suggestions provided by the Petitioner in Paragraph 109to 115 above including necessary amendments to the Amended and Restated PPA;

(f) Grant consequential extension of SCOD till the issue of procurement of fuel is decided by this Commission.

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION

PSPCL has filed reply dated 06.07.2015 and the petitioner has filed rejoinder dated 24.07.2015 to the reply of PSPCL.

The Commission has perused the entire record filed by the petitioner and PSPCL in both the petitions i.e. 65 of 2013 and 33 of 2015 through petitions, replies, rejoinders and various submissions. The Commission notes that there remains a wide difference in the respective positions of the petitioner and PSPCL with regard to alleged Force-Majeure and Change-in-Law events, which according to the petitioner are Change-in-Law and / or Force-Majeure events and have caused delay in SCOD of the project and according to PSPCL these events are irrelevant and also are not 'Change-in-Law' and / or Force Majeure events. The issues can be decided only after taking the evidence. In the view of the Commission, all the disputes arisen between the parties regarding alleged Force-Majeure Events and Change-in-Law events resulting in delay in SCOD can be better decided through Arbitration after taking evidence, documentary and oral. The Commission, therefore, decides to refer this dispute for arbitration. The Petitioner and PSPCL have agreed to propose names of three arbitrators each on or before 24.08.2015. The Petitioner and PSPCL are directed to file names of three arbitrators each alongwith their consents. The Commission further directs that two of the arbitrators out of three to be proposed by the parties shall be one from judicial and another from technical backgrounds i.e. Retired Supreme Court/High Court Judge and Retired Technical Member of APTEL, SERCs, CEA, CERC, Large Electricity Distribution / Generation Company etc.

The Commission notes that Project has come at the stage of commissioning and requires immediate arrangement of coal supply for commissioning and operation of the Project till an alternate permanent arrangement is made by the concerned authorities, which may take some time. As such this issue raised by the petitioner vide prayer (e) of Petition No.33 of 2015 is of urgent nature and needs to be decided by the Commission forthwith in the interest of the project. Therefore, the petitioner and PSPCL are directed to file reply to following queries of the Commission by 24.08.2015:

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION

(i) Action(s) presently being taken by the petitioner for allotment of alternative coal mine / coal linkage by Ministry of Coal ?

(ii) Status of re-bidding of Saregarah Coal Mine allotted as a supplementary captive coal block to the petitioner jointly with Arcelor Mittal Group in 45:55 ratio to meet the full coal requirement for its project?

(iii) Premise on which the petitioner's claim that the plant is ready for commissioning rests?

(iv) Efforts made by the petitioner to arrange commissioning coal from CEA?

The petition shall be taken up for further hearing on 26.08.2015 on the aspect of alternate arrangement of coal supply for the project and for considering the proposed names of Arbitrators for nomination for referring the disputes for Arbitration.

The stay granted vide Order dated 08.07.2015 on invocation and encashment of Bank Guarantee against Notices dated 14.05.2014 and 14.11.2014 in respect of delay in SCOD of the project and consequential liquidated damages is extended till the next date of hearing i.e. 26.08.2015.

(Gurinder Jit Singh)
Member

(Romila Dubey)
Chairperson

Chandigarh
Dated: 12.08.2015

Authenticated
Registrar
Punjab State Electricity Regulatory Commission
Chandigarh

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION

ANNEXURE P-9 (Colly.)

IN THE MATTER OF THE ARBITRATION AND CONCILIATION ACT 1996

AND IN THE MATTER OF AN ARBITRATION

BEFORE:
HON'BLE MR. JUSTICE DEEPAK VERMA (FORMER JUDGE, SUPREME COURT OF INDIA)
HON'BLE MR. JUSTICE MUKUL MUDGAL (FORMER JUDGE, DELHI HIGH COURT)
HON'BLE MR. V.J. TALWAR

BETWEEN:

GVK POWER (GOINDWAL SAHIB) LIMITED

Claimant/ Petitioner

&

PUNJAB STATE POWER CORPORATION LIMITED

Respondent

FINAL AWARD

CLAIM PETITION NO. 1

10/04/2017

THE HON. JUSTICE MUKUL MUDGAL (RTD.) A - 1, LGF Nizamuddin East, New Delhi – 110013 India	**THE HON. JUSTICE DEEPAK VERMA (RTD.)** B-4, Ground Floor, Geetanjali Enclave, New Delhi – 110017 India Presiding Arbitrator	**THE HON. MR. V.J. TALWAR** 708, Brentwood Tower Charmwood Village, SurajKund Road, Faridabad – 121009 India

TABLE OF CONTENTS

LIST OF ABBREVIATIONS

BHEL……………………………………………………………Bharat Heavy Electricals Ltd.

CERC……………………………………..Central Electricity Regulatory Commission

COD…………………………………………………………...Commercial Operation Date

CPM………………………………..…………………………Critical Path Method

DFO…………………………………..…………………………District Forest Officer

DPR…………………………………….………………………Detailed Project Report

ECR…………………………………….…………………Eastern Central Railways

ESP…………………………………..………………………Engineering Scale Plan

GOI…………………………………..………………………..Government of India

GoP……………………………………………………………..Government of Punjab

IA………………………..………………………………..Implementation Agreement

L.A. Act…………………………………………………….…………Land Acquisition Act

LOI……………………………………………………………............Letter of Intent

MOU………………………………………………..Memorandum of Understanding

MoEF…………………………………………………Ministry of Environment and Forest

NOC……………………………………………………………..No Objection Certificate

PERT………………………………………..Program Evaluation Review Technique

PSPCL ………………………………………Punjab State Power Corporation Limited

PSEB……………………………………………..……..Punjab State Electricity Board

PPA……………………………………………………………Power Purchase Agreement

RFP………………………………………………………………Request for Proposal

SERC…………………………………………State Electricity Regulatory Commission

SIP……………………………………………………………Signal Inter-locking plan

SCOD…………………………………………Scheduled Commercial Operation Date

TG………………………………………………...………………Turbine & Generator

LIST OF CASES

CLAIMANT

i. Manohar Lal Sharma v. The Principal Secretary & Ors., (2014) 9 SCC 516.
ii. Ranbir Singh vs. Executive Engineer, (2011) 15 SCC 453.
iii. Power Company of Karnataka Ltd. v. Central Electricity Regulatory Commission & Ors., Appeal No. 108 of 2014.
iv. North Eastern Electric Power Corporation Ltd. v. Assam State Electricity Board & Ors., Appeal No. 159, 162 and 167 of 2005.
v. Urban Improvement Trust v. Mohan Lal, 2010 (1) SCC 512.
vi. Corporation Bank v. Saraswati Abharansala and Another, 2009 (1) SCC 540.
vii. Sales Tax Officer Banaras and Others v. Kanahaiya Lal Mukund Lal Saraf, 1959 SCR 1350.
viii. State of M.P v. Bhailal Bhai and Others, 1964 (6) SCR 261.
ix. Jay Laxmi Salt Wroks (P) Ltd v. State of Gujarat, 1994(4) SCC 1.
x. UOI v. ITC Ltd, 1993 Supp (4) SCC 326.
xi. Salonah Tea Co. Ltd v. Superintendent Of Taxes Nowgong & Others, 1988 (1) SCC 401.
xii. Udupi Power Corporation Limited v. Power Company of Karnataka Limited and Others, Petition No. 160/GT/2012.
xiii. NKTCL v. CERC & Ors., Appeal No. 139 of 2013

RESPONDENT

i. Khardah Co. Ltd. v. Raymon & Co., AIR 1962 SC 1810.
ii. Central Bank of India v. H F Inse. Co., AIR 1965 SC 1288.
iii. Bank of India & Anr. v. K Mohandas & Ors. [(2009) 5 SCC 313.
iv. Rajasthan State Industrial Development and Investment Corporation & Anr. v. Diamond and Gem Development Corporation Ltd & Anr. [(2013) 5 SCC 470.
v. Kamla Sugar Mills Ltd Delhi v. M/s Ganga Bishen Bhajan Singh and Anr., AIR 1978 Mad 178.
vi. L Schuler AG v. Wickman Machine Tool Sales Ltd [(1973) All ER 39.

DRAMATIS PERSONAE

Mr. M. Ramamurty	Director, GVK Power & Infrastructure
Mr. T.V. Bhaskar	Head Legal, GVK Power & Infrastructure
Mr. M. Sodekar	AGM, GVK Power & Infrastructure
Er. Balwant Singh	Chief Engineer, PSPCL
Er. Lakhvinder Singh	Senior Engineer, IPC
Er. Keval Singh	Senior Executive Engineer, IPC

A. INTRODUCTION

(a) <u>OVERVIEW</u>

This Arbitration pertains to dispute between GVK and PSPCL arising out of Power Purchase Agreement dated 26.05.2009 with respect to extension of Scheduled Commercial Operation Date (SCOD) on account of alleged 'Change in Law' and/or Force Majeure Events.

(b) <u>PARTIES</u>

CLAIMANT/PETITIONER

GVK Power (Goindwal Sahib) Limited (hereinafter referred to as **`GVK Power')** is a Company incorporated under the Companies Act, 1956. It is a power generating Company having a Coal Fired Thermal Power Plant at Goindwal Sahib in the State of Punjab. It entered into an Agreement for establishing, maintaining and operating a Thermal Power Station for supplying electricity from the said project exclusively to the Punjab State Power Corporation Limited (hereinafter referred to as **`PSPCL')** the Respondent herein.

RESPONDENT

Punjab State Power Corporation Limited (PSPCL) is electricity generating and distributing Company of the Government of Punjab state in India. PSPCL was incorporated as a Company on 16.04.2010 and was given the responsibility of operating and maintenance of State's own generating projects and distribution system.

(c) Representatives Of The Parties

Claimant:

- Advocate Amit Kapoor
- Advocate Vishrov Mukerjee
- Advocate Rohit Venkat V.
- Mr. M. Ramamurty
- Mr. M. Sodekar
- Mr. T.V. Bhaskar

Respondent:

- Advocate Suparna Shrivastava
- Advocate Raghav Kapoor
- Er. Balwant Singh
- Er. Lakhvinder Singh
- Er. Keval Singh

(d) ARBITRAL TRIBUNAL

OVERVIEW:

GVK took up the construction of the Project. However, on account of various events, the Project got delayed. Since its commissioning, the Project got delayed on account of various events, GVK filed Petition No. 65 of 2013 before Punjab State Electricity Regulatory Commission (herein after referred to as '**the Commission'** under Section 86(1)(f) of the Electricity Act 2003, ('**the Act'**) seeking extension of Scheduled Commercial Operation Date ("***SCOD***"). GVK claimed the aforesaid events as '*Force Majeure*' events under the Agreement and sought an extension of SCOD.

While the aforesaid petition was pending adjudication before the Commission, Captive Coal Blocks allocated to GVK got cancelled pursuant to judgment dated 24.08.2014 of the Hon'ble Supreme Court in the case of ***Manohar Lal Sharma vs. The Principal Secretary & Ors.,*** reported as (2014) 9 SCC 516 ("***Coal Judgment***") and the subsequent Cancellation Order dated 24.09.2014 reported as (2014) 9 SCC 614 ("***Cancellation Order***").

Since the Project was premised on captive coal block which was no longer available, GVK filed Petition No. 33 of 2015 before the Commission on 11.05.2015 seeking declaratory relief on account of Change in Law and Force Majeure events, and consequential relief of amendment of the terms of the Restated PPA so as to enable GVK to procure fuel from alternate sources and supply power to PSPCL.

ARBITRAL TRIBUNAL

In terms of Section 86(1)(f) of the Act, the Commission has powers either to adjudicate the disputes between generating company and licensee or to refer it for Arbitration. The Commission, vide its order dated02.09.2015 has constituted this Arbitral Tribunal for Arbitration.

The Commission had directed the parties to propose names of three Arbitrators each. GVK Power had proposed names of Hon'ble Mr. Justice Mukul Mudgal (Former Judge, Delhi High Court), Mr. R.D. Gupta (Former Member, UP Electricity Regulatory Commission) and Mr. Ashish Gupta (Partner, M/s T.R. Chadha and Co.). PSPCL had proposed names of Hon'ble Mr. Justice Deepak Verma (Former Judge, Supreme Court of India), Mr. R.S. Mann (Retd. IAS, Former Chief Secretary, GoP) and Mr. S.K. Anand (Former Member of erstwhile PSEB).

The Commission considered all the names proposed by the parties for nomination on the panel of Arbitrators. Thereafter, Commission referred the disputes and differences between GVK Power (Goindwal Sahib) Limited and PSPCL to the panel of three Arbitrators namely,

1.	Hon'ble Justice Deepak Verma Former Judge Supreme Court of India	Presiding Arbitrator
2.	Hon'ble Justice Mukul Mudgal Former Judge High Court of Delhi	Arbitrator
3.	Sh. V.J. Talwar Former Technical Member Appellate Tribunal for Electricity	Arbitrator

B. <u>BRIEF FACTS</u>

1. In the year 1996, Government of Punjab formulated an International Competitive Bidding process for inviting proposals and for selection of a bidder to establish and operate a Coal based thermal power generation project at Goindwal Sahib, Tarn Taran District, in the State of Punjab. The entire electricity generated from the said generating station was to be sold to meet the increasing needs of power of the then Punjab State Electricity Board (hereinafter referred to as **`PSEB, Predecessor in Interest of PSPCL)** for maintaining distribution and retail supply in the State of Punjab. For the purpose of bid selection, two stage evaluation process comprising Qualification stage and Request for Proposal (RFP) was adopted. PSEB received 9 bids which were treated as Pre-qualification bids. The Evaluation Criteria, RFP Document and draft Power Purchase Agreement (PPA) were framed in consultation with M/s. ICICI. The draft PPA was based on Capital Cost. After short-listing, five consortia including the Claimant were pre-qualified for issue of RFP. The RFP including draft PPA were furnished to 5 pre-qualified parties on 29.9.1995. In response thereto, 3 parties including Claimant submitted their detailed bids. On analysis of the said bids which were based on capital cost, there were deviations from the bid document, ambiguities, discrepancies and shortcomings. Even after seeking detailed clarifications from the three bidders, it was not feasible to evaluate the bids on equitable and realistic basis. It was then decided to invite tariff based bids by freezing important commercial parameters from the three parties only. A Pre-Bid Conference was held on 12/13.11.1996 with three parties to discuss the commercial parameters proposed to be frozen. With respect to fuel procurement for the Project, it was clarified that it will be sole responsibility of the developer to obtain fuel linkage, however PSEB at its own discretion may assist the developers in obtaining fuel linkage. It was also clarified that Coal

import for a limited period would be allowed. However, its commercial impact will be taken into consideration while evaluating the bids. However, total fuel cost shall not exceed the fuel cost per kwh with domestic coal. Further, it was also clarified in this pre-bid conference that if the developer envisages use of captive mine, coal cost shall not exceed coal cost per unit payable by PSEB to Coal India supplying coal.

2. In pursuance of this Competitive Bidding process initiated by the Government of Punjab, GVK Power was short-listed and selected to build, own and operate the coal based generation station of 2 x 250 MW at Goindwal Sahib. Accordingly, a Letter of Intent dated (LOI) 4.3.1998 was issued to GVK by the Government of Punjab and the same was revised by LOI dated 18.5.1998.

3. Pursuant to the above GVK Power and PSEB executed a Power Purchase Agreement (P.P.A.) on 17.4.2000 providing for the terms, conditions, norms and parameters including tariff for the sale of electricity by GVK Power to PSEB.

4. The Government of Punjab and GVK Power entered into an Implementation Agreement (IA) on 25.8.2000 where under the Government of Punjab granted to Claimant the right to establish, own and operate the Project and permission to generate and sell power to PSEB from the Project co-extensive with the term of the PPA.

5. However, construction of Project could not be taken-up for various reasons beyond the reasonable control of GVK and PSEB. In the meantime, the Central Electricity Regulatory Commission had notified its Tariff Regulations after which further negotiations took place between GVK and PSEB for better norms and parameters which resulted in reduction of tariff from that agreed under the above PPA executed on 17.4.2000. The Government of Punjab also agreed to revise the generation capacity to 2X250 MW (+20%) so as to accommodate the

standard size of power generating equipment available in the market in order to economize on the cost of equipment.

6. On 08.02.2006, a Memorandum of Understanding was also entered into between PSEB and GVK Power. The parties accordingly agreed on and initialled an Amended and Restated Power Purchase Agreement (hereinafter called '**Amended and Restated PPA**').

7. In terms of Section 86 (1) (b) read with Sections 61 and 62 of the Electricity Act, 2003, Amended and Restated PPA finalized between GVK Power and PSEB required approval of the Commission before it could be finalized and executed between GVK Power and PSEB. PSEB, therefore, filed before the Commission a Petition being No. 3 of 2007 for approval of Amended and Restated PPA agreed to and initiated between PSEB and GVK Power.

8. After the filing of the above petition No. 3 of 2007, GVK Power filed a petition being Petition No. 4 of 2007 before the Commission seeking in-principle approval of the estimated cost and financing plan of the project.

9. Vide Order dated 29.4.2008, the Commission decided Petition No. 4 of 2007 filed by GVK Power in regard to in-principle approval to the estimated project cost of the power project at Goindwal Sahib proposed to be set up by GVK Power. In the said Order dated 29.4.2008, the Commission approved the capital cost of Rs 2622.48 crores as against the proposed capital cost of Rs 2987.86 crores by GVK Power. Aggrieved by the Order dated 29.4.2008, GVK Power filed an appeal being Appeal No. 104 of 2008 before the Appellate Tribunal for Electricity.

10. By another Order dated 6.3.2009 the Commission decided petition No. 3 of 2007 filed by PSEB in regard to the approval of Amended and Restated PPA between PSEB and GVK Power. The Commission directed

certain modifications to Amended and Restated PPA initiated between PSEB and GVK Power.

11. Aggrieved by the Order dated 6.3.2009 GVK Power filed an Appeal being No. 70 of 2009.

12. By Order dated 19.5.2009 the Appellate Tribunal for Electricity permitted GVK Power to execute the Power Purchase Agreement (hereinafter referred to as **'PPA')** as per the Orders of the Commission without prejudice to the rights and contentions of GVK Power in the appeal to enable the implementation of the project subject to the orders that may be passed in the appeal.

13. Accordingly, GVK Power proceeded to execute Amended and Restated PPA dated 26.5.2009 as per the directions of the Commission and began to implement the project.

14. By Order dated 8.4.2009 the Appellate Tribunal partly allowed the appeal No. 104 of 2008 filed by GVK Power against the Order dated 29.4.2008 in regard to the in-principle approval of the capital cost given in Petition No. 4 of 2007 and allowed some of the cost which were disallowed by the Commission. Thereafter, by Order dated 13.1.2011 the Appellate Tribunal for Electricity decided the appeal No. 70 of 2009 rejecting the claims of GVK Power against the decision of the Commission dated 6.3.2009.

15. GVK Power proceeded to implement Agreement between GVK Power and PSEB as per Amended and Restated PPA dated 26.5.2009 subject to the modification to the in-principle capital cost made by the Appellate Tribunal for Electricity in Appeal No. 104 of 2008.

16. Amended and Restated PPA as approved by the Commission entered into between GVK Power and PSPCL, inter alia, provides for the

construction and completion of the project by the Scheduled Commercial Operation Date which has been defined as within 36 Months from Financial Closure for 1st unit and another six months for 2nd Unit. The financial closure for the project was achieved by GVK Power on 21.05.2010 and accordingly Scheduled Commercial Operation Date for the first generating unit of 270 MW worked out as 20.05.2013 and for the second generating unit of 270 MW as 20.11.2013.

17. However, the erection and commissioning of the project got delayed due to various reasons/events including development of captive coal mine at Tokisud block in the State of Jharkhand. Claimant requested PSPCL to supply coal from its own captive mine at Pachhwara for commissioning and running of the project. The request was, however, refused by PSPCL.

18. Thereafter, GVK Power filed petition being N0.65 of 2013 before the Commission claiming the events leading to delay as '*force majeure*' events under *Restated and Amended PPA* and has sought extension of COD of 9 months for 1st Unit and another 6 months for 2nd Unit from the closure of the Force Majeure events, namely approval of railway drawings both in regard to Power Project and in regard to the Coal Mine siding and the availability of land to enter upon and commence mining operations.

19. Claimant had made the following prayers in its petition before the Commission

a) direct the extension of the SCOD for completion and commercial operation of the project for a period of 9 months in the case of unit #1 and for a further period of 6 months for unit #2 to be calculated from the closure of the Force Majeure events namely, approval of railway drawings both in regard to Power project and in regard to coal mine siding and the availability of the land to enter upon and commence mining operations.

b) pass any such further order or orders as this Hon'ble Commission may deem just and proper in the circumstances of the case.

20. Thereafter, pursuant to directions in the Order dated 16.07.2014 passed by the Commission, GVK filed a Rejoinder dated 01.08.2014 stating the following:-

(a) The *force majeure* events which were in force at the time of filing of Petition 65 of 2013 had come to an end on 11.07.2014 with:

(i) grant of approval of drawings for the railway siding at the Project site as well as the Tokisud Coal mine, and

(ii) hand over of Forest Land by the Forest Department, Government of Jharkhand.

(b) Consequently, GVK sought the following extensions of SCOD:

(i) For Unit 1 from 20.05.2013 to 10.04.2015.

(ii) For Unit 2 from 20.11.2013 to 10.10.2015.

21. The Commission vide its Order dated 02.09.2015 constituted this Tribunal and referred both the Claim Petitions for Arbitration by this Tribunal.

C. ISSUES FRAMED BY ARBITRAL TRIBUNAL

22. After hearing the parties, by Order dated 15.12.2015, this Arbitral Tribunal has framed the following points of determination in relation to the present Arbitration proceedings:

Re. Claim Petition No. 1

a) Whether there existed a Force Majeure Event/Change in law Events, which were beyond the control of the Claimant, pursuant to Article 12 and 13 of the Power Purchase Agreement?

(b) Whether the delay in following Schedule Commercial Operation Date is due to existence of Force Majeure event/Change in law events?

(c) Whether the Claimant is entitled for extension of SCOD for completion and commercial operation of the Project?

(d) Reliefs and cost

(a) QUESTION FOR CONSIDERATION

23. First question for Tribunal's consideration is whether there existed a Force Majeure Event/Change in law Events, which were beyond the control of the Claimant, pursuant to Article 12 and 13 of the Power Purchase Agreement?

24. GVK Power has claimed *force majeure* and consequent extension of SCOD on account of the following events:

(a) Delay by Government of Punjab in procurement of land for railway corridor and water pipeline.

(b) Delay by Northern Railways in grant of approvals pertaining to the Railway Siding at the Project site.

(c) Delay by Railways in grant of approvals pertaining to the railway siding at the Tokisud Coal Mine.

(d) Delay by Government of Jharkhand in handing over forest land for Tokisud Coal Mine.

(e) Delay in construction of the Project due to uncontrollable events, being:

(i) Poor soil conditions which required treatment using Vibro Compaction as per the Indian Standard Criteria for Earthquake Resistant Design of Structures.

(ii) Shortage of aggregates due to a ban imposed by the Punjab and Haryana High Court necessitating procurement from neighbouring States.

(iii) Delay in supply of equipment by Bharat Heavy Electricals Ltd. ("BHEL").

(iv) Increase in number of bays (i.e. from 4 to 6) at the request of PSPCL.

25. GVK Power had claimed delay on account of the aforesaid *force majeure* events for 41 months. However, for the purpose of Claim Petition No. 1, GVK Power has sought an extension in SCOD of 22 months and 20 days and an extension of SCOD for the period between 25.08.2014 to 31.03.2016 on account of cancellation of the Captive Coal Blocks which forms part of Claim Petition No.2.

26. Elaborate arguments were advanced by the learned counsel for both the parties on '*force majeure*' events and its application in the present matter.

27. We find it desirable to take up each of the above grounds one by one enumerating the contentions of the Claimant/Petitioner and Respondent along with our analysis and decision.

28. Learned counsel for the PSPCL, while advancing contentions on the above issues, has raised preliminary objection with respect to the grounds raised by the Claimant. Learned Counsel for PSPCL submitted that the stated *force majeure* events in Claim Petition qua which relief is being sought are:

    (i) approval of railway drawings both in regard to power project and in regard to coal mine siding; and

    (ii) the availability of land to enter upon and commence mining operation.

29. According to PSPCL the pleadings made in the Claim Petition show that besides the above two events of *force majeure*, Claimant has also alleged occurrence of other *force majeure* events leading to delay in completion of its Project; however, the Prayer Clause shows that Claimant has not claimed any extension of SCOD on account of other *force majeure* events. That being so, the proceedings before this Arbitral Tribunal would necessarily be confined to adjudication of Claimant's claim for extension of SCOD on the two events of *force majeure* as stated in the prayer clause and Claimant cannot be permitted to advance its claim extension of SCOD before this Arbitral Tribunal for any other additional *force majeure* events. It is a settled principle of law that a party must be held to be bound by its pleadings; a Prayer Clause cannot be construed or dubbed as a technicality. The learned counsel has placed reliance on ***Ranbir Singh vs. Executive Engineer*, (2011) 15 SCC 453**.

D. CLAIMANT'S REBUTTAL ON PRELIMINARY OBJECTION

30. PSPCL has argued that GVK's claim is limited to relief on account of the following *force majeure* events:-

    (a) Delay in approval of railway drawings both in regard to power project and in regard to coal mine siding; and

    (b) Delay in availability of the land to enter upon and commence mining operation.

31. The above averment is incorrect. GVK Power has claimed relief on account of all *force majeure* events claimed in Claim Petition No. 1.PSPCL seeks to misinterpret the Prayer Clause of Claim Petition No. 1, seeking extension of SCOD from conclusion of two subsisting *force majeure* events at the time of filing of Petition before the Commission, i.e.:

    (a) delay in approval of railway drawings; and

    (b) delay in availability of land.

32. It is erroneous to contend that GVK has not pressed its claims with respect to *force majeure* events other than the delay in grant of approvals and availability of land for mining. It is submitted that *force majeure* events by GVK have affected the Project concurrently and there is an overlap of events. The duration for which various *force majeure* events have impacted the Project have been detailed in Paragraph 77 of the Note for Arguments as well as in the critical path diagram and chart tendered and pressed at the time of arguments.

33. PSPCL has also contended that GVK accepted that all *force majeure* events had come to an end at the time of execution of Amended and Restated PPA and therefore, cannot contend that there has been a delay in SCOD on account of *force majeure* events. This argument is evidently

flawed because the *force majeure* events commenced much after execution of Amended and Restated PPA and hindered the duty and timely performance by GVK. GVK is not claiming any *force majeure* event prior to execution of Amended and Restated PPA.

(a) ANALYSIS AND DISCUSSIONS

34. We have heard the detailed arguments put forward by learned Counsel for the parties on this preliminary objection. Claimant in its pleadings has claimed delay on account of various 'Force Majeure' events. However, in the prayer it has sought relief only on two grounds.

35. GVK Power has submitted there are several events which ran concurrently and were overlapping and Claimant has claimed delay on account of each of such events. Claimant has clarified that it had claimed relief in the prayer only for the events which were on 'Critical Path' of the project. At this stage it would be desirable to understand the concept of 'Critical Path' in execution of large projects like erection and commissioning of a thermal power project. Every large project has hundreds of activities. Some of the activities run concurrently overlapping each other and some activities run sequentially. It is, therefore, important to prepare PERT/CPM (Program Evaluation Review Technique/Critical Path Method) charts and monitor critical path in execution of project. To understand the concept of 'Critical Path', let us consider a simple example of erecting a power project involving few major activities like construction of TG (Turbine & Generator) hall and installation of TG. We know that TG cannot be installed before civil works in construction of TG hall is complete. Thus, construction of civil works and installation of TG falls on critical path. However, procurement of TG can be done before TG hall is complete. Therefore, procurement of TG does not fall on critical path in our example even if it

is delayed provided that it is procured before completion of TG Hall. However, if procurement of TG gets delayed beyond completion of TG hall then procurement of TG would fall on critical path.

36. Therefore, the contention of GVK Power that while it has put up Claim with respect to 'force majeure' for all the events, it has prayed for relief for those events which were on 'Critical Path' appears sound. Thus, in our considered Opinion Respondent's Preliminary Objections deserve to be dismissed and are hereby rejected. Accordingly, we have taken up each of the claim to decide on merits.

E. <u>RELEVANT PROVISIONS OF RESTATED AND AMENDED PPA AND OTHER DOCUMENTS RELIED UPON BY BOTH THE PARTIES</u>

37. Before we proceed further, it would be desirable to reproduce some relevant provisions of *Restated and Amended PPA*, Letter of Intent issued by the Government of Punjab, Implementation Agreement and Memorandum of Understanding between GVK Power and PSEB.

(A) Scheduled Commercial Operation Date (SCOD) has been defined in Article 1.1 to mean:

"the date on or before which COD of a Generating Unit is required to occur, which shall be thirty six (36) months from the date of Financial Closure for the First Generating Unit and six (6) months from the COD of the First Generating unit for the Second Generating Unit or such other dates from time to time, specified in accordance with the provisions of this Agreement"

(B) Commercial Operation Date (COD) has been defined in Article 1.1 to mean:

"in relation to a Unit, the date one day after the date when the Petitioner receives a Final Test Certificate of the Independent Engineer as per the provisions of Article 6.3.1 and in relation to the Power Station shall mean the date by which such Final Test Certificates as per Article 6.3.1 are received by the procurer for all the Units"

(C) Article 4.5 of the Restated PPA deals with Extension of Time. The relevant portion is extracted below:

"4.5.1 In the event that:

(a) the Seller is prevented from performing its obligations under Article 4.1.1(b) by the stipulated date due to any Procurer Event of Default; or

(b) a Unit cannot be commissioned by its Scheduled Commercial Operation Date because of Force Majeure Events.

The Scheduled Commercial Operation Date, the Scheduled Connection Date and the Expiry Date shall be deferred, subject to the limit prescribed in Article 4.5.3, for a reasonable period but not less than 'day to day' basis, to permit the Seller through the use of due diligence, to overcome the effects of Force Majeure Events affecting the Seller or in the case of the Procurer's Event of Default, till such time such default is rectified by the Procurer.

4.5.2 If the Parties have not agreed, within thirty (30) days after the affected Party's performance has ceased to be affected by the relevant circumstance, on how long the Scheduled Commercial Operation Date, the Scheduled Connection Date or the Expiry Date should be deferred by, any Party may raise the Dispute to be resolved in accordance with Article 17.

4.5.3 In case of extension occurring due to reasons specified in Article 4.5.1(a), the original Scheduled Commercial Operation Date of any Unit or the original Scheduled Commercial Operation Date of the Power Station as a whole, would not be extended by more than two (2) years or the date on which the Seller elects to terminate this Agreement, whichever is earlier.

As a result of such extension, the date newly determined shall be deemed to be the Scheduled Commercial Operation Date for the purposes of this Agreement."

(D) Article 12 of Restated PPA which deals with Force Majeure is extracted below:

"12.1 Definitions

In this Article 12, the following terms shall have the following meanings:

12.2 Affected Party

An affected Party means the Procurer or the Seller whose performance has been affected by an event of Force Majeure.

…

Any event of Force Majeure affecting the performance of the Sellers contractors shall be deemed to be an event of Force Majeure affecting the Seller of if the Force Majeure event is affecting and resulting in:

a) late delivery of plant, machinery, equipment, materials, spare parts, fuel, water or consumables for the Project; or

b) a delay in the performance of any of the Project Company's Contractors.

…

12.3 Force Majeure

A "Force Majeure" means any event or circumstances or combination of events and circumstances including those stated below that wholly or partly prevents or unavoidably delays an affected Party in the performance of its obligations under this Agreement, but only if and to the extent that such events or circumstances are not within reasonable control, directly or indirectly, of the Affected Party and could not have been avoided if the Affected Party had taken reasonable care or complied with Prudent Utility Practices:

i. Natural Force Majeure Events:

ii. Non-Natural Force Majeure Events:

12.7 Available Relief for a Force Majeure Event

Subject to this Article 12:-

a) no Party shall be in breach of its obligations pursuant to this Agreement to the extent that the performance of its obligations was prevented, hindered or delayed due to a Force Majeure Event.

b) both the parties shall be entitled to claim relief in relation to a Force Majeure Event in regard to its obligations, including but not limited to those specified under Article 4.5…

(E) Law has been defined under Article 1.1 as:

"Law means, in relation to this Agreement, all laws including Electricity Laws in force in India and any statute, ordinance, regulation, notification or code, rule, or any interpretation of any of them by an Indian Government Instrumentality and having force of law and shall further include all applicable rules, regulations, orders, or notifications by an Indian Government Instrumentality pursuant to or under any of them and shall include all rules, regulations, decisions and orders of the Appropriate Commission."

(F) Indian Government Instrumentality has been defined under Article 1.1 as:

"Indian Government Instrumentality means the GOI, Government of Punjab, and any ministry or, department or board or agency either regulatory or quasi-judicial authority controlled by GOI or Government of Punjab where the Procurer and Project are located and includes the Appropriate Commission."

(G) As per Article 13.1.1 Change in Law has been defined to mean the occurrence of any of the following events:

"(i) the enactment, bringing into effect, adoption, promulgation, amendment, modification or repeal, of any law or (ii) a change in the interpretation of any Law by a Competent Court of Law, Tribunal or Indian Governmental Instrumentality provided such Court of Law, tribunal or Indian Governmental Instrumentality is final authority under law for such interpretation or (iii) change in any consents, approvals or licenses available or obtained for the Project, otherwise than for default of the Seller, which results in any change in any cost of or revenue from the business of

selling electricity by the Seller to the Procurer under the terms of this Agreement, but shall not include (i) any change in withholding tax on income or dividends distributed to the Shareholders of the Seller, or (ii) change in respect of UI Charges or frequency intervals by an Appropriate Commission."

(H) Article 13.1.2 defines Competent Court as:

"The Supreme Court or any High Court, or any tribunal or any similar judicial or quasi juridical body in India that has jurisdiction to adjudicate upon issues relating to the Project."

(e) Article 13.2 (b) deals with the application and principles for computing impact of Change in Law in the Operating Period. The relevant portion is quoted below: [Ann. 5, Pg. 108, Vol. I].

"13.2 Applications of the Principles for computing impact of Change in Law

While determining the consequence of Change in Law under Article 13, the parties shall have due regard to the principle that the purpose of compensating the Party affected by such Change in Law is to restore through Monthly Tariff payments, to the extent contemplated in this Article 13, the affected party to the same economic position as if such Change in Law has not occurred.

…

3.2 (b) Operating Period: As a result of Change in Law, the compensation for any increase/decrease in revenues or cost to the Seller shall be determined and effective from such date, as decided by the Punjab State Electricity Regulatory Commission whose decision shall be final and binding on both the parties subject to rights of appeal provided under applicable law".

38. Now we will take up each of the ground claimed by GVK Power as '*force majeure*' thereby requesting for extension of SCOD.

F. DELAY IN HANDOVER OF LAND FOR RAILWAY CORRIDOR AND WATER PIPELINE

(a) CLAIMANT'S SUBMISSIONS

39. Learned Counsel for GVK Power made following submission on this issue

I. In terms of Article 3.3.1 of Implementation Agreement dated 25.08.2000 ("IA"), the land for generating station including Railway Corridor was required to be acquired by the State Government and given to GVK, within a period of 12 (twelve) months from the effective date, i.e., by 25.05.2010, admitted by PSPCL.

II. Possession of the land for the main plant and auxiliaries was given during the year 2009. On 10.08.2009, GVK submitted its request for land for Railway Corridor and water pipeline to the Government of Punjab. On 29.07.2010, the State Government issued Section 4 Notification under Land Acquisition Act (L.A. Act) for acquisition of 37 Acres 7 Kanal 18 Marla of land for construction of railway siding and water pipeline corridor. On 28.04.2011, the State Government issued Section 6 Notification of L.A. Act, for acquisition of land for construction of railway siding and water pipeline. On 15.07.2011, possession of the land for the railway siding and water pipe line corridor was offered to GVK, 13.5 months later than the agreed time limit period for handing over possession of land to GVK. Yet, certain landowners did not handover possession of land and a Writ Petition was filed before the High Court of Punjab and Haryana on 09.11.2011 against bifurcation of land acquired by the Government of Punjab for construction of railway siding lead line. On 21.03.2012, GVK had informed the Government of Punjab about non availability of land for construction of Railway siding due to pending High Court case and the fact that the land was crucial for completion of the project. On 12.04.2012, GVK requested PSPCL to resolve pending court cases for handing over and possession of land as delay in availability of land for construction of railway corridor will lead to delay in project commissioning. The Writ Petition was finally disposed of vide judgment dated 21.05.2012 and possession of the land was handed over to GVK on 09.02.2013.

III. Railway Corridor and the water pipeline are essential components of the Project. The Railway Corridor was essential to ensure supply of coal from Tokisud Coal Block. The water pipeline was necessary to supply water to the generating station without which the generating station would not be able to generate power. In light of the above, it is submitted that there has been delay of 33 months and 15 days in handing over of land for Railway Corridor and water pipeline.

IV. GVK had applied for the required land in a timely manner and followed up regularly with Government authorities as is evident from the above. It is noteworthy that since the land acquisition was to be done by the Government of Punjab in terms of Clause 3.3.1 of the IA, GVK had no say or control in regard to the process of acquisition of the land for Railway Corridor and water pipeline.

V. Learned Counsel for GVK Power has relied upon following authorities, wherein delay in land acquisition for power projects have been held to be a *force majeure* event

a) Order of Hon'ble Central Electricity Regulatory Commission dated 20.02.2014 in Petition No. 160/GT/2012 – Udupi Power Corporation Limited v. Power Company of Karnataka Limited and Others

b) Judgment of Hon'ble Appellate Tribunal for Electricity dated 15.5.2015 on the issue of delay in land acquisition in Appeal No. 108 of 2014 – Power Company of Karnataka Ltd. vs. Central Electricity Regulatory Commission & Ors.

c) Judgment of Hon'ble Appellate Tribunal for Electricity dated 31.10.2007 passed in Appeal No. 159, 162 and 167 of 2005 – North Eastern Electric Power Corporation Ltd. vs. Assam State Electricity Board & Ors.

(b) RESPONDENT'S SUBMISSIONS

40. Per Contra learned Counsel for PSPCL submitted that right from the inception of the Project, the State Government had given its commitment for rendering all assistance to Claimant for making available necessary land for setting up the Project. Claimant, in turn, had also time and again recorded its commitment to execute and implement the Project within agreed time lines (except in case of *force majeure*) so that power generation from the Project could commence for the benefit of power consumers in the State. Further, under Article 3.1.2 read with Article 5.5 of P.P.A, Claimant had agreed to duly perform and complete the stipulated activities within 12 months from the date of signing of PPA unless such completion was affected by any *force majeure* event, which included taking over possession of land for the Power Station and paying the price of the land if any, to the State Government authority which was acquiring the land. As per Article 1.1 of Amended and Restated PPA, Power Station included all other facilities required for efficient and economic operation of the power generation facility which naturally included the land for railway and water pipeline corridor.

41. Learned Counsel for PSPCL further submitted that Claimant's own pleadings show that upon receipt of Claimant's request for acquisition of land for railway and river water pipeline corridors, immediate steps were taken for carrying out necessary preparation as regards the lands proposed to be acquired and following the process as laid down in the Land Acquisition Act, Notifications under Sections 4 and 6 were issued and thereafter Awards were passed. In this manner, the State Government duly fulfilled its commitment for rendering all assistance to Claimant with regard to making necessary land available. However, if some of the farmers preferred to challenge the awards passed owing to which possession of the land could be given after the litigation was over, then the time consumed in the same could not be construed as an event of *force majeure* beyond the control of Respondent because it was clearly

contemplated under Article 12.3.1(ii)(1) of Amended And Restated PPA that any action which was directed against the Project and not impermissible in law, the same could not qualify as a *force majeure* event and no extension in the SCOD could be claimed or permitted on that account. Since the land acquisition had been done by the State Government, Claimant was necessarily required to take possession thereof within 12 months as stipulated in Amended and Restated PPA subject to occurrence of *force majeure* in which case an extension of ten months was permissible under Article 3.3.3, which was not the case here. Be that as it may, Claimant had unequivocally undertaken to be responsible at its own cost and risk for executing the Project in a timely manner and litigation during land acquisition (historically a regular occurrence in most of land acquisition processes) was a risk which was inherent in land acquisition for the purposes of the Project and deemed to have been taken into account by Claimant while committing to timeline under Amended and Restated PPA. Therefore, Claimant could not claim any extension of time on ground of any alleged delay in acquisition of land. In any case, Claimant has not sought any relief from this Arbitral Tribunal for extension of SCOD on this ground and as such, the pleadings made in that behalf are liable to be ignored by this Arbitral Tribunal.

(c) ANALYSIS AND DISCUSSIONS

42. Railway Corridor and the water pipeline are essential components of the Project. It is estimated that for a project of 540 MW size, daily requirement of coal would be about 750 Tonnes at 85% PLF. Such large quantity of coal from Jharkhand to Punjab can only be transported by Railways. Accordingly the Railway Corridor was essential to ensure supply of coal for the project. The water pipeline was necessary to

supply water to the generating station without which generating station would not be able to generate power. GVK Power has claimed that there has been delay of 33 months and 15 days in handover of land for Railway Corridor and water pipeline. PSPCL has not contested that these are not essential requirements for running of the project. It has contested the Claim on the ground that the non-availability of land cannot be treated as *force majeure* event.

43. PSPCL has submitted that Claimant had unequivocally undertaken to be responsible at its own cost and risk for executing the Project in a timely manner and **litigation during land acquisition (historically a regular occurrence in most of land acquisition processes) was a risk which was inherent in land acquisition for the purposes of the Project and deemed to have been taken into account by Claimant** while committing to the timeline under Amended and Restated PPA. Therefore, Claimant could not claim any extension of time on ground of any alleged delay in acquisition of land.

44. The contention of PSPCL that the litigation in land acquisition process is regular occurrence and should have taken into account by GVK while accepting the time lines for execution of project cannot be accepted. Time lines of 36 months from financial closure had been provided even in LoI dated 18.5.1998 issued by GoP. Implementation Agreement dated 25.8.2000 executed between GoP and GVK provided that required land would be acquired by the Government of Punjab and handed over to GVK before schedule date of financial closure. Whereas financial closure of the project occurred on 21.5.2010, the land for railway siding had been handed over to Claimant/Petitioner on 9.2.2013 i.e. after a delay of 33 months. It cannot be expected from a developer that it could have foreseen a delay of more than 33 months in handing over the land for railway siding and water pipe line and complete the project in 36 months from date of financial closure.

45. Article 4.5.1 (b) of *Restated and Amended PPA* provides that SCOD can be extended if a Unit cannot be commissioned by its Scheduled Commercial Operation Date because of Force Majeure Events. Therefore, it is for us to examine whether such delay can be treated as '*force majeure*' event under *Restated and Amended PPA* or not. In this regard learned Counsel for GVK Power has relied on judgments of Appellate Tribunal for Electricity Judgment dated 15.5.2015 in Appeal No. 108 of 2014 – ***Power Company of Karnataka Ltd. vs. Central Electricity Regulatory Commission & Ors.***, wherein it held:

> *"We find that the PCKL and other Respondents before the CERC had not denied the fact of delay in handing over the land to Udupi Power and accordingly* ***the CERC considered delay in acquisition of land beyond the control of Udupi Power and not attributable to Udupi Power****. Udupi Power gave survey nos. of land falling in BTG area and date of possession certificate between April 2007 to September 2007. Lease of land was executed in November 2007. Strangely, PCKL has given various submissions before this Tribunal which were not made before the CERC.* ***It is not denied that the Government agencies, namely KIADB was solely responsible for acquisition of land handing over project to the developers****. The Udupi Power has explained that there was delay in handing over the land where BTG which is critical path in construction of power project had to be installed. ...* ***As discussed above land acquisition was the responsibility of GoK and KIADB a Government agency and land was to be handed over to Udupi Power by KIADB. This delay in delivery of land is a reason beyond the control of Udupi Power."***

46. The facts of this case squarely fit into the facts of the present matter before us. GVK Power had no role in acquisition of land and delay is a reason beyond the control of GVK Power. Accordingly, we hold that delay in handing over the land for railway siding and water pipe line is a '*force majeure*' event and it falls on 'Critical Path'.

G. DELAY ON ACCOUNT OF RAILWAYS

DELAY BY NORTHERN RAILWAYS IN GRANT OF APPROVALS PERTAINING TO THE RAILWAY SIDING AT THE PROJECT SITE AND

DELAY BY RAILWAYS IN GRANT OF APPROVALS PERTAINING TO THE RAILWAY SIDING AT THE TOKISUD COAL MINE.

(a) CLAIMANT'S SUBMISSIONS

47. Learned Counsel for GVK Power submitted that there were substantial delay in grant of approvals for the railway siding at the Project site as a result of which the construction of the Project was delayed. GVK Power had initiated the process for getting mandatory approvals from Railways by submitting Detailed Project Report on 29.7.2009 itself i.e. immediately after signing *Restated and Amended PPA* dated 26.5.2009. Railway Authorities had considerably delayed granting following mandatory Railway Approvals.

1 Obtaining approval of the Detailed Project Report (DPR),

2 Approval of Engineering Scale Plan (ESP),

3 Permission to undertake work in the Khadur Sahib Railway Station

4 Land Licensing Agreement,

5 Approval of Station Building Drawing,

6 Approval of Signal Inter-locking plan (SIP)

7 Construction of Railway Siding

48. Learned Counsel for GVK Power submitted that though GVK had submitted designs and plans for approval by Northern Railway in a timely manner, still approvals were delayed. Some of these approvals

were sequential and some could be concurrent. For example, GVK could apply for the approval of ESP only after DPR was approved. Similarly approval for SIP's and Station Building Plan could be started only once the ESP was approved. However, request for approval of SIP and Station Building Plan could be submitted concurrently. Assuming a period of three months as the normative time required to obtain the said approvals the delays for the approval has been computed as under:-

(a) Approval of DPR: Delay of 19 months.

(b) Approval of ESP: Delay of 5 months. (Can apply only after approval of the DPR)

(c) Approval of SIP: Delay of 9 months. (Included in delay for Station Building approval)

(d) Approval of Station Building: delay of 17 months

S. NO	MAJOR ACTIVITIES	SUBMISSION DATE	APPROVAL DATE	Delay in months after considering 3 months of normal approval time
1	Approval of DPR	29.7.2009	5.5.2011	19
2	Engineering Scale Plan	16.6.2011	22.2.2012	5
3	Land Licensing Agreement	16.3.2012	31.1.2014	19

4	Station Build Drawing	20.6.2012	20.2.2014	17
5	Signal Interlocking Plan	5.7.2012	27.5.2013	9

49. Based on the foregoing, the aggregate delay on account of delay in Railway Approvals works out to be 41 months.

50. He informed that railway siding at Khadoor Sahib was commissioned on 14.09.2015 and the same was approved / ratified by Northern Railways. Ferozpur Division Railways has taken over Kahdoor Sahib Station and other facilities thereto.

51. Learned Counsel for GVK Power added that there has also been delay of 34 months in obtaining clearance for railway siding to be constructed under Dhanbad Division to transport coal from Tokisud Coal Mine to the Project Site. The approval of licensing of railway land for setting up the Y siding and shunting neck is stated to have been granted on 09.04.2013 though it came to be finally communicated only on 07.05.2014 after a gap of 13 months. Application for Land Leasing Agreement between GVK and ECR for the Railway Siding for Tokisud Coal Mine was submitted on 18.5.2011. However, it was executed on 25.6.2014 after a delay of 34 Months.

52. Further, following sequence of events may be noted in this regard:

1 Obtaining of the Detailed Project Report. On 19.01.2009, Detailed Project Report was submitted to Eastern Central Railways ("ECR") for approval. On 12.06.2009, ECR wrote to GVK's agent BARSYL sharing certain observations to Detailed Project Report and seeking

compliance with the same. On 22.07.2009, revised compliant Detailed Project Report was submitted by BARSYL, which was approved on 10.08.2009.

2 Engineering Scale Plan. On 22.09.2009, BARSYL submitted ESP to ECR for approval. ESP was approved on 05.05.2011 and 11.05.2011. In this regard a delay of 17 months was caused. It is submitted that delay had a cascading effect on the project timeline since the 6 approvals listed below could be applied for only after ESP was approved.

S. NO	MAJOR ACTIVITIES	SUBMISSION DATE	APPROVAL DATE	Delay in months after considering 3 months of normal approval time
1	Box Culverts Drawing	4.1.2012	9.11.2012	7
2	SIP Drawing	8.7.2012	21.11.2012	1
3	Station Building	17.8.2012	10.5.2012	6
4	Cost Estimates	12.3.2012	11.12.2013	18
5	Permission to work undertake works in Railway premises at Tokisud Railway	13.3.2012	15.5.2012	Nil

	Station			
6	Land License Agreement	18.5.2011	25.6.2014	34

53. Learned Counsel for GVK Power argued that delay in grant of licences and approvals is a Force Majeure event. The Hon'ble Appellate Tribunal, in its Judgment dated 02.12.2013 in Appeal No. 139 of 2013 - ***NKTCL v. CERC & Ors.***, has held that delay in grant of an essential approval is to be construed as a Force Majeure. The operative part of the Judgment is reproduced below:

> *"36. To sum up: In the light of above discussion, we are of the view that the power of Telegraph Authority under 164 of the 2003 Act is essential for laying transmission line both from prior consent of land owner as well as from telephonic or telegraph message point of views. Hence, the delay in obtaining the Central Government's approval in conferring power of the Telegraph Authority is to be construed to be a force majeure."*

(b) RESPONDENT'S SUBMISSIONS

54. Refuting the claim of Claimant relating to delay due to Railway clearances Learned Counsel for PSPCL stated that it is the case of Claimant that it had initiated the process for obtaining railway clearances and had submitted applications for approvals. Though Claimant also placed some of the correspondence exchanged by it with Northern Railways with regard to the status of the applications,

however, no communications received from Northern Railways in the nature of raising queries, seeking details or the like were placed which could demonstrate the actual process that underwent in processing of Claimant's applications. The details submitted indicated that despite being aware of the time lines agreed under Amended and Restated PPA which, if not adhered to, could lead to serious issues of breach of contractual obligations and penal consequences for it, there was not the required urgency reflected by Claimant who allowed the permissions to come at their own pace when Claimant ought to have not only pursued vigorously but also taken legal recourse and utilize the available relief of mandamus to compel the State instrumentalities to perform their statutory duties so that the Project was not delayed on account of delay in grant of necessary permissions. It is Claimant's own case that permissions relating to station building and land licensing were still pending for more than 15/18 months with the Railways. Article 12.3 of Amended and Restated PPA clearly stated that in order to invoke the provisions of *force majeure*, it was necessary for the party to demonstrate that it had taken reasonable care in avoiding the occurrence of such event of *force majeure*. Claimant having failed to demonstrate any reasonable care that it had at all taken for mitigating the delay occurring due to pendency of applications with Railway for a long period, it was not eligible for invoking the provisions of *force majeure* and claiming any relief under it.

(c) ANALYSIS AND DISCUSSIONS

55. Next two events for our consideration are delay by Railway Authorities in granting various mandatory approvals for the Project site and Tokisud Coal Block. GVK Power has claimed delay of 41 months and 34 months respectively as delay by Railways Authorities in granting

various mandatorily approvals. According to GVK Power some of the delays were sequential and would fall on 'Critical Path'. However, some of the delays were concurrent and accordingly would not be on the 'Critical Path'.

56. Learned Counsel for PSPCL pointed out that while furnishing documentary evidence for such delays in granting approvals, Claimant has placed some of the correspondence exchanged by it with the Railways with regard to the status of the applications, however, no communications received from Northern Railways in the nature of raising queries, seeking details or the like were placed which could demonstrate the actual process that underwent in processing of Claimant's applications.

57. We agree with the contentions of learned Counsel. Claimant did not demonstrate that all the delays were attributable to Railways only and none of the delay could be attributed to it. Let us take example of delay in approving DPR. GVK submitted DPR on 29.7.2009 and Railways approved it on 5.5.2011 after about 22 months. It is possible that there were some deficiencies in the DPR submitted by GVK and Railways had asked for removal of those deficiencies. From records available with us it is not clear as to when all the deficiencies had been removed by GVK Power and then how much further time was taken by Railways to give approval on final accepted DPR. In the light of these discussions we cannot say that all the delays were not attributable to Claimant and Claimant had no control over that.

58. Further, it is claimed that 6 approvals Tabulated above could be applied for only after ESP was approved. It is noted that ESP approvals for Tokisud site were granted on 11.5.2011 and Box Culvert Drawings were submitted to Railways Authorities only on 4.1.2012 i.e. after 7 months from getting ESP approvals. SIP Drawings were submitted after more

than a year from getting ESP approvals. Claimant has claimed that Railway should have granted approvals within three months from its submission, however, it itself has taken much longer time in making required submissions. We have also noted that it had submitted details for Govidwal Sahib site within 3-5 months from getting ESP Approvals.

59. However, delay in signing of Land Lease Agreement is different. Claimant has no control over that delay caused due to signing of Land Lease Agreements for Project Site and Tokisud Coal Block. Accordingly, we hold that only the delay caused in signing of Land Lease Agreements qualify for '*force majeure*' event under *Restated and Amended PPA*.

H. DELAY BY GOVERNMENT OF JHARKAND IN HANDING OVER FOREST LAND FOR TOKISUD COAL MINE.

(a) CLAIMANT'S SUBMISSIONS

60. Learned Counsel for GVK Power made following submissions on this issue.

I. In order to expedite the forest clearance process GVK obtained the requisite No Objection Certificate dated 20.09.2007 from the District Forest Officers Giridh. GVK had already acquired 395.32 Ha of non-forest land for compensatory afforestation against the indicated requirement of 374.87 Ha by 2007-2008. GVK was granted possession of the said land vide Certificates dated 17.05.2007, 29.11.2007 and 30.12.2008. GVK had also paying the rent and other charges for such lands to the Government authorities.

II. In contrast, approval process of the governmental authorities was significantly delayed as is evident from the following events:-

(a) GVK submitted the first application for transfer of forest land in the year 2007.

(b) On 20.11.2008, GVK wrote to Chief Conservator of Forests, Jharkhand intimating that GVK had arranged 975 acres of alternative land for compensatory afforestation.

(c) On 28.03.2009, the Government of Jharkhand forwarded GVK's proposal for diversion of 926 acres (374.87 Ha) of forest land to the Ministry of Environment and Forest ("MoEF") for grant of Stage I clearance.

(d) On 13.11.2009, while GVK's proposal for diversion of forest land was pending with MoEF, GVK was informed by DFO – Hazaribagh that

GVK was required to obtain No Objection Certificate from the Deputy Commissioner, Giridih for offering certain land parcels acquired by GVK for the purpose of compensatory afforestation. The aggregate area of the land in question was 271.66 acres.

(e) On 21.04.2010, MoEF granted Stage-I forest clearance to GVK and directed transfer of 374.87 Ha of non-forest land identified for compensatory afforestation in favour of the State Forest Department.

(f) However, on 12.05.2010, the Deputy Commissioner - Giridih had addressed a letter to Principal Secretary (Land Reforms and Revenue), Government of Jharkhand to Institute a Departmental Level Committee to enquire into the nature of land.

(g) GVK diligently followed up with the matter to expedite grant of No Objection Certificate and submitted several revenue documents under cover of its letter dated 24.08.2010.

(h) Since No Objection Certificates were not issued by Deputy Commissioner – Giridh, thus GVK purchased additional land in lieu of the said 271.66 acres of land to expedite the forest clearance.

(i) By letter dated 22.03.2011, the District Forest Officer, Hazaribagh cancelled the Certificate given for 99.67 acres of the compensatory land purchased in Hazaribagh district.

(j) Government of Jharkhand finally accepted the compensatory afforestation land and approved the diversion proposal on 02.07.2014.

(k) The order for transfer/diversion of forest land in favour of GVK was made on 09.07.2014.

(l) The land was handed over by DFO Hazaribagh and DFO-Ramgarh vide letters dated 11.07.2014 and 18.07.2014

III. GVK made a number of representations to the Government of Jharkhand for resolution of the matter vide letters dated 04.04.2011, 13.07.2011 and 15.04.2013. Despite the best efforts of GVK, the cancellation of 99.67 acres of compensatory afforestation land was not reconsidered by the Forest Department, GVK purchased the additional land to expedite the forest clearance.

IV. Thus Effective Delay is 24 Months in relation to delay in handing over of Forest land for Tokisud Coal Mine. Even though there was a delay of almost 7 years, GVK has claimed delay for 24 months.

V. Apart from delay in commissioning of the Project on account of Force Majeure events, development of the captive coal mine was also delayed.

VI. Delay in development of Tokisud Coal Block was on account of Force Majeure events. The said delay cannot be attributable to GVK. In this regard, Article 12.2 of PPA may be noted in terms of which any Force Majeure event resulting in late delivery of fuel will be treated as a Force Majeure event for GVK. Therefore GVK cannot be made liable for delay in development of Tokisud Coal Block.

(b) RESPONDENT'S SUBMISSIONS

61. Learned Counsel for PSPCL vehemently opposed the contentions raised by Claimant. She made following submissions in this regard.

a. Right from the beginning at the time of signing the Implementation Agreement dated 25.8.2000, Claimant had undertaken, assured and represented to the State Government that it would make available the fuel for generating electricity from the Project. Thereafter, under the Memorandum of Understanding dated 8.2.2006, Claimant reiterated its assurance given to the State Government that it would complete the Project within prescribed time lines and if required, would also secure fuel from alternative source so as to achieve implementation as per the prescribed Commercial Operation Date. The Government of India, Ministry of Coal had allotted Tokisud (North) sub-block mines in District Hazaribagh in the State of Jharkhand for the Project on 7.1.2002 on the recommendations of the Government of Punjab for supply of coal to the Project. Subsequently, Claimant began representing to the State Government/PSEB that the project at Goindwal Sahib was required to be shifted because as per the policy of Government of Jharkhand, no mineral could be taken out of the State without value addition and therefore the Project was necessarily to be at the pithead. <u>The State Government/PSEB rendered all assistance in resolving the issue and not only corresponded with the Government of Jharkhand in that behalf but also offered the option of making available coal from its own mine situated in Pachhwara in the State of Jharkhand.</u>

b. Notwithstanding the stated difficulties in operating the captive coal block, Claimant voluntarily and being fully aware of all surrounding circumstances, entered into Amended and Restated PPA with fuel supply to be taken from the same Tokisud (North) sub-block in the State of Jharkhand. The clear representation made contractually to PSEB was that the issues that had prevented mining operations from Tokisud North mines had been resolved and Claimant was now in readiness to source fuel from the allocated coal block at Tokisud (North). Having made such unequivocal representation and binding itself under Amended and Restated PPA, Claimant is now estopped from raising any plea as regard its inability to make the allocated mines operational; all the issues that had earlier been represented to prevent commencement of mining operation from the said mine, could not be pleaded as events of *force majeure*. All pleadings made in the Claim Petition as regard alleged difficulty in operating the captive coal mine prior to the signing of the Amended and Restated PPA are therefore liable to be ignored by this Tribunal.

c. The events relevant for the purpose of alleged existence of a *force majeure* situation as regard mining operations, could be those that had occurred after the signing of Amended and Restated PPA. From the pleadings made before this Tribunal, the only event that occurred was the cancellation of the No-objection Certificate granted for lands for compensatory afforestation in respect of which proceedings were stated to be pending. Under Article 12.3 (non-direct *force majeure* event), whenever any consent required by Claimant or its contractors for performing their obligations qua the Project was revoked or refused or when any action of the appropriate Government was directed against the Project, then such revocation or refusal or action was necessarily to be unlawful, unreasonable or discriminatory as declared by a court of law. It follows as a natural corollary that if any such revocation/refusal or action was not declared unlawful or unreasonable or discriminatory by a court of law, then notwithstanding that it was directed against the Project, the same could not qualify as a *force majeure* event as agreed under Amended and Restated PPA and no extension in SCOD could be claimed or permitted on that account. Claimant has not demonstrated that cancellation of No-objection Certificate with respect to lands for mining operations had been declared unlawful or unreasonable or discriminatory by a court of law. As such, the same cannot be construed as a *force majeure* event as wrongly pleaded by Claimant.

d. For the reasons stated above, there is no merit in the Claim Petition of Claimant and the same is liable to be dismissed by this Tribunal. No extension of SCOD of the Project as claimed or prayed for by Claimant, is liable to be granted to Claimant. What is important to note here that the approval of Amended and Restated PPA (with the implementation schedule given therein) and the cost of the Project in 2009 has been granted by the State Electricity Regulatory Commission on the basis of unequivocal representations made by Claimant as regard permissions, land acquisition, fuel source, etc.; these representations have, however, been found to be incorrect in 2012. Had the actual situation been known to the Commission at that time, then the approval of PPA terms would have been granted accordingly and Respondent would have paid or fixed the tariff accordingly and not the increased fixed charges if SCOD is now extended. This aspect of the matter is most fundamental in adjudication of the present Claims before this Tribunal.

e. In its Rejoinder filed in the Petition, Claimant has stated that the *force majeure* events have concluded on 25.6.2014, meaning thereby that there is no longer any impediment whatsoever in execution of the Project. Most importantly, this conclusion of *force majeure* events has taken place 2 months prior to the passing of the Judgment of the Hon'ble Supreme Court as set out below. As such, the plea for extension of SCOD is liable to be considered by this Hon'ble Tribunal separately from and without inter-linking with the plea for extension of SCOD made by Claimant in Claim Petition No.2,

(c) <u>ANALYSIS AND DISCUSSIONS</u>

62. Respondent PSPCL has claimed that procurement of Coal for the project has been the sole responsibility of Claimant and Respondent had no role in this. Respondent had relied on various provisions of LoI issued by the Government of Punjab, MoU and PPA etc. Respondent has also submitted extract of RFP issued as part of bid as under:

> *"(2) The developer will be solely responsible for making arrangements for fuel and for this purpose hold separate discussions with Ministry of Petroleum and Natural Gas and Oil companies for the coal and fuel Oil linkage respectively. If the Coal mines are required to be developed, the developer will make suitable arrangements at his level for the same. The development of such mines would not add to the Capital Cost of the Project. The developer will also undertake to arrange for the transportation of coal and fuel oil to the Project. However, the fuel supply and transportation arrangements that will be entered into with fuel suppliers and Railways would be subject to approval by PSEB. Use of imported coal should not be considered."*

63. From the records made available to us, we have noted the criteria for selection of the developer of the project was on tariff basis. Claimant had proposed two tariff viz., fixed charges based on commercial parameters given in RFP and variable cost based of certain indicative fuel cost. The LoI issued by the Government of Punjab had indicated fixed charges and per unit variable cost arrived at Rs 0.60 per 1000 kCal of GCV. It was also mentioned in the LoI that variation in fuel cost would be allowed as pass through. Thus, the claim of the Respondent that procurement of fuel was sole responsibility of the Claimant is not fully true. This is evident from the fact that the project was allocated coal linkage from Eastern Coal Fields to PSEB. The coal linkage from ECL was transferred from PSEB to Claimant on 3rd September 1998 by Ministry of Coal, Government of India. In this regard Respondent's letter No. 1386/IPC dated 19.9.2001 to

Claimant is important. The relevant extracts of this letter are reproduced below:

"… Also please refer to this office letter No. 1333/IPC/GVK-4 dated 7.9.2000 vide which you were requested to float global tenders to explore the possibility of imported coal as an alternative to the expensive coal from ECL…

In the meanwhile, you had intensive discussions with ECL on coal prices and other provisions of Coal Supply Agreement, but prices and many other commercial issues remained unsolved. All these issues were discussed in detail in the chamber of Addl. Secy., Ministry of Coal, GOI on 12th September 2001 and it was decided to source coal for Govindwal Sahib Project from captive mine block to be allocated to the Company by the Ministry of Coal… Till such time as the captive mine block is developed and coal supply from it commences, PSEB and GOP are agreeable for use of imported coal in Govindwal Sahib Power project.

GVK Power (Govindwal Sahib) Ltd. is requested to initiate Coal Supply Agreement for imported coal for an initial period of three years from date of Project COD extendable on mutually agreed terms. The coal supply agreement for the imported coal will be approved by GOP/PSEB. For this purpose, a Committee of the representatives of GOP/PSEB and GVK will be formed. Please take suitable action for expeditious execution of the coal supply agreement for the imported coal.

The cost of coal from captive mine will have to be mutually agreed between GVK and PSEB/GOP in advance. However, it is presumed that the cost of coal from captive mine block will be less than notified prices of coal based on basket price of coal at which PSEB shall get from various coal companies of Coal India Limited, compared on the basis of per 1000 kilo calories. ***Further, since GVK have not so far at any stage conveyed any reservation by its lenders regarding private mining and imported***

coal for intervening period, it is presumed that this arrangement is acceptable to the lenders."

64. It is very clear from the above that Respondent was also very much keen to keep the fuel cost low so that tariff is not increased. If it was the sole responsibility of Claimant to arrange fuel then the linkage coal from ECL would have served the purpose as the variation in coal prices was pass through as per LOI issued by the Government of Punjab. However, high cost of the coal would have resulted in increase in variable charge component of the tariff quoted by Claimant. Thus, the whole dispute started from the fact that the prices of linkage coal from ECL, which was allocated to PSEB and transferred to Claimant, was high and Respondent wanted to keep tariff low. It is also evident from the above that Respondent was concerned with the lenders' reservations about fuel availability for the project.

65. M/s IDBI, the principle lender to the project expressed their concern about timely availability of coal for the project and Chairman PSEB in his letter dated 16th Oct 2007 had assured Chief General Manager, IDBI Bank that

> "*As there is an acute shortage of power in the State of Punjab, PSEB has requested the Company to set up the Project and PSEB will support the development and commercial operation of the Project. PSEB has also developed is captive coal mine at Pachwara in the State of Jharkhand…If the commencement of coal supply from the Tokisud North coal mine of GVK Power (Govindwal Sahib) Ltd. is delayed due to procedural formalities or is not sufficient to meet the coal requirement of the project, PSEB confirms that it will supply the coal requirement from …its coal mine at Pachwara in Jharkhand…*"

66. Thus, Respondent was aware that there could be delay in developing captive coal mine at Tokisud North by Claimant due to procedural

formalities. Respondent in its submissions before this Tribunal has also submitted that the State Government/PSEB rendered all assistance in resolving the issue and not only corresponded with the Government of Jharkhand in that behalf but also offered the option of making available coal from its own mine situated in Pachwara in the State of Jharkhand.

67. On 14th August 2012 Claimant, vide its letter No. GVKGS/PSPCL/2012/August/01 dated 14thAugust 2012, informed Respondent that 1st Unit of the project is expected to be commissioned by 28.2.2013 and 2nd Unit by 30.6.2013 and requested PSPCL to supply coal from Pachwara coal mine for one year i.e. from Feb 2013 to January 2014 to ensure that the capacity built for the State does not remain idle. It also assured PSPCL that the coal given by PSPCL will be replenished. Claimant had again requested Respondent on 24th June 2013 to supply coal from its Pachwara Coal mine.

68. However, Respondent changed its stand on supply of coal from Pachwara Coal mine and informed Claimant in its letter dated 30.8.2013 that in view of last recital of Restated and Amended PPA all previous correspondence has been superseded. Restated and Amended PPA does not have any commitment of any kind for providing coal from Pachwara coal mine. Relevant extracts of Respondent's letter dated 30.8.2013 are set out below:

> *3. Regarding assurance for supply of coal from Pachwara Block for Govindwal Sahib project quoted as per your letter dated 16.7.2013 para 5 of the letter reference may be made to the agreed terms of the Amended and Restated PPA with following provision in the last para of the preamble:*
>
> > *"Now, therefore, in consideration of the premises and mutual agreements and covenants set forth herein, it is hereby and between the Parties, in supersession of all agreements, letter, communications and the like, anterior to this Agreement, as follow"*

Thus superseding all previous correspondence, the issue regarding source and cost of coal and secondary fuel has been addressed in Schedule 6, clause 1.2.3.2 of the Restated and Amended PPA. As per this clause there is no commitment of any kind for providing coal from captive mine at Pachwara in Jharkhand for the commissioning and commercial operation of the project."

69. Strangely, having once claimed that in view of Restated and Amended PPA all previous correspondence, agreements stood superseded, Respondent has relied heavily on the LoI, IA, MoU and 2000 PPA etc. Never the less, in terms of last recital of Restated and Amended PPA (reproduced above) all previous correspondence, Agreement etc between the parties to the Restated and Amended PPA only would stand superseded. Correspondence giving certain assurance to third party cannot be superseded and would remain valid. Assurance given by Chairman, PSEB to lead lender before financial closure of the project and which could be the basis for facilitating financial closure, cannot be wished away. We are of the view that Respondent should have honoured its assurance and commitment and provided coal from its own Pachwara Coal mine on replenishment basis. This would have substantially avoided the delay in commissioning of project and the current dispute.

70. In view of the above we are of the view that the delay by the Government of Jharkhand in handing over forest land for Tokisud Coal Mine would amount to *'Force Majeure'*.

71. However, we are constrained to point out that the Hon'ble Supreme Court in the following decisions has held that the Statutory Authorities cannot be allowed to raise unjust objections and they cannot behave like some private litigants with profiteering motives:

   a. **2010 (1) SCC 512-*Urban Improvement Trust vs Mohan Lal***

- ***b.*** **2009 (1) SCC 540-*Corporation Bank vs Saraswati Abharansala and Another***
- **c. 1959 SCR 1350-*Sales Tax Officer Banaras and Others Vs Kanahaiya Lal Mukund Lal Saraf***
- **d. 1964 (6) SCR 261-*State of M.P Vs Bhailal Bhai and Others***
- ***e.*** **1994(4) SCC 1 *Jay Laxmi Salt Wroks (P) Ltd Vs State of Gujarat***
- **f. 1993 Supp (4) SCC 326-*UOI Vs ITC Ltd***
- **g. 1988 (1) SCC 401-*Salonah Tea Co. Ltd and Others***

72. In the above decisions, the following principles have been laid down:

a. It is high time that Government and public authorities adopt the practice of not relying upon technical pleas for the purpose of defeating legitimate claims of citizens and do what is fair and just to the citizens.

b. Statutory authorities exist to discharge statutory functions in public interest. They should be responsible litigants. They cannot raise frivolous and unjust objections, nor act in a callous and high handed manner. They cannot behave like some private litigants with profiteering motives. Nor can they resort to unjust enrichment.

c. It must be remembered that the State is not an ordinary party trying to win a case against some of its own citizens by hook or by crook. The interest of the State is to meet honest claims and never to score a technical point or overreach a weaker party to avoid a just liability and secure an unfair advantage.

d. Where excess duty was not payable by the party under the provisions of a statute but had in fact been paid under a mistake of law, the party has a right to recover it and there is a corresponding legal obligation on the part of the Government to refund the excess duty so collected because the collection in such cases would be without the authority of law.

> e. *The taxes collected without the authority of law as in this case from a citizen should be refunded because no State has the right to receive or to retain taxes or monies realised from citizens without the authority of law.*

73. These principles will squarely be applicable to the present case also.

I. POOR SOIL CONDITIONS AND DE-WATERING

(a) CLAIMANT'S SUBMISSIONS

74. Learned Counsel for GVK Power submitted that during the geo-technical investigation conducted by GVK in 2009, it was found that the soil-strata at the project site was liquefaction prone during earth quakes. The results of the said investigation were referred for further analysis by CENGRS Geotechnica Pvt. Ltd. and review by IIT Delhi. It was found that the N-Value at the project site which is situated in seismic zone IV was less than 15 against the required N-Value of 25. It was suggested that Vibro Compactions be carried out, which is a cumbersome and time consuming process. During these investigations it was revealed that the ground water table exists at 0.75 m to 1.0 m below the existing ground level due to which GVK had to adopt a well point de-watering system and a cluster of bore wells to contain the seepage of water and to facilitate foundations for construction. On account of the same there was a delay of 6 months in execution of the Project. IS 1893 (Part 1), 2002 prescribes standards for earthquake resistant design of structures which are applicable to all structures. In terms of IS 1893 (Part I), in the event that the Standard Penetration Resistance or "N-Value" of the soil is lower than the prescribed standard, soil compacting is required to be adopted in order to achieve the standards stipulated in IS 1893. IS 1893 (Part 1), 2002 was an amendment to IS 1893, 1984. The initial soil testing of the project site had been carried out in terms of IS 1893, 1984. The vibro-compaction was a requirement prescribed in terms of the applicable IS 1893, 2002.

(b) RESPONDENT'S SUBMISSIONS

75. Under the Implementation Agreement dated 25.8.2000, the Government of Punjab had permitted Claimant to undertake necessary investigation with respect to soil survey, topographical survey and other necessary test work as required for the Project. It is reasonable to presume that Claimant had acted with all business prudence at its command for ensuring full safety of its investment/stake in the Project and after being fully satisfied as to the geological and other conditions with regard to the Project site, it undertook construction responsibility expressly declaring under Article 5.2 of the Amended and Restated PPA that it not only had sufficient opportunity for investigating the site as per its geological condition but that it had in fact undertaken the required investigation and only thereafter it had accepted full responsibility for its condition. For this reason, Claimant had agreed and undertaken that it would not be entitled to extension of time by reason of unsuitability of site for any reason whatsoever. That being so, Claimant cannot now plead any additional time spent in execution of the Project on account of alleged unsuitability of site condition, whether on account of soil condition or de-watering, as the same is barred by provision of Article 5.2.

(c) ANALYSIS AND DISCUSSIONS

76. The contention of PSPCL referring to Clause 5.2 of *Restated and Amended PPA* appears to be attractive on a first look. But on detailed examination of facts it becomes untenable due to the fact that the land for project site was handed over to Claimant during the year 2009 i.e. after signing of Draft *Restated and Amended PPA*. To a specific query raised by Tribunal during hearings that Clause 3.2 of Implementation Agreement between GoP and GVK dated 25.8.2000 states that Government shall permit the

Company to undertake necessary investigation etc. Restated PPA was initiated in 2007 and submitted to PSERC for approval and finally signed on 16.5.2009. Clause 5.2 of Restated PPA states that seller acknowledges before entering into this PPA that it had sufficient opportunity to investigate the site. Land for the project was handed over to GVK in 2009. Could Claimant carryout investigation without getting the possession of land? PSPCL reiterated its view taken in the pleadings and before this Arbitral Tribunal. It is to be noted that possession of land for the project was handed over to GVK Power after signing of *Restated and Amended PPA*. Detailed investigation relating to soil testing and suitability of land for laying foundation for TG Hall and Boiler etc. could only be done after physical possession of land. Geological surprises do occur during such large scale construction works and any delay on account of such geological surprises is considered as '*force majeure*' event GVK Power has claimed a delay of 6 months. We have examined that this delay is concurrent and overlapping with delay occurred due to handing over land for railway siding and water pipeline etc. Accordingly, it does not fall on 'critical path' of the project.

J. SHORTAGE OF AGGREGATES

(a) CLAIMANT'S SUBMISSIONS

77. Learned Counsel for GVK Power submitted that there was an acute shortage of fine aggregate (Sand) and course aggregate (HBG material) due to an imposition of a ban on local quarrying by the Hon'ble High Court of Punjab and Haryana. This caused a delay of 4 months in the Implementation of the Project. In order to avoid any further delay in construction of the Project, GVK diligently started sourcing the aggregates from various places in Himachal Pradesh and even from other areas outside the State of Punjab. The delay caused in procuring aggregate was due to the restrictions imposed by the Hon'ble High Court of Punjab and Haryana, which is beyond the control of GVK.

(b) RESPONDENT'S SUBMISSIONS

78. Admittedly, procurement of all construction material including fine aggregate (sand) and coarse aggregate (HBG Metals) was an obligation of Claimant under Amended and Restated PPA. If there was a ban on local quarrying as alleged by Claimant, then the only consequence of such ban was that procurement was now to be done from a site other than the one originally identified. It did not bring in any inability in performance of obligations under PPA and as such, the same could not under any stretch of imagination qualify as an event of *force majeure* so as to entitle the Claimant to any extension of time. That being so, Claimant's plea of alleged delay in implementation of the Project on account of alleged shortage of aggregates is unfounded and is liable to be rejected by this Arbitral Tribunal.

(c) <u>ANALYSIS AND DISCUSSIONS</u>

79. We have perused the order of Hon'ble High Court of Punjab and Haryana dated 18.5.2010 referred to by Claimant in support of its claim. The Order clearly states that illegal mining in the State has been banned. It further directs that there would not be any extension of permits for mining in the States. Thus, legal mining under existing permits was not banned. During hearing learned Counsel for GVK Power stated that pursuant to Hon'ble Supreme Courts directions there was a complete ban on mining in the country. However, Claimant in its own pleadings has stated that aggregate was sourced from Himachal Pradesh and other areas outside Punjab. It is therefore evident from records that ban was limited to illegal mining in the State of Punjab and extension of permits for mining. Therefore, delay in procurement of aggregate cannot be held as 'force majeure' event.

K. DELAY ON ACCOUNT OF DELAYED SUPPLY OF BTG BY BHEL

(a) CLAIMANT'S SUBMISSIONS

80. Learned Counsel for GVK Power submitted that BHEL who is the BTG contractor for the supply of Boiler, turbine, generator and main-transformers delayed supplies due to power shortage in the State of Tamil Nadu, resulting in delay in supply of boiler drums and pressure parts. Erection was held up at site due to non- availability of boiler material. This caused a delay of 8 months for each of the two units of the Project.

(b) RESPONDENT'S SUBMISSIONS

81. Article 12.4 of Amended and Restated PPA had provided for exclusion of certain events from the purview of *force majeure*. Such exclusion included delay in performance of any contractor, sub-contractor or their agents except to the extent that they were consequences of an event of *force majeure*. Respondent as a distribution licensee is aware that power availability or non-availability in a given State or a region is a situation which is within the limits of reasonable assessment unless disturbed by unprecedented and unforeseen circumstances. The status of power availability is therefore a factor which is well within the knowledge of the equipment supplier when it enters into a contractual obligation to supply equipment for a power plant and it can reasonably be assumed that the time period for effecting delivery of equipment is also agreed taking into account the situation of power availability in the State. That being so, power cuts in the State where manufacturing facility of the equipment supplier is situated, cannot be construed as an event of *force majeure* which has prevented the equipment supplier from delaying the

plant equipment within agreed time and does not qualify as *force majeure* as defined in Article 12.2. As such, if late delivery of equipment by BHEL occurred, the same did not qualify as a *force majeure* event within the meaning of Article 12.3 of Amended and Restated PPA so as to entitle the Claimant to plead any extension of time on that account.

(c) ANALYSIS AND DISCUSSIONS

82. The claim of Claimant that the delay in supply of equipment by BHEL due to load shedding is not acceptable. Load shedding in Southern States, which were reeling under sever power shortages, cannot be held to be unforeseen and unprecedented. Delay in supply of goods is a matter between procurer and supplier and had to be dealt according to the terms of contract between the two. Claimant should have incorporated provisions of liquidated damages in its contract with BHEL to indemnify itself. Delay in supply of goods cannot be termed as *'force majeure'* under of Amended and Restated PPA.

L. INCREASE IN NUMBER OF BAYS FROM 4 NUMBERS TO 6 NUMBERS

(a) CLAIMANT'S SUBMISSIONS

83. The learned Counsel for GVK Power submitted that in a meeting held between PSEB and GVK on 12.02.2009, PSEB stressed on the fact that 6 no. bays are necessary to provide proper evacuation against 4 No. bays envisaged by GVK and agreed by PSEB earlier. In context of the agreed plant configuration, this belated change caused a delay of 6 months in execution of the Project. Being a new and belated requirement for additional bays was on account of specific request by PSPCL, any time and cost overrun on account of the said request has to be borne by PSPCL.

(b) RESPONDENT'S SUBMISSIONS

84. It was agreed between Claimant and Respondent that the additional bays were required for operation of PSEB grid system in integrated mode so as to ensure proper power evacuation under contingency/outage conditions and provide necessary flexibility for operation of the system. The Minutes of Meeting dated 12.2.2009 placed on record by Claimant shows that the parties had also agreed that the addition of bays would result in additional capital cost for the Project to which PSEB had no objection; however, the same was a matter for getting approval from the Commission. If the addition was to result in extra construction time for Claimant, the same would also have been discussed and recorded in the meeting and agreed for referring for approval of the Commission, which was not the case here. In this undisputed situation, no question of any *force majeure* or change in law

position could arise and the claim for extension of time in this behalf was untenable.

(c) ANALYSIS AND DISCUSSIONS

85. We have noted from the records that 220 kV Switchyard at Govindwal Sahib with all the 6 bays was available on 20.9.2012.Restated PPA defines Scheduled Connection date as 210 days before SCOD. SCOD was 20.5.2013. Therefore SCD works out to be 20.10.2012. PSPCL has confirmed that one of the 220 kV Double Circuit line from Sultanpur was completed on 25.8.2012. Since both switchyard as well as the evacuation line was ready before Schedule Connection Date, there was no effective delay on account of increase in number of bays. The event, therefore, cannot be categorised as '*force majeure*' event.

M. CONCLUSIONS

86. We have examined whether each of the event falls under the category of '*force majeure*' event or not. This brings us to second question for our consideration i.e. whether the delay in following Schedule Commercial Operation Date is due to existence of Force Majeure event ?A table showing various events which have impacted the Project along with start date and end date, the time over run and whether the event is '*force majeure*' or not is set out below:

S. No.	***Event***	***Start Date***	***End Date***	***Time over run***	***Whether Force Majeure or not***
1	Poor Soil conditions requiring vibro Compaction	04.01.2010	22.07.2011	Effective delay is 6 months	Yes
2	Shortage of Aggregates	17.05.2010	31.12.2010	Effective delay about 4 months	No
3	Supply of BHEL materials	18.02.2010	25.09.2013	Effective delay 8 months	No
4	Increase in number of bays from 4 numbers to 6 numbers	06.09.2010	Construction completed -20.09.12.	Effective delay about 6 months	No
5	Railway corridor Land	25.05.2010	09.02.2013	33 months 15 days	Yes

S. No.	*Event*	*Start Date*	*End Date*	*Time over run*	*Whether Force Majeure or not*
6	**Railways approval (Goindwal Project Site)**				
A	DPR	29.07.2009	05.05.2011	19 Months	No
B	ESP	16.06.2011	22.02.2012	5 Months	No
C	SIP Drawing	05.07.2012	24.07.2013	9 Months	No
D	Station building Drawing	20.06. 2012	24.02.2014	17 Months	No
E	Land Licensing Agreement	16.03.2012	23.01.2014	19 Months	Yes
7	**Railways approval(Tokisud Coal Mine Site Railway Siding)**				
A	ESP	22.09.2009	11.05.2011	16 Months	
B	Box Culverts Drawing	04.01.2012	22.02.2013	10 Months	No
C	SIP Drawing	08.07.2012	21.11.2012	1 Months	No
D	Station Building	17.08.2012	10.05.2013	6 Months	No
E	Cost Estimates	12.03.2012	11.12.2013	18 Months	No
8	Land License Agreement	18.05.2011	25.06.2014	34 Months	Yes
9	CA land of 271.66 Acres acquired in Giridh District, Jharkhand:	03.11.2009	12.06.2013	Effective Delay 24 Months	Yes
10	CA land of 99.67 Ac. Acquired in Hazaribagh District, Jharkhand:	22.03.2011	18.09.2013	Effective Delay 24 Months	Yes

87. In the light of above discussions we shall now address the issued framed by us in para 22 and the same are reproduced below:

a) Whether there existed a Force Majeure Event/Change in law Events, which were beyond the control of the Claimant, pursuant to Article 12 and 13 of the Power Purchase Agreement?

(b) Whether the delay in following Schedule Commercial Operation Date is due to existence of Force Majeure event/Change in law events?

(c) Whether the Claimant is entitled for extension of SCOD for completion and commercial operation of the Project?

(d) Reliefs and cost

We have decided in the proceeding paragraphs that "Force Majeure" events which were beyond reasonable control of the Claimant/ Petitioner did exist under some of the circumstances which have been summarised in para 86 above. Delay in achieving SCOD is due to such "Force Majeure" events. Accordingly, the Claimant/Petitioner is entitled for extension of SCOD from 4.1.2010 to 25.6.2014 as prayed for. Parties to bear their respective costs.

88. Award pronounced in open court on 10/04/2017.

Parties to bear their respective costs.

(Justice Mukul Mudgal)	(Justice Deepak Verma)	(Mr. V J Talwar)
Co- Arbitrator	Presiding Arbitrator	Co- Arbitrator

IN THE MATTER OF THE ARBITRATION AND CONCILIATION ACT 1996

AND IN THE MATTER OF AN ARBITRATION

BEFORE:
HON'BLE MR. JUSTICE DEEPAK VERMA (FORMER JUDGE, SUPREME COURT OF INDIA)
HON'BLE MR. JUSTICE MUKUL MUDGAL (FORMER JUDGE, DELHI HIGH COURT)
HON'BLE MR. V.J. TALWAR

BETWEEN:

GVK POWER (GOINDWAL SAHIB) LIMITED

Claimant/ Petitioner

&

PUNJAB STATE POWER CORPORATION LIMITED

Respondent

FINAL AWARD

CLAIM PETITION NO. 2

10/04/2017

THE HON. JUSTICE MUKUL MUDGAL (RTD.)
A - 1, LGF
Nizamuddin East,
New Delhi – 110013
India

THE HON. JUSTICE DEEPAK VERMA (RTD.)
B-4, Ground Floor,
Geetanjali Enclave,
New Delhi – 110017
India
Presiding Arbitrator

THE HON. MR. V.J. TALWAR
708, Brentwood Tower
Charmwood Village,
SurajKund Road,
Faridabad – 121009
India

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LIST OF ABBREVIATIONS

APTEL...Appellate Tribunal for Electricity

BHEL……………………………………………………Bharat Heavy Electricals Ltd.

CERC……………………………………...Central Electricity Regulatory Commission

CIL..Coal India Limited

COD…………………………………………………...Commercial Operation Date

CPM………………………………..……………………….Critical Path Method

DFO………………………………..……………………….District Forest Officer

DPR……………………………………..……………………Detailed Project Report

ECR……………………………………..…………………Eastern Central Railways

ESP…………………………………...………………………Engineering Scale Plan

GOI…………………………………..………………………..Government of India

GoP…………………………………………………………..Government of Punjab

IA……………………..…………………………………..Implementation Agreement

L.A. Act………………………………………………….…………Land Acquisition Act

LOI……………………………………………………………...........Letter of Intent

MOU………………………………………………..Memorandum of Understanding

MoEF…………………………………………….Ministry of Environment and Forest

NOC………………………………………………………..No Objection Certificate

PERT…………………………………………..Program Evaluation Review Technique

PSPCL ………………………………………Punjab State Power Corporation Limited

PSEB……………………………………….……..Punjab State Electricity Board

PPA……………………………………………………Power Purchase Agreement

RFP………………………………………………………….Request for Proposal

SERC……………………………………….State Electricity Regulatory Commission

SIP………………………………………………………….Signal Inter-locking plan

SCOD…………………………………….Scheduled Commercial Operation Date

TG………………………………………...………………Turbine & Generator

LIST OF CASES

CLAIMANT

i. Manohar Lal Sharma v. The Principal Secretary & Ors., (2014) 9 SCC 516.
ii. Uttar Haryana Bijli Vitran Nigam Ltd. & Anr. v. Central Electricity Regulatory Commission & Ors., Appeal No. 100/2013.
iii. A.P. Electricity Regulatory Commission v. R.V.K. Energy (P) Ltd. Reported as (2008) 17 SCC 769.
iv. M/s Wardha Power Company Limited v. Reliance Infrastructure Limited & Ors., Appeal No. 288 of 2013.
v. Nabha Power Limited v. Punjab State Power Corporation Limited, Appeal No. 207 of 2012.
vi. Jiyajeerao Cotton Mills Ltd. v. M.P. Electricity Board, 1989 Supp (2) SCC 52.
vii. D.K. Trivedi & Sons v. State of Gujarat, 1986 Supp SCC 20.
viii. K. Ramanathan v. State of Tamil Nadu &Anr., (1985) 2 SCC 116.
ix. U.P. Power Corporation Limited v. National Thermal Power Corporation Limited, (2009) 6 SCC 235.
x. Tata Power Company Limited v. Reliance Energy Limited, (2009) 7 SCALE 513.

RESPONDENT

i. M/s Adani Power Ltd. v. Gujarat Electricity Regulatory Commission, Appeal No. 184/2010.
ii. NTPC Ltd. v. Central Electricity Regulatory Commission, Appeal No. 110/ 2012.
iii. Manohar Lal Sharma v. The Principal Secretary & Ors., (2014) 9 SCC 516.
iv. Khardah Co. Ltd. v. Raymon & Co., AIR 1962 SC 1810.
v. Central Bank of India v. H F Inse. Co., AIR 1965 SC 1288.
vi. Bank of India & Anr. v. K Mohandas & Ors. [(2009) 5 SCC 313.

vii. Rajasthan State Industrial Development and Investment Corporation & Anr. v. Diamond and Gem Development Corporation Ltd & Anr.,(2013) 5 SCC 470.

viii. Kamla Sugar Mills Ltd Delhi v. M/s Ganga Bishen Bhajan Singh and Anr.,AIR 1978 Mad 178.

ix. L Schuler AG v.Wickman Machine Tool Sales Ltd (1973) All ER 39.

DRAMATIS PERSONAE

Mr. M. Ramamurty	Director, GVK Power & Infrastructure
Mr. T.V. Bhaskar	Head Legal, GVK Power & Infrastructure
Mr. M. Sodekar	AGM, GVK Power & Infrastructure
Er. Balwant Singh	Chief Engineer, PSPCL
Er. Lakhvinder Singh	Senior Engineer, IPC
Er. Keval Singh	Senior Executive Engineer, IPC

A. INTRODUCTION

(a) OVERVIEW

This Arbitration pertains to dispute between GVK and PSPCL arising out of Power Purchase Agreement dated 26.05.2009 with respect to extension of Scheduled Commercial Operation Date (SCOD) on account of alleged 'Change in Law' and/or Force Majeure Events.

(b) PARTIES

CLAIMANT/PETITIONER

GVK Power (Goindwal Sahib) Limited (hereinafter referred to as **`GVK Power')** is a Company incorporated under the Companies Act, 1956. It is a power generating Company having a Coal Fired Thermal Power Plant at Goindwal Sahib in the State of Punjab. It entered into an Agreement for establishing, maintaining and operating a Thermal Power Station for supplying electricity from the said project exclusively to the Punjab State Power Corporation Limited (hereinafter referred to as **`PSPCL')** the Respondent herein.

RESPONDENT

Punjab State Power Corporation Limited (PSPCL) is electricity generating and distributing Company of the Government of Punjab State in India. PSPCL was incorporated as Company on 16.04.2010 and was given the responsibility of operating and maintenance of State's own generating projects and distribution system.

(c) REPRESENTATIVES OF THE PARTIES

Claimant:

- Advocate Amit Kapoor
- Advocate Vishrov Mukherjee
- Advocate Rohit Venkat V.
- Mr. M. Ramamurty
- Mr. M. Sodekar
- Mr. T.V. Bhaskar

Respondent:

- Advocate Suparna Shrivastava
- Advocate Raghav Kapoor
- Er. Balwant Singh
- Er. Lakhvinder Singh
- Er. Keval Singh

(d) ARBITRAL TRIBUNAL

OVERVIEW:

GVK took up the construction of the Project. However, on account of various events, the Project got delayed. Since the commissioning of the Project got delayed on account of various events, GVK filed Petition No. 65 of 2013 before Punjab State Electricity Regulatory Commission (herein after referred to as '**the Commission'** under Section 86(1)(f) of the Electricity Act 2003, ('**the Act'**) seeking extension of Scheduled Commercial Operation Date ("***SCOD***"). GVK claimed the aforesaid events as '*Force Majeure*' events under the Agreement and sought an extension of SCOD.

While the aforesaid petition was pending adjudication before the Commission, Captive Coal Blocks allocated to GVK got cancelled pursuant to judgment dated 24.08.2014 of the Hon'ble Supreme Court in the case of ***Manohar Lal Sharma vs. The Principal Secretary & Ors.,*** reported as (2014) 9 SCC 516 ("***Coal Judgment***") and the subsequent Cancellation Order dated 24.09.2014 reported as (2014) 9 SCC 614 ("***Cancellation Order***").

Since the Project was premised on captive coal block which was no longer available, GVK filed Petition No. 33 of 2015 before the Commission on 11.05.2015 seeking declaratory relief on account of Change in Law and Force Majeure events, and consequential relief of amendment of the terms of the Restated PPA so as to enable GVK to procure fuel from alternate sources and supply power to PSPCL.

ARBITRAL TRIBUNAL

In terms of Section 86(1)(f) of the Act, the Commission has powers either to adjudicate the disputes between generating company and licensee or to refer it for Arbitration. The Commission, vide its order dated 02.09.2015 has constituted this Arbitral Tribunal for Arbitration.

The Commission had directed the parties to propose names of three Arbitrators each. GVK Power had proposed names of Hon'ble Mr. Justice Mukul Mudgal (Former Judge, Delhi High Court), Mr. R.D. Gupta (Former Member, UP Electricity Regulatory Commission) and Mr. Ashish Gupta (Partner, M/s T.R. Chadha and Co.). PSPCL had proposed names of Hon'ble Mr. Justice Deepak Verma (Former Judge, Supreme Court of India), Mr. R.S. Mann (Retd. IAS, Former Chief Secretary, GoP) and Mr. S.K. Anand (Former Member of erstwhile PSEB).

The Commission considered all the names proposed by the parties for nomination on the panel of Arbitrators. Thereafter, Commission referred the disputes and differences between GVK Power (Goindwal Sahib) Limited and PSPCL to the panel of three Arbitrators namely,

1. Hon'ble Justice Deepak Verma Former Judge Supreme Court of India	Presiding Arbitrator
2. Hon'ble Justice Mukul Mudgal Former Judge High Court of Delhi	Arbitrator
3. Sh. V.J. Talwar Former Technical Member Appellate Tribunal for Electricity	Arbitrator

B. <u>BRIEF FACTS</u>

Background and relevant facts of the claim are as follows:-

1. In 1996, the Government of Punjab ("***Punjab Government***") undertook an international competitive bidding process with the objective to select a party to establish and operate a coal fired Thermal Power project at Goindwal Sahib in the State of Punjab, and the entire electricity generated from the said power project was to be sold to PSEB. Claimant was selected as the successful bidder to Build, Operate and Own (BOO) the Power Plant.

2. On 04.03.1998 the Punjab Government issued a Letter of Intent ("***First LOI***") and on 18.05.1998, the Punjab Government issued a revised Letter of Intent ("***LOI***") to Claimant and on 20.05.1998, Claimant accepted the amended LOI issued by the Punjab Government.

3. On 02.06.1998, the Punjab Government:

   (a) wrote to the Claimant stating, *inter alia,* that the Punjab Government will be requesting all concerned departments/authorities to transfer statutory and non-statutory clearances already obtained by PSEB to the newly formed generating company.

   (b) wrote to PSEB requesting it to transfer all statutory and non-statutory clearances (including environment and forest, coal linkage etc.) obtained by PSEB in favour of the Claimant, which will be the generating company for the Project.

4. On 10.08.1998, The Chief Minister of Punjab wrote to the Prime Minister of India, Union Minister of Coal and Union Minister of Power stating that the Power Project has been awarded to Claimant. In the said letter, the Chief Minister stated that Claimant is facing difficulties in getting allocation of coal linkage and had requested the Union Minister of Coal to provide linkage from an existing coal block rather

from an undeveloped mine and to that extent requesting them to do the needful.

5. On 03.09.1998, the Government of India, Ministry of Coal & Mines ("***Coal Ministry***" "***MoC***") issued a letter to PSEB conveying its approval to transfer coal linkage for the Project in favour of Claimant.

6. On 17.04.2000, Claimant entered into a Power Purchase Agreement with PSEB for the sale of the entire capacity of the Power Project to PSEB. In terms of PPA:-

   (a) It was proposed that coal linkage for operating the Power Plant at PLF of 85% on annual basis would be obtained from Coal India Limited ("***CIL***").

   (b) The Coal Supply Agreement and the Coal Transportation Agreement executed have to be acceptable to Claimant, PSEB and the Lenders.

   (c) Energy charges shall be on the basis of the cost of coal supplied by CIL.

   (d) In case CIL fails to deliver the required quantity of coal, Claimant can procure coal from any other source, including imported coal with the permission of PSEB.

   (e) The energy charge in such cases will include cost of coal procured from alternative source.

7. On 19.09.2001, PSEB communicated to Claimant, inter alia, that it was decided by the Addl. Secretary Ministry of Coal on 12.09.2001 that the source of coal for the Project from a captive coal block will be allowed to the company by the MoC. In this regard, Claimant was requested to follow up with the MoC on the allocation of such captive coal block.

8. On 28.11.2001, the Coal Ministry allocated the Tokisud (North) Coal Block to Claimant for captive use for the Project in its 17th Screening Committee Meeting.

9. On 07.01.2002, the Coal Ministry wrote to Claimant confirming the allocation of the Tokisud Coal Block to the Claimant for captive use for the Project as decided in the 17th Screening Committee Meeting held on 28.11.2001.

10. On 04.08.2005Claimant submitted a revised mining plan for mining of coal and for transportation of coal from Tokisud Coal Block to the Power Plant, to the Coal Ministry. The revision was done in view of unwillingness of the Government of Punjab in accepting the proposal of Government of Jharkhand to locate Power Plant in Jharkhand as a Pit Head project.

11. On 08.02.2006, pursuant to negotiations between Claimant and PSEB, a Memorandum of Understanding ("**MoU**") was executed revising certain norms and parameters for supply of power by Claimant to PSEB, which:-

    (a) Substantially reduced the tariff for generation of power.

    (b) Enhanced the capacity of the Project from 2x250 MW to 2x270 MW (+20%).

12. On 05.04.2006 the Coal Ministry granted approval of the revised mining plan for Tokisud Coal Block, submitted on 04.08.2005.

13. On 26.05.2006 Claimant applied for a mining lease to the District Mining Officer, Hazaribagh, enclosing the approval granted for the revised mining plan.

14. On 03.01.2007, Claimant applied to the Coal Ministry for allocation of a coal mine at Seregarah. In the said application, it was stated that for generating 600MW of power from the Power Plant, 3.05 Million Tons

per annum of coal is required. However, since the capacity of the Tokisud block was only 2 Million Tons additional coal was required.

15. On 13.09.2007, the Coal Ministry at its 35th Screening Committee meeting recommended allocation of Seregarah coal mine as a supplementary captive coal block ("***Seregarah Coal Block***") to Claimant, jointly with the Arcelor Mittal Group in a 45:55 ratio to meet the balance coal requirement for the 2 x 270 MW power plant.

16. On 09.01.2008, the Coal Ministry allocated the Seregarah Coal Block as a supplementary captive coal block to the Claimant, jointly with the Arcelor Mittal Group at a ratio of 45:55.

17. On 03.10.2008, Ministry of Coal gave administrative approval for the mining lease with respect to Tokisud Coal Block, with the following conditions:-

    (a) Tokisud Coal Block has been allocated to meet the requirements of the Project. Tokisud Coal Block is meant for captive end-use of the Project.

    (b) The boundaries of the Tokisud Coal Block were defined in the letter.

    (c) Claimant was directed to comply with the terms and conditions contained in the letter of allocation dated 07.01.2002.

    (d) Claimant had to obtain Forest clearances.

18. On 05.12.2008 a Coal Transportation Agreement was executed between Claimant and East Central Railway for transport and delivery of coal from Tokisud Coal Block to the Project.

19. On 06.06.2009, Claimant executed a Coal Supply Agreement with Claimant Coal (Tokisud) Company Pvt. Ltd. (*being the project company developing the coal mine*) for the supply of coal to the Project.

20. On 06.03.2009, State Commission, passed an Order in Petition No. 3 of 2007 approving Restated PPA proposed to be entered into by PSEB and Claimant , pursuant to the MoU dated 08.02.2006 and directed certain modifications to be made to the same viz.:

    (a) Modify PPA in line with the standard bidding documents issued under Section 63 of the Act.

    (b) Claimant along with PSPCL should initiate a competitive bidding for developing and operating the Tokisud Coal Block and any lower cost emanating as a result of this exercise shall form part of the mining agreement and be adopted for the purposes of working out the variable fuel charges.

21. On 26.05.2009, Claimant entered into Restated PPA with the erstwhile PSEB for supply of power from Claimant's 2x270 Project, conceptualizing the Project as a captive coal mine based Project.

22. On 05.08.2010 Mining Lease was executed between Claimant and the Government of Jharkhand.

23. On 13.01.2011, the Tribunal passed a judgment in Appeal No. 70 of 2009 filed by Claimant challenging the order of the Hon'ble State Commission dated 06.03.2009 modifying the terms of PPA, the Tribunal upholding the views of the Punjab Commission on development of coal mine through competitive bidding.

24. On 07.06.2012, Claimant received the Mine Opening Permission for Tokisud Coal Block from the Office of the Coal Controller.

25. On 13.08.2012, Claimant received the approval for the revised mining plan for Tokisud Coal Block.

26. On 14.08.2012, Claimant wrote to Respondent requesting it to supply coal from Panchwara Block in view of delays in the mining of Coal from Tokisud Coal Block due to the occurrence of various Force Majeure events.

27. On 19.06.2013, IDBI Bank wrote to PSPCL, intimating it of the fact that there has been a delay in the completion of the mining activities in Tokisud Coal Block due to delay in getting possession of forest land and various other statutory approvals as a result of which coal from Tokisud Coal Block would not be available in time for COD of the Project. In this regard, IDBI requested PSPCL to fulfil its assurance given on 16.10.2007 and supply coal to the Power Plant from Panchwara block.

28. On 24.06.2013, Claimant wrote to Respondent requesting it to supply coal from the Panchwara block.

29. On 30.08.2013, Respondent wrote to Claimant stating that it is not obligated to supply coal from Panchwara coal mine for the commissioning and commercial operation of the Project in terms of Clause 1.2.3.2 of Schedule 6 of Restated PPA.

30. On 10.12.2013, Claimant filed Petition No. 65 of 2013 seeking extension of the Schedule Commercial Operation Date ("***SCOD***")for the Power Plant on account of certain Force Majeure and Change in Law events, which, inter alia, included the delay in handover of possession of land for Tokisud Coal Block, which consequently caused a delay in the mining of coal from Tokisud Coal Block. In terms of the foregoing, Claimant sought the following reliefs (computed on the basis of 9 months extension from the date of closure of force majeure events):

    (a) Extension of SCOD for Unit 1 from 20.05.2013 to 10.04.2015; and

    (b) Extension of SCOD for Unit 2 from 20.11.2013 to 10.10.2015.

31. On 27.06.2014, Claimant received the Consent to Operate Tokisud Coal Block from Jharkhand State Pollution Control Board.

32. On 25.08.2014 the Hon'ble Supreme Court in W.P. (Crl.) 120 of 2012 in the case of ***Manohar Lal Sharma vs. The Principal Secretary & Ors.***

reported as 2014, 9 SCC 516 ("***Coal Judgment***") held that the entire allocation of coal blocks/ mines made by the Screening Committee from 14.07.1993 in 36 meetings and allocations made through the Government dispensation route suffer from arbitrariness and legal flaws and were found to be illegal. It may further be noted that the Hon'ble Supreme Court has specifically held that there was no fault on the part of the prior allottees and it was the Government / Screening Committee that was responsible for such illegality.

33. On 24.09.2014, the Supreme Court passed a consequential de-allocation Order in W.P. (Crl.) 120 of 2012 ("***Cancellation Order***") cancelling 204 coal blocks the allocation of coal blocks and all captive coal blocks, including Tokisud Coal Block allocated to Claimant. In terms of the Cancellation Order:-

(a) Allocation of all coal blocks allocated between 1993 and 2010 except for 4 coal blocks specifically identified, were cancelled.

(b) As regards cancellation of 42 coal blocks including the Coal Blocks which were operational or about to be operational, the cancellation was to be effective from 31.03.2015 within which period CIL, Coal Ministry and the mine owners have to adjust their affairs.

(c) Compensatory payment of Rs. 295 per Metric Tonne for Coal extracted from such mines, was imposed.

34. On 21.10.2014, the Government of India notified The Coal Mines (Special Provisions) Ordinance ("***First Ordinance***"), No. 5/2014, setting out the modalities for re-allocation of coal blocks cancelled by the Hon'ble Supreme Court.

35. Since the Coal Mines (Special Provisions) Bill was tabled in Parliament but could not receive assent of the Rajya Sabha, on 26.12.2014 Government of India promulgated the Coal Mines (Special Provisions)

Second Ordinance 2014 ("***Ordinance***") to give continuity to the First Ordinance. The Ordinance came into force with effect from 21.10.2014. Tokisud North Coal Block and Saregarah Coal Block are listed at Sl.No.64 and Sl.No.51 of Schedule-I respectively.

36. The Ordinance stipulated following 2 modes of allocation:

(a) In terms of Section 4 of the Ordinance, Coal Mines set out in Schedule – I including Tokisud Coal Block may be put up for auction.

(b) In terms of Section 5, the Central Government may allocate a Schedule – I coal mine to:

(i) Government Company;

(ii) Corporation which is not a joint venture with a private company; or

(iii) Company which has been awarded a power project on the basis of competitive bids for tariff from specified Schedule I coal mines by making an allotment order in accordance with such rules as may be prescribed and the State Government shall grant a reconnaissance permit, prospecting license or mining lease in respect of any area containing coal to such company or corporation.

37. On 30.03.2015 the Coal Mines (Special Provisions) Act, 2015 ("***Coal Act***") was notified in the Official Gazette after receiving assent of the President. The Coal Mines Act repealed the Coal Mines (Special Provisions) Second Ordinance, 2014 in terms of Section 33. All the provisions of the Act are identical to that of the Ordinance. Since the Ministry of Coal conducted the bidding process for re-allocation of all coal blocks, Claimant is claiming re-allocation as a furtherance/ continuation of Change in Law Event, herein.

38. On 25.09.2014, Claimant wrote to Respondent regarding the occurrence of a Force Majeure Event due to Change in Law on account of the Coal Judgment and the Cancellation Order, wherein it was intimated that allocation of all coal blocks by the Government including Coal Blocks of Claimant and the same has affected the performance of obligations under Restated PPA.

39. On 04.10.2014, Claimant pursuant to the letter dated 25.09.2014, communicated to Respondent, regarding cancellation of the Coal Block in terms of the Coal Judgment and Cancellation Order and intimating Respondent of the fact that the Hon'ble Supreme Court has given importance to avoiding the disruption of mining activities and has given all the Prior Allottees of such Schedule II mines time till 31.03.2015 to operate the mines.

40. On 25.10.2014, the Claimant again communicated to the Respondent intimating them of the promulgation of the First Ordinance by the Government of India. Claimant further intimated Respondent of the occurrence of a Force Majeure Event / Change in Law Event in terms of Article 13 and 12.3(ii) (a) of PPA.

41. On 27.10.2014, Respondent replied to Claimant's letter dated 25.09.2014 rejecting Claimant's Force Majeure claim due to the occurrence of a Change in Law event on the ground that Cancellation Order of Supreme Court allows mining from Tokisud Coal Block till 31.03.2015 and thus the allocation continues to subsist.

42. On 07.11.2014, Claimant communicated to Respondent requesting them to apply to Central Government for the allocation of Tokisud North Coal Block to PSPCL which may be used to supply Coal to the Power Project of Claimant in terms of Section 5 of the Ordinance.

43. On 15.11.2014, Claimant replied to Respondent's letter dated 27.10.2014, stating that the stand taken by it is neither in line with the

terms of the PPA or the terms set out in the First Ordinance. It was reiterated that cancellation of the Coal Block and promulgation of the First Ordinance has led to a Change in Law Event in terms of the PPA and thus requested Respondent to convene a meeting to re-consider the terms of the PPA, subject to the approval of this Ld. Commission.

44. On 17.11.2014, Claimant again communicated to Respondent, stating that, end use plant of Claimant is ready for coal firing, however, due to cancellation of the Coal Block and given the time taken to obtain a captive coal mine through e-auction, Claimant stated as follows:

(a) Keeping the Power Plant idle until coal is made available, would lead to an increase in the fixed cost component on account of IDC which would be about Rs. 386 Crores.

(b) If the usage of Imported Coal is permitted the same would work out to about Rs. 0.16/kwh cheaper than coal procured through tapering linkage form CIL. Further the additional cost of IDC may also be avoided, since plant would be generating power.

(c) An amount of Rs. 59 Crores will be saved per annum by using Imported Coal instead of tapering linkage from CIL at an envisaged PLF of 85%.

Based on the above, Claimant requested Respondent to allow usage of Imported Coal.

45. On 31.12.2014, Claimant communicated to Respondent that the MoC has, pursuant to the Ordinance, released the bidding schedule for the auction of coal blocks that were cancelled by the Hon'ble Supreme Court, in which Tokisud Coal Block was included and earmarked for the end-use of Power Projects. In this regard, Claimant communicated to Respondent that it intends to participate in auction process for Tokisud Coal Block.

46. On 20.02.2015, Claimant communicated to Respondent that it has lost in the bidding process for Tokisud Coal Block and as a consequence of which Claimant is left without any coal linkage due to occurrence of a Change in Law Event / Force Majeure Event.

47. Further on the same date, Claimant issued another letter to Respondent, stating that Claimant had lost in the bidding process for Tokisud Coal Block, which was the source of coal for the Power Project as per Clause 1.2.3.2 of Schedule 6 of PPA and due to the occurrence of a Change in Law Event in terms of Article 13 of the PPA, the terms and conditions in relation to the source of coal will need to be re-negotiated and amended. To that extent, Claimant requested for a meeting with Respondent, to discuss the same.

48. On 18.03.2015, Claimant communicated to Respondent that the tariff depends on the landing cost of coal and since the coal from Tokisud Coal Block was not available to the Project anymore, the coal price as indicated by CIL, which is a GoI undertaking, was to be considered. In this regard, Claimant, requested the Respondent to give its consent to procure coal from Western Coal Fields, which works out to Rs. 7050/MT.

49. On 03.04.2015, Claimant informed Respondent that Vesting Order for Tokisud Coal Block has been issued in favour of M/s Essar Power M.P. Limited. Claimant further indicated that since Tokisud Coal Block (along with all the assets) have been transferred, due to operation of law, the same is a Force Majeure Event/ Change in Law Event in terms of Article 12 and 13 of PPA.

50. On 01.04.2015, Respondent in reply to Claimant's letter dated 18.03.2015, stated that contractual obligation to arrange for supply of Coal to Power Project, whether from an identified source in terms of the PPA or any other source, is the sole responsibility of Claimant and responsibility cannot be passed on to PSPCL. Respondent further

stated that in terms of Schedule 6 of the PPA, the cost of coal delivered for the Project shall not exceed the cost "as prevailing" in the Panchwara Coal Block. Respondent further claimed that even if Panchwara Block is no longer held by them, the benchmark price of the Panchawara Coal Block "as existing" at that point of time would be applicable to the Coal procured by Claimant from alternate sources.

51. On 08.04.2015, Claimant wrote to Respondent, stating that the agreed capping cost of coal with Panchwara Coal Block was based on the coal availability from Tokisud Coal Block, since it was the identified source of Fuel in terms of PPA. However, due to the occurrence of a Change in Law event, cost of coal is beyond the control of Claimant and thus will be as per the CIL notification. Claimant further stated that PPA will need to be amended in light of changed circumstances.

52. On 09.04.2015, Claimant again communicated to Respondent requesting a meeting to discuss and amend PPA since Tokisud Coal Block is no longer held by Claimant for captive use in the Power Plant, due to cancellation of the Coal Block by the Hon'ble Supreme Court of India and the promulgation of the Ordinance. Claimant stated that Clauses 1.2.3.2.1 & 1.2.3.2.2 of Schedule 6 and Definition of Captive Coal Mines in terms of Clause 1.1 of the PPA will need to be amended.

53. On 30.04.2015, Respondent in reply to Claimant's letter dated 08.04.2015 stated that the judgments of the Hon'ble Supreme Court leading to cancellation of Tokisud Coal Block and consequent promulgation of the Ordinance does not constitute a Change in Law event within the meaning of Article 13 of Restated PPA. It was further stated that a Change in Law event can only result in tariff adjustment and not amendment of PPA as has been sought by Claimant.

54. Further on the same date, Respondents in reply to Claimant's letter dated 09.04.2015 communicated that the coal cost from Panchwara Coal Block existing at the time of execution of PPA had been agreed to be

the maximum cost at which coal is to be supplied to the Project. It was further stated that the coal cost is therefore capped and nowhere in PPA does it envisage an upward revision in the coal cost from Panchwara Coal Block. It was further stated that the scheme in PPA clearly state that Claimant will resort to competitive bidding for developing and operating Tokisud Coal Block and the lowest cost emanating from such exercise will not be more than the cost of coal from Panchwara Coal Block and the same would be adopted for the purpose of working out variable fuel charges and thus there is no occasion for amendment of PPA.

C. ISSUES FRAMED BY THIS ARBITRAL TRIBUNAL

55. After hearing the parties, by Order dated 15.12.2015, this Arbitral Tribunal has framed the following points of determination in relation to the present Arbitration proceedings:

Claim Petition No. 2

(a) *Whether Cancellation of Coal Blocks pursuant to the judgment of the Supreme Court on 25.08.2014 is a Change in Law Event, according to Article 13 of the Power Purchase Agreement?*

(b) *Whether Cancellation of Coal blocks pursuant to the judgment of the Supreme Court on 25.08.2014 is a Force Majeure Event, according to Article 12 of the Power Purchase Agreement?*

(c) *Whether Promulgation of Ordinance is a Force Majeure and/or Change in Law Event in accordance with Article 12 and 13 of Restated and Amended PPA?*

(d) *Whether in view of pendency of the Petition filed by Claimant U/S 86 of the Electricity Act, 2003, any further consequential relief or reliefs could still be granted to the Claimant by this Tribunal?*

(e) *Reliefs and Cost"*

(a) QUESTION FOR CONSIDERATION

56. We have heard very elaborate and detailed arguments advanced by learned counsel for both the parties. From the arguments so advanced by the parties following preliminary questions would require our consideration before we examine the Issues framed in para 55 above:

I. Whether the Competitive bidding for the project held in the year 1996 by Government of Punjab is similar to the bidding process envisaged under Section 63 of the Electricity Act 2003?

II. Whether as per PPA procurement of fuel for the project was the sole responsibility of Claimant and Respondent had no stake in procurement of fuel what so ever?

III. Whether last recital in Re-stated and Amended PPA has overriding effect over all the previous correspondence relating to the project including Letter of Intent issued by the Government of Punjab, Memorandum of Understanding etc.?

IV. Whether Re-stated and Amended PPA has provision for alternate source of fuel?

V. Whether ceiling of coal price as proposed by the State Commission would still be applicable.

I. <u>Preliminary Question – I</u>

57. We shall now examine each of the above questions one by one. The first question before us for our consideration is whether the Competitive bidding for the project held in the year 1996 by Government of Punjab is similar to the bidding process envisaged by Section 63 of the Electricity Act 2003? Learned Counsel for both the parties have relied on the Judgments of the Appellate Tribunal for Electricity (APTEL) relating to competitive bidding envisaged in EA 2003. The Learned Counsel for Respondent has also claimed in her Written Submissions that the bidding held in 1996 is similar to that envisaged in the Act. It has, therefore, become necessary to examine as to whether competitive bidding held by the Government of Punjab as early as in the year 1996 has any similarity with the bidding process envisaged in the EA 2003.

58. Electricity Act 2003 has provided two alternate methods of fixation of tariff from a generating station viz., (i) Cost Plus tariff determined by

the Appropriate Commission under Section 62 and (ii) tariff discovered through competitive bidding under Section 63 of the Act to be adopted by the Commission. We are concerned with Section 63 of the Act which is reproduced below:

> ***63. Determination of tariff by bidding process***
>
> *Notwithstanding anything contained in section 62, the Appropriate Commission shall adopt the tariff if such tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government.*

59. In January 2005 the Central Government had issued guidelines for competitive bidding envisaged under Section 63 of the Act. These guidelines suggests two types of tariff based bidding viz., (i) Case 1 bidding: Bidder has the choice of fuel, source of fuel, site of plant etc. and the bidder has to quote final tariff, (ii) Case II bidding: Site, procurement of fuel etc. rests with the procurer.

60. Government of Punjab held tariff based competitive bidding in the year 1996. In this bid site of the project was mentioned as Goindwal and the bidder was required to quote fixed charges as well energy charges. Fuel was mentioned as domestic coal but source of coal was not mentioned. Bidder was required to quote energy charges based on some assumed fuel cost of Rs 0.40 per 1000 Kcal. Clause 5 of Annexure III to Letter of Intent dated 4.3.1998 provides that any variation in fuel cost and/or GCV of coal was to be pass through i.e. energy charges were dependent upon fuel cost and quality of coal the supplier actually gets. Further, after enactment of 2003 Act, PPA signed in the year 2000 between the parties was modified to include that the tariff would be determined by the Punjab Commission as per its Regulations framed under Section 61 of the Act Clearly, the bidding held in the year 1996 by the Government of Punjab cannot be said to be similar to the competitive bidding envisaged in the Act. Therefore, the cases relating to competitive

bidding relied upon by Learned Counsel has no application in the present case.

II. <u>Preliminary Question – II</u>

61. Next question before us for consideration is whether, as per PPA, the procurement of fuel for the project was the sole responsibility of Claimant and Respondent had no stake in procurement of fuel what so ever?

62. Learned Counsel for Respondent has claimed that procurement of coal was sole responsibility of Claimant and Respondent had no role in the same. She has relied heavily on certain provisions of Letter of Intent issued by the Government of Punjab dated 4.3.1998, Memorandum of Understanding signed between the parties on 8.2.2006 and original PPA dated 17.4.2000. We have critically examined these documents along with other materials on record. Article 1 of original PPA dated 17.4.2000 has provided definitions of cost of CIL Coal", "Cost of other Coal" , Deemed cost of Coal etc. Article 2.6 of the original PPA deals with Coal. Relevant extracts of Article 2.6 are reproduced below:

2.6.1 The project shall seek a coal linkage for operation to not less than a PLF of 85% on annual basis based on a coal which meets the minimum specification indicated in Schedule F…

2.6.2 The Energy Charges shall be based on the cost of CIL Coal and shall not take into account any rebate…

2.6.3 … but the Company procures coal from sources other than the CIL, including through imports, not due to failure of CIL and/or Indian railways, the energy Charges shall be based on the Deemed Cost of CIL Coal.

63. Reading of above would indicate that the cost of energy supplied by the project, depends upon the cost of Coal procured by Claimant. Article 3.1 read with Schedule H of the original PPA gives the method for determination of energy charges payable by Respondent to Claimant for supply of energy from the project. Therefore, it was in the interest of Respondent that the cost of coal is kept low. It is to be noted that on 03.09.1998, the Government of India, Ministry of Coal & Mines ("***Coal Ministry***" "***MoC***") transferred the coal linkage awarded to PSEB for the Project in favour of Claimant. On 7.9.2000 the Respondent wrote to Claimant requesting it to explore the possibility of imported fuel as an alternative to the expensive Coal from ECL. In its letter dated 29.9.2000, Respondent directed Claimant to initiate steps for private mining. Again, on 19.9.2001, Respondent wrote to Claimant reiterating the above and also adding as under:

…..

In the meanwhile, you had intensive discussions with ECL on coal prices and other provisions of Coal Supply Agreements, but prices and many other commercial issues remained unresolved. All these issues were discussed in detail in the chamber of Addl. Secy., Ministry of Coal, GoI on 12th Sept., 2001 and it was decided to source coal for Goindwal Sahib Project from the captive coal mine block to be allocated to the Company by the Ministry of Coal. Please follow up with MoC for expeditious allocation of the captive coal mine block for which an application has already been submitted by you. Till such time as the captive mine block is developed and coal supply from it commences, PSEB and GoP are agreeable for use of imported coal in Goindwal Sahib Power Project.

….

The cost from the captive mine will have to be mutually agreed between GVK and PSEB/GoP in advance. However, it is presumed that the cost of *the coal from the captive mine block will be less than the notified prices of coal based on basket prices of coal at which PSEB will get coal from various Coal Companies of Coal India Limited, compared on basis of 1000 kilo Calories…*

64. Bare reading of above along with various provisions of original PPA would reveal that it would not be proper to hold that procurement of coal was the sole responsibility of Claimant and Respondent had no stake in the same. In fact Coal Linkage from ECL had been transferred to the project by Ministry of Coal. But since the cost of coal from ECL was coming out to be higher, the Claimant was asked to explore the possibilities of importing coal and pursue Ministry of Coal for allocation of Captive Coal Block. The present situation of cancellation of captive coal block would not have arisen if, the Claimant was allowed to procure linkage coal from ECL, cost of which fits in the definition of cost of CIL Coal.

III. <u>Preliminary Question – III</u>

65. Next question for our consideration is whether recital in the Re-stated last and Amended PPA has overriding effect over all the previous correspondence relating to the project including Letter of Intent issued by the Government of Punjab, Memorandum of Understanding, etc.?

66. Learned Counsel for Claimant submitted that since commissioning of the captive coal mine at Tokisud was getting delayed for the reasons beyond Claimant's control and plant was expected to be commissioned by June 2013, Claimant wrote to Respondent on 14.08.2012 requesting it to arrange for supply of coal from Pacchwara coal block as per the assurance given by Respondent to the lead banker of the project IDBI, vide its letter dated 16.10.2007. However, Respondent through its letter

dated 30.8.2013 refused to supply coal from its Pachhwara coal mine for commissioning of the project stating as under:

"3. Regarding assurance for supply of coal from Pachwara Block for Goindwal Sahib project quoted as per letter dated 16.10.2007 para 5 of the letter, reference may be made to agreed terms of Amended & Restated PPA with following provision in the last para of the preamble:

"Now, therefore, in consideration of the premises and mutual agreements, covenants and conditions set forth herein, it is hereby agreed by and between the Parties, in supersession of all Agreements, letters, communications and the like, anterior to this Agreement, as follows:"

Thus, superseding all previous correspondence, the issue regarding source and cost of coal and secondary fuel has been addressed in Schedule-6, Clause 1.2.3.2 of the Re-stated and Amended PPA. As per this Clause there is no commitment of any kind for providing coal from captive coal mine at Pachwara in Jharkhand for the commissioning and commercial operation of the project.

Therefore, the terms and conditions of the Re-stated and Amended PPA shall prevail upon & complied with by PSPCL without prejudice to any earlier correspondence on any matter including that quoted in letter dated 16.10.2007"

67. Learned Counsel for Claimant submitted that Respondent has erred in submitting that the undertaking dated 16.10.2007 provided by it promising that Respondent would supply coal from Pachwara Coal Block in case there is any delay in development of the captive coal block allocated to Claimant has no bearing after the execution of Amended and Restated PPA. Aforesaid contention is factually incorrect. Re-stated and Amended PPA was submitted before the Commission on 21.3.2007 and has given the said undertaking on 16.10.2007, well after it had filed its petition for approval of Amended

and Restated PPA. Thus, Respondent had given the Undertaking being aware of the terms of Restated and Amended PPA in terms of which the source of fuel and obligations of the parties were frozen. Respondent refused to honour its undertaking and commitment to supply coal from Panchwara coal block as is evident from letter dated 30.08.2013. Learned Counsel submitted that in the event that Respondent had honoured its commitment, Claimant would have been able to commission the plant by June, 2013 and extended delay in commissioning could have been avoided.

68. It is noted that while both parties have placed reliance on the documents entered into before Re-stated and Amended PPA in order to establish their respective cases. However, Respondent has contended that Claimant is not entitled to rely on the same documents.

69. Parties were requested to submit copies of Original PPA dated 17.4.2000 and Re-stated and Amended PPA as submitted to the Commission for approval on 21.3.2007. From these documents we have noted that the recital in question and quoted above was verbatim present in both the documents. We have also noted that in Re-stated and Amended PPA submitted to the Commission on 21.3.2007 the provision relating to source of fuel was indicated as Tokisud captive coal mine. Therefore, the contention raised by the learned Counsel for the Claimant Respondent had given the undertaking being aware of the terms of Restated and Amended PPA in terms of which the source of fuel were frozen appears to be valid and correct.

70. Respondent has claimed that Undertaking dated 16.10.2007 provided by it promising that Respondent would supply coal from Pachhwara Coal Block in case there is any delay in development of the captive coal block allocated to Claimant has no bearing after execution of Amended and Restated PPA. It is to be noted that Re-stated and Amended PPA is an Agreement between the Parties and the Respondent. It is settled law

that an Agreement has binding effect on the parties to the Agreement only. It cannot bind any third party, who is not party to Agreement without the consent of the said party. Thus, the said recital of Re-stated and Amended PPA superseding all previous Agreements, Correspondence etc., has effect only on the Agreements, Correspondence and likes between the parties to the Agreement. Respondent through its letter dated 16.10.2007 has given assurance to IDBI lead Banker to the project which was not a party to the Re-stated and Amended PPA. Thus, the said recital could not have superseded the assurance given by Respondent to IDBI. Accordingly, Respondent should have honoured its assurance given to IDBI and supplied coal to the project for its commissioning particularly when Claimant has requested for the coal on returnable basis within fixed time frame.

71. However, the situation has now changed with enactment of the Coal Act. Learned Counsel for Respondent has informed that the allocation of Pachhwara Coal mine had also been cancelled due to Hon'ble Supreme Court's directions and the said coal mine has been reallocated to Respondent with the undertaking that the coal extracted from this mine would be utilised for generation of electricity from its own specified stations.

IV. Preliminary Question – IV

72. Next question for consideration is whether Re-stated and Amended PPA has provision for alternate source of fuel?

73. We have examined Original PPA dated 17.4.2000 and Re-stated and Amended PPA to ascertain as to whether there was any provision for alternate fuel in original PPA and Re-stated and Amended PPA. We noticed that original PPA premised on the procurement of Coal from Coal India Limited and Article-1 defined "Cost of CIL Coal" as well as

"Cost of Other Coal" not procured from CIL. Article 2.6.4 provided that under certain conditions Claimant could have procured coal from any source other than CIL including, to import after Respondent's prior approval. It is also noted that Clause 1.3.3.6 of Schedule -3 to the draft Re-stated and Amended PPA submitted to the Commission had a provision in the event the coal mine is not commissioned on time or the Coal production falls short of the requirement of seller (Claimant herein), then the seller will procure coal from market and the Procurer (Respondent herein) shall pay the seller in accordance with the applicable Fuel Supply Agreement. Relevant clause relating to cost of coal in the approved Re-stated and Amended PPA has restricted the Coal cost to the cost prevailing in Respondent's existing Pachhwara Captive Coal Mine. Clearly, Re-stated and Amended PPA does not have any provision for alternate fuel. Accordingly, Re-stated and Amended PPA would have to be further modified to include procurement of coal for the project from sources other than Tokisud Captive Coal mine.

V. <u>Preliminary Question – V</u>

74. Next question before us is whether ceiling of coal price as proposed by the State Commission would still be applicable?

75. In order to address this question, we have to look into the related document where the cost of coal procured from captive mine has been restricted. In this regard, the following observation of the Commission in its Order dated 06.03.2009 in Petition No. 3 of 2007 may be noted:

"3. Thereafter, the Ministry of Coal (MoC) on the recommendation of GoP, allocated the Tokisud North Coal Block as a captive mine for GSTPS on 7.1.2002. The project still did not proceed further as the developer was unable to indicate the tentative cost of coal from the captive coal mine allocated for the project. At that stage, the Officers' Committee on Projects of GoP in its

meeting held on 26.7.2005 deliberated the matter and decided that PSEB may proceed to revise the MoU which besides providing for the commissioning schedule and tripartite payment security mechanism also stipulated that the tariff shall be subject to the approval of the Commission and be based on the principle that variable/fuel charges linked to coal cost will not exceed the cost as prevailing in the captive Pachhwara coal mine of PSEB and that fixed charges will not exceed the charges as worked out as per Central Electricity Regulatory Commission (CERC) norms.

…

10. Coal Cost: The Claimant has indicated that a captive coal mine (Tokisud North) has been allocated for GSTPS by the Ministry of Coal on the recommendation of GoP/PSEB. As per decisions taken in the meeting of the Officers' Committee on Projects held on 26.7.2005, the fuel charges linked to coal cost are not to exceed the cost as prevailing in the PSEB's existing Pachhwara captive coal mine. The Commission observes that the coal price of the Pachhwara coal mine determined on the basis of percentage of discounts on the Coal India Ltd. price for different categories of coal cannot automatically be adopted for another mine where geographical and other features may be different. The Commission is, therefore, of the view that adoption of coal cost of the Pachhwara mine indicates the maximum price at which coal would be supplied to GSTPS. However, the possibility that cost of fuel from the captive coal mine of GSTPS may actually be lower needs to be explored. Accordingly, the Commission is of the view that there is a need to devise a judicious method of arriving at the cost that will actually be supplied from Tukisud North. The Commission directs that the developer will in association with the procurer resort to a competitive bidding process, preferably international both for developing and operating the captive coal block allocated to GSTPS and any lower cost emanating as a result of this exercise shall form part of the mining agreement and be adopted for the purposes of working out the variable (fuel) charges."

76. Thus, the Punjab Commission has put ceiling on the coal cost procured from Tokisud Coal Mine at coal cost of Pacchwara mine. However, the Appellate Tribunal for Electricity in its Order dated 13.01.2011 in Appeal No. 70 of 2009 filed by Claimant has held as under:

> *"22. Let us now discuss over the three aspects which are referred to earlier as urged by the Appellant:*
>
> …
>
> *(iii) Coal Cost: The 3rd aspect relates to Coal Cost. It cannot be debated that the State Commission has been entrusted with the duty to protect the interest of the consumers. The competitive bid process was directed to ensure discovery of the most competitive coal prices in order to ensure cheap power to consumers. The cost of coal being a pass-through cost to the consumers has to be determined on an actual basis. Though the fuel charges were intended under the Standard PPA to be linked to the cost of coal, it should not exceed the prevailing cost for the captive coal mines of the Electricity Board in Pachhwara.* ***This does not mean that the energy charged had to be fixed at Pachhwara level automatically. Energy charges are chargeable at actual cost of fuel. Hence, the actual coal cost for the project needs to be determined and the energy charges for the project had to be fixed on the basis of such actual cost.***
>
> ***23. In view of the above reasoning's the State Commission had directed the Appellant to determine the actual coal cost on a competitive basis. The Electricity Board and its consumers are entitled as a matter of right to get the best value of the coal mine from Tokisud coal block because this coal block was allotted to Appellant exclusively for the Project at the request of the Electricity Board as well as the Government of Punjab.***
>
> *24. According to the State Commission, in case Appellant, Claimant Power Limited wants to develop and operate the coal mines itself, Appellant is free to match the lowest bid received in the bidding process and can reserve its rights for developing and operating the captive coal mines at such lowest bid received. Unless the Appellant undertakes the process of competitive bidding, the competitive rate for developing the coal mine will not be discovered.* ***The State Commission and its consumers are entitled to get the coal at the lowest rate possible, since the actual price of coal is a complete pass through to the consumers.***

> *26. Learned Counsel for the Appellant has argued that if the Appellant proceeds with competitive bidding for selection of coal mine developer, the developer may quote price of coal with escalable factors and the price may be higher than the reference coal price in future. We feel that if the competitive bidding is done on the same basis as applicable to Pachhwara captive coal mine of PSEB i.e. coal price based on percentage of discount on the Coal India Ltd. price from time to time, for like to like comparison with the bench mark price of Pachhwara mine. Linking the price to CIL Ltd. Price will also take care of future price escalation".*

77. A close reading of the above judgment of APTEL would also indicate that energy charges have to be fixed on the basis of actual coal cost. It has also held that the competitive bidding should be done on the same basis as applicable to Pachhwara captive coal mine of PSEB i.e. coal price based on percentage of discount on the Coal India Limited price from time to time, for a comparison with the bench mark price of Pachhwara mine. It has not held that price of coal from Tokisud Captive coal mine would be restricted to coal cost for coal extracted from Pachhwara Coal mine. It has held that competitive bidding for development of Tokisud Coal Mine should be done on the same basis as Pachhwara coal mine for like to like comparison.

78. The APTEL's above observations are also based on premise that coal for the project will be procured from Tokisud Captive Coal Mine. Since Tokisud Captive coal mine is not available for extraction of coal for the project, the ceiling of fuel cost put by the Commission would not hold good under the changed circumstances.

79. Our observations to the preliminary questions discussed above are summarised below:

Question	Our observations
Whether the Competitive bidding for the project held in the year 1996 by Government of Punjab is similar to	No.

the bidding process envisaged under Section 63 of the Electricity Act 2003?	
Whether as per PPA the procurement of fuel for the project was the sole responsibility of the Claimant and the Respondent had no stake in procurement of fuel what so ever?	No. Since fuel cost was pass through in the tariff, the procurer also had role in approving the source of fuel and charges.
Whether last recital in Re-stated and Amended PPA has overriding effect over all the previous correspondence relating to the project including Letter of Intention issued by the Government of Punjab, Memorandum of Understanding etc?	Yes. It has overruled all the previous Agreements signed between the parties. However, it could not have overridden the correspondence with third party.
Whether Re-stated and Amended PPA has provision for alternate source of fuel?	No. Re-stated and Amended PPA submitted to Commission had provisions for alternate fuel. But, the approved Re-stated and Amended PPA do not have such provision
Whether ceiling of coal price as proposed by the State Commission would still be applicable	No.

D. <u>ISSUES IN DETAIL</u>

80. In the light of above discussions we shall now address the issued framed by us in para 55 and the same are reproduced below:

1. *Whether Cancellation of Coal Blocks pursuant to the judgment of the Supreme Court on 25.08.2014 is a Change in Law Event, according to Article 13 of the Power Purchase Agreement?*

2. *Whether Cancellation of Coal blocks pursuant to the judgment of the Supreme Court on 25.08.2014 is a Force Majeure Event, according to Article 12 of the Power Purchase Agreement?*

3. *Whether Promulgation of Ordinance is a Force Majeure and/or Change in Law Event in accordance with Article 12 and 13 of Restated and Amended PPA?*

4. *Whether in view of pendency of the Petition filed by Claimant U/S 86 of the Electricity Act, 2003, any further consequential relief or reliefs could still be granted to the Claimant by this Tribunal?*

5. *Reliefs and Cost"*

ISSUE NO. 1, 2 & 3

81. Since first three issues are inter-related, we shall address these together. The submissions made by learned counsel for the parties on these issues are set out below:

(a) PETITIONER/CLAIMANT'S SUBMISSIONS

Learned Counsel for Claimant has made very elaborate submissions on these issues: Crux of his submissions are listed below:

82. Claimant had submitted that Project was premised on availability of Tokisud Coal Block as a captive coal mine for the Project.The coal block was based on a recommendation made by the Government of Punjab and Respondent. The parties, i.e. Claimant and Respondent were *ad idem* on the fact that the fuel for the Project was to be sourced from Tokisud Coal Block.

83. Claimant further stated that, on 25.08.2014 the Hon'ble Supreme Court in the case of ***Manohar Lal Sharma vs. The Principal Secretary &Ors.*** reported as (2014) 9 SCC 516 ("***Coal Judgment***") held that the entire allocation of coal blocks/ mines made by the Screening Committee from 14.07.1993 in 36 meetings and allocations made through the Government dispensation route including the Captive Coal Blocks, suffer from arbitrariness and legal flaws and were found to be illegal.

84. On 24.09.2014, the Supreme Court passed a consequential de-allocation Order in W.P. (Crl.) 120 of 2012 ("***Cancellation Order***") cancelling 204 coal blocks the allocation of coal blocks and all the captive coal blocks, including the Coal Blocks allocated to Claimant.

85. On 21.10.2014, the Government of India notified The Coal Mines (Special Provisions) Ordinance ("***First Ordinance***"), No. 5/2014, setting out the modalities for re-allocation of coal blocks cancelled by the

Hon'ble Supreme Court. On 26.12.2014 Government of India promulgated the Coal Mines (Special Provisions) Second Ordinance 2014 ("***Ordinance***") to give continuity to the first Ordinance. The Ordinance came into force with effect from 21.10.2014.

86. On 30.03.2015 the Coal Mines (Special Provisions) Act, 2015 ("***Coal Act***") was notified in the Official Gazette after receiving the assent of the President. The Coal Act repeals the Coal Mines (Special Provisions) Second Ordinance, 2014 in terms of Section 33. The Ministry of Coal took over the Captive Coal Mines and vested Tokisud Coal Block with successful bidders of auction conducted by it. As a result, Claimant has lost the captive coal mine allotted to the Project. This event was due to the operation of the Hon'ble Supreme Courts' judgement and due to the subsequent enactment of Coal Mines Act, which are change in law/force majeure events that are beyond the control of the Claimant.

87. Claimant also asserted that Coal Blocks allocated to Claimant were cancelled pursuant to the Coal Judgment and the Cancellation Order. The aforesaid cancellation amounts to:-

(i) a change in interpretation of the existing legal framework dealing with allocation of coal blocks in terms of Article 13.1.1
(ii) of Restated PPA; and a change in consents, approvals, or licenses obtained for the Power Plant in terms of Article 13.1.1
(iii) of the Restated PPA, since the Coal Blocks allocated to Claimant is an integral part of the Project.

88. The cancellation of allocation was premised on the interpretation accorded by the Hon'ble Supreme Court to the extant legal framework governing allocation of coal mines.

89. The allocation of the coal blocks was a consent granted for the Project. Without grant of the consent i.e. allocation of the coal blocks, Claimant would not be able to use coal from the said coal blocks for generating

and supplying power. Therefore, cancellation of allocation amounts to change in consents, approvals or licences obtained for the Project which is squarely covered under Article 13.

90. Article 13.1.1 of Restated PPA states that a 'Change in Law' would mean, *inter alia*, the Enactment, bringing into effect, adoption, promulgation, amendment, modification or repeal of any law. In this regard, it is submitted that the Enactment of the Ordinance, pursuant to Cancellation of coal blocks, including Tokisud Coal Block would squarely fall within the definition of 'Change in Law' in terms of the Restated PPA, since the definition clearly provides for the promulgation of any law and law in terms of Article 1.1 of Restated PPA has been defined to include Ordinance.

91. As a consequence of cancellation of the Coal Blocks, Claimant was left without a source of fuel and hence was unable to perform its obligations in terms of Restated PPA.

92. In terms of Article 12 of Restated PPA, definition of Force Majeure, is an inclusive term that includes:-

    I. Any event affecting Performance of the Affected Party's obligations under Restated PPA;
    II. If such event is not within the reasonable control, directly or indirectly and could not have been avoided if, Affected Party took all reasonable care.
    III. Nationalization or compulsory acquisition of any material assets or rights of the seller by an Indian Government Instrumentality.

93. Claimant submitted that Coal Blocks allocated to it were cancelled pursuant to the Coal Judgment and the Cancellation Order and the same was beyond the control of Claimant and had affected the performance of the terms of Restated PPA. Hence, the cancelation of

the Coal Blocks would constitute a Force Majeure event in terms of Article 12 of Restated PPA.

94. Upon cancellation of the allocation, it had become impossible for Claimant to use coal from the identified source i.e. Tokisud Coal Block. Therefore, there is an absolute impossibility which has only ended pursuant to the Order of Commission dated 01.02.2016. In this regard, it may be noted that even the order of the Commission is an interim Order.

95. In terms of the Ordinance, under Section 17 the Central Government shall be deemed to have become lessee or licensee of Schedule II coal mines from 01.04.2015 and the same would constitute compulsory acquisition of any material assets or rights of the seller by an Indian Government Instrumentality, in terms of Article 12 of the Restated PPA. It is further pertinent to note that the Bidding process for Tokisud Coal Mine was concluded on 18.02.2015 and Essar Power M.P. Limited was declared as the successful bidder and issued the Vesting Order in terms of the Ordinance.

96. Evidently, Promulgation of the Ordinance would constitute a Force Majeure event in terms of Article 12 of Restated PPA.

97. Article 12.7 of Restated PPA which provides relief for force majeure events is essentially a restitutive provision and is aimed at providing ameliorative relief to Affected Party suffering from the Force Majeure event. Further, in terms of Article 12.7 of Restated PPA, the relief available to a party affected by a force majeure event is an inclusive provision which permits the grant of relief which would mitigate the effect of Force Majeure event (including relief under Article 4.5 of Restated PPA) and place the party suffering from the Force Majeure event in a similar position, had such an event not occurred.

98. Thus, in terms of the definition of Schedule I of Coal Mines Ordinance, coal mines also include the land on which it is situated on. In this regard it may be noted that all the land in which the Coal Block was situated was acquired by Claimant and duly mutated in favour of Claimant, causing further delay in arranging fuel for the Project. It is submitted that this would constitute a force majeure event in terms of Article 12.3 (ii) (1) (a) of Restated PPA, i.e. "*Nationalization or compulsory acquisition by any Indian Government Instrumentality of any material assets or rights of the Seller or Sellers contractors*".

99. In terms of Article 12.2 (a) of Restated PPA, delay in *inter alia* supply of fuel is a force majeure event. Cancellation of Tokisud Coal Block had delayed supply of fuel as a consequence of which Claimant was unable to commission and operate the plant even though, Plant was ready for commissioning. It is submitted that as stated above, the State Commission passed the Order dated 01.02.2016, allowing Claimant to declare COD and use an alternate source of Fuel. Thereafter, on 01.04.2016, Claimant declared COD for Unit I of its Project.

100. In light of the foregoing, Claimant submitted that, it is seeking declaratory relief, to the extent that Cancellation of the Coal Blocks by the Hon'ble Supreme Court of India and promulgation of the Ordinance is a Change in Law event, in terms of Article 12 of Restated PPA. Such declaratory relief, would enable Claimant:

   a. To use an alternate source of Fuel as devised by the State Commission in its Order dated 01.02.2016; and

   b. Get consequential extension of SCOD on account of force majeure event i.e. non-availability of fuel.

101. In this regard, Claimant submitted that ought to be granted the said declaratory relief since in terms of Article 12.7 of Restated PPA which provides relief for force majeure events is essentially a restitutive

provision and is aimed at providing ameliorative relief to the Affected Party suffering from the Force Majeure event. Further, in terms of Article 12.7 of Restated PPA, the relief available to a party affected by a Force Majeure event is an inclusive provision which permits the grant of relief which would mitigate, effect of the Force Majeure event (including relief under Article 4.5 of the Restated PPA) and place the party suffering from Force Majeure event in a similar position, had such an event not occurred.

102. Due to occurrence of Change in Law Events and Force Majeure Event, i.e. the cancellation of the Coal Blocks of Claimant by the Hon'ble Supreme Court of India and Promulgation of the Ordinance by the GoI, Tokisud Coal Block is no longer available as a source of Fuel in terms of PPA.

103. The capping of the cost of Fuel for the Project at the same cost as the cost of coal from Panchwara Coal Block was directed since they amounted to contemporary allocation of coal blocks.

104. The price cap was fixed on the basis of an identified source of fuel i.e. Tokisud (North) Coal Block.

105. The fundamental premise of benchmarking and capping the coal cost was the supply of coal from Tokisud Coal Block. Since the same is no longer available on account of certain Force majeure and Change in Law events, Restated PPA will need to be amended.

106. The terms of Restated PPA will need to be re-opened and amended, since:-

a. The identified source of fuel under Restated PPA i.e. Tokisud Coal Block is no longer available on account of force majeure and change in law events.

b. Cost of coal from Tokisud Coal Block has been capped based on the price of Coal from Panchwara Coal Block, which belongs to

Respondent. It is however submitted that this provision will need to be deleted, since Tokisud (North) Coal Block is no longer, the identified source of Fuel and the price cap on the fuel will not be applicable.

c. Since there will be change in the identified source of Fuel in terms of Restated PPA and the capping of the Fuel cost against that of Panchwara Block will not be applicable, the mechanism for computation of the Energy Charges component of Restated PPA will need to be amended.

107. While Claimant was in the process of completing the Project after cessation of all force majeure events which form subject-matter of Claim Petition No. 1, and prior to SCOD of 01.04.2016 for Unit I, cancellation of the coal blocks gave rise to another force majeure event which made commissioning of Project impossible, even on the dates to which the extension of SCOD of the two Units were sought under Claim Petition No. 1.

108. In order to overcome / mitigate the impact of such force majeure event, Claimant took all necessary steps including request to respondent to apply to the Central Government for allocation of Tokisud North Coal Block to Respondent which may be used to supply Coal to Power Project in terms of Section 5 of the Ordinance and/or allow Claimant to use imported coal for running the plant.

109. Due to refusal on the part of Respondent to agree to any such proposal, Claimant was constrained to approach the State Commission which allowed use of coal from alternate source in terms of its order dated 02.01.2016. It is submitted that the force majeure event of non-availability of fuel came to an end pursuant to the aforesaid order.

110. Thereafter, Claimant has completed the commissioning test of the first unit on 01.04.2016 and is in the process of commissioning its second

unit. It is submitted that Claimant is entitled to be granted extension of SCOD for the intervening period from 24.09.2014 till 31.03.2016. when Commission allowed use of coal from alternate source.

(b) <u>RESPONDENT'S SUBMISSIONS</u>

Learned Counsel for Respondent also made very detailed submissions on these issues. Her submissions are summarised below:-

111. Respondent had submitted that right from the beginning at the time of signing Implementation Agreement dated 25.8.2000, Petitioner/ Claimant had undertaken, assured and represented to the State Government that it would make available the fuel for generating electricity from the Project. Thereafter, under the Memorandum of Understanding dated 8.2.2006, Claimant reiterated its assurance given to the State Government that it would complete the Project within prescribed time lines and if required, would also secure fuel from alternative source so as to achieve implementation as per the prescribed Commercial Operation Date. The Government of India, Ministry of Coal had allotted Tokisud (North) sub-block mines in District Hazaribagh in the State of Jharkhand for the Project on 7.1.2002 on the recommendations of the Government of Punjab for supply of coal to the Project.

112. Respondent further stated that consequently, the allocation of Tokisud North block to Claimant also stood quashed/cancelled so that coal from the said block was no longer available for supply to the Project. Considering that under Amended and Restated PPA, the obligation to procure coal for the Project was solely that of Claimant, who was now obliged to source coal from an alternate source without any recourse whatsoever to Respondent. After the passing of the above Judgment of the Hon'ble Supreme Court and cancellation of coal block allocations

made since 1993, the Government of India promulgated the Coal Mines (Special Provisions) Ordinance, 2014 for undertaking fresh allocation of coal mines in terms of the provisions for auction made thereunder. Respondent submits that whether the Claimant sourced coal for the Project by participating in the auction process under the said Ordinance (its success apart) or otherwise, the same did not absolve it from the absolute obligation to supply coal for commissioning and operationalizing the Project.

113. Both cancellation of coal block pursuant to the Judgment of the Hon'ble Supreme Court and the Promulgation of the Ordinance, were neither natural nor non-natural (whether direct or indirect) force majeure events as contemplated under the provisions of Article 12 of Amended and Restated PPA. On the contrary, they were actions taken by the court of law and by legal prescriptions. Claimant therefore could not contend, the same to be force majeure events within the meaning of Article 12 of Amended and Restated PPA. Even otherwise, in view of the Claimant's absolute obligation to procure coal for the Project from a source of its choice and the above law laid down by the Hon'ble Appellate Tribunal, plea of force majeure as was being raised by Claimant was not admissible. Further, when Claimant was alleging occurrence of force majeure events, meaning thereby, it was being prevented from performing its obligations under Amended and Restated PPA, then the question of occurrence on any change in law situation could not arise.

114. Respondent further asserted that cancellation order passed in terms of the Judgment of the Hon'ble Supreme Court does not in any manner bring a *"change in interpretation of the existing legal framework dealing with allocation of coal blocks in terms of Article 13.1.1(ii) of PPA"*. The same also does not amount to a change in consents, approvals or licenses obtained for the power plant in terms of Article 13.1.1(iii) of the PPA.

Inasmuch as the Claimant has been at a liberty to supply coal from its chosen source, it cannot be permitted to contend that coal block allocated to the Claimant is an integral part of the Project without which the Project cannot be implemented.

115. For the same reasons, it is denied that the promulgation of Ordinance constitutes a change in law in terms of Article 13.1.1 of the PPA. Under Amended and Restated PPA, it has been categorically agreed and recorded that arranging of coal for commercially operating the Project is contractual liability of Claimant and in view of this absolute liability to procure fuel from chosen source, no plea of force majeure and/or change in law can be sustained. Amended and Restated PPA has been entered into on 26.5.2009 and SCOD of Unit-I is 36 months from financial closure of the agreed terms and conditions. It is Claimant who has not developed/utilized Tokisud Coal Block allocated for the Project and even now it has failed to demonstrate before this Hon'ble Tribunal that it is performing its contractual obligation of sourcing fuel from alternate source for operating the planting in terms of Amended and Restated PPA. That being so, Claimant's contention that fuel charge mechanism under PPA is no longer workable, is not sustainable and in absence of a fuel source (for a period of 25 years as required under Amended and Restated PPA), no question of any "re-adjustment" in the terms of Amended and Restated PPA can at all arise; as the Judgment and Ordinance cannot but be change in law events, without prejudice to the submissions made above, which may adversely affect the revenues and most certainly not force majeure events, there can at best be a tariff adjustment subsequently in accordance with the change in law provisions in the PPA once the alternate fuel source has been provided and the issue of price cap can appropriately be dealt with at that stage. When Claimant has breached its contractual obligation of sourcing fuel for the Project (whether original or alternate), then the

consequences thereof must necessarily lie with Claimant; neither Respondent nor the State's consumers could be burdened by the same.

116. Reliance has been placed by Claimant on the Judgment of the Hon'ble Appellate Tribunal in the matter of Uttar Haryana Vitran Nigam Ltd. & Anr. Vs Central Electricity Regulatory Commission & Ors. [dated 7.4.2016 in Appeal No.100/2013]. In the said Judgment, the Hon'ble Tribunal has discussed the sanctity of a competitive bidding process (under which the Claimant's Project has also been implemented).

117. Respondent submitted that present case of Claimant is clearly not covered by this finding of the Hon'ble Tribunal inasmuch firstly, as there is no change in fuel or fuel cost which is a result of force majeure; rather, the "change" has been on account of change in law. Secondly, the said "change" has not wiped out the premises on which the bids have been offered. As stated above, the bids have been invited and LOI has been issued with a clear stipulation that the responsibility to source fuel for the Project is solely that of the bidder from whatever source it may choose. That being so, the above Judgment of the Hon'ble Tribunal is completely different on facts, thus not applicable to the present case. In any case, if Claimant's submission that anything which is beyond the control of the parties is necessarily to be a force majeure event, then the detailed Force Majeure clause as incorporated in Amended and Restated PPA would become otiose and nugatory, which cannot be permitted.

118. Be that as it may, it is specifically mentioned in clause 1.2.3.2.1 of Schedule 6 that the Seller in association with the Procurer is to resort to a competitive bidding process, preferably international both for developing and operating the captive coal block at Tokisud North Sub Block and any other block allocated to the Project and the lowest cost emanating as a result of this exercise is not to be more than the cost of the existing Pachhawara captive coal block. The above said clause is

premised not only for the Tokisud North sub block but also for any other block allocated to the Project. As such, the cap on the price of coal is not only to be applicable on Tokisud North sub block but is also to be applicable on any other block allocated to the Project (the alternate source). Since the obligation to arrange coal block for the Project is the sole contractual obligation of Claimant, there is no requirement to devise any fuel charge mechanism as is being sought by Claimant. Therefore, the contention of Claimant that the price cap is done on the basis of an identified source of fuel i.e. Tokisud North coal block, is not correct.

119. Respondent submitted that, plea of Claimant that coal may be supplied from Pachhwara coal mines allotted to Respondent, is also not tenable. Claimant is basing the said plea on the so-called "undertaking" earlier given by Respondent to supply coal to the Project in the interim. However, as stated above, the said undertaking has only been an interim arrangement proposed by Respondent prior to the signing of Amended and Restated PPA; but in the same, Claimant has given a categorical undertaking that it would be procuring coal for the Project from Tokisud (North) sub-block. There is no mutual understanding agreed to or recorded in the said PPA that in the event of any difficulty in mining from Tokisud (North) sub-block, Claimant would request Respondent for supply of coal in the interim from its Pachhawara mines and Respondent would be obliged to permit such supply upon request. After signing of Amended and Restated PPA and approval thereof by the Commission, the earlier proposal to source fuel from Pachhawara mines of Respondent in the interim, is of no consequence and does not entitle Claimant to claim under any circumstances any alleged enforcement of the said proposal or delay in implementation of the Project on that account.

120. According to Respondent, admittedposition as on date is, that there is no firm source of fuel for generating power from the Project. Claimant therefore continues to be in breach of its Contractual obligation to procure fuel for the Project and achieve its SCOD. Claimant has submitted during the course of arguments before this Tribunal that it now has the coal to generate power from the Project; however, the said coal is only by way of an interim arrangement approved by the State Commission for a period of 2-2½ years under the Order dated 1.2.2016 of the State Commission, which Order has since then been challenged by Respondent before the Appellate Tribunal. Commissioning of units and power generation therefrom by use of the said coal cannot be said to be under Amended and Restated PPA. Curiously, on the one hand amendment of Amended and Restated PPA has been sought by Claimant even when there is no alternate firm source of fuel available with it; on the other hand, enforcement of the same Amended and Restated PPA has been prayed for time extension under the Force Majeure and change in law clause. Besides this inherent contradiction, the question which is relevant is whether in absence of firm source of fuel, can Amended and Restated PPA be at all enforced? The answer clearly is in the negative. The expression "fuel" occurring in Amended and Restated PPA is first to be defined with the alternate firm fuel source and then alone can the said PPA become alive for implementing the Project; presently, its operation remains suspended.

121. Besides, the legal plea taken by Claimant is impossibility to perform. Since extension of SCOD sought by Claimant is qualified, it is a temporary impossibility and consequently, legal discharge can also be of a temporary period till force majeure and/or change in law situation is over. If the provisions regarding force majeure and change in law as existing in Amended and Restated PPA are seen, they have been inserted for risk allocation on unforeseen happenings and their

operation on occurrence of such unforeseen happenings has been contractually agreed. That being so, effect is necessarily to be given to the concluded bargain and any interpretation of such provisions is permissible only if the agreed terms are found to be ambiguous. In *Chitty on Contracts* [27th Edition, Vol-1], it is stated as under:

*"**Intention of the parties.** The cardinal presumption is that the parties have intended what they have in fact said, so that their words must be construed as they stand. That is to say, the meaning of the document or of a particular part of it is to be sought in the document itself: "One must consider the meaning of the words used, not what one may guess to be the intention of the parties." However, no contract is made in a vacuum. In construing the document, the court may resolve an ambiguity by looking at its commercial purpose and the factual background against which it was made.*

……….

Parties' intention. *It is not open to the court to revise the words used by the parties, or to put upon them a meaning other than which they ordinary bear, in order to bring them into line with what the court may think the parties really intended or ought to have intended. ………."*

122. The rule regarding construction of contracts for gathering correct and proper intention of the parties from their written document, has been laid down in the following pronouncements:

a. Khardah Co. Ltd. vs. Raymon & Co. [AIR 1962 SC 1810, para 30-;
b. Central Bank of India vs. H F Inse. Co. [AIR 1965 SC 1288, para 5-;
c. Bank of India & Anr. vs K Mohandas & Ors. [(2009) 5 SCC 313, paras 28,31-;
d. Rajasthan State Industrial Development and Investment Corporation & Anr. vs. Diamond and Gem Development Corporation Ltd & Anr. [(2013) 5 SCC 470, paras 23,24-
e. Kamla Sugar Mills Ltd Delhi vs. M/s Ganga Bishen Bhajan Singh and Anr. [AIR 1978 Mad 178, paras 21,22-; and

f. L Schuler AG vs Wickman Machine Tool Sales Ltd [(1973) All ER 39, at page 48-.

123. Respondent stated that, in view of the above settled legal position, when the Project implementation has been with express agreed understanding that the risk associated with fuel supply is squarely that of Claimant, then the said risk cannot be reallocated by Courts in a different manner, particularly when there are performance options because of which Claimant is not discharged from its obligation to perform.

124. Respondent further asserted that for the reasons stated above, there is no merit in the above Claim Petition and the same is liable to be dismissed. It may be mentioned that owing to Claimant's failure to achieve SCOD of both units of the Project as per the terms of Amended and Restated PPA for reasons solely attributable to it, the Respondent has served notices dated 14.5.2014 and 14.11.2014 for payment of liquidated damages, operation whereof has been stayed pending adjudication of the claims before the Commission and thereafter before this Hon'ble Tribunal. Considering that no Force Majeure and/or Change of Law events as alleged by Claimant have occurred, the said stay is liable to be vacated Hon'ble Tribunal.

E. <u>REJOINDER SUBMISSIONS</u>

125. Claimant submitted that Respondent has repeatedly raised the issue of consumer interest and increase in tariff to defend the claims made by Claimant. The issue of tariff fixation is neither before this Tribunal nor before the Commission. The present proceedings relate to force majeure and change in law claims. Moreover, tariff is to be determined in accordance with applicable tariff regulations. Therefore, alleged increase in tariff will have no bearing on the present claims.

126. Public interest does not mean that interest of the distribution licensee or the public at large alone is to be safeguarded. It also involves the interest of generating companies as held by the Hon'ble Supreme Court in ***A.P. Electricity Regulatory Commission vs. R.V.K. Energy (P) Ltd***. Reported as (2008) 17 SCC 769.

127. Further the Hon'ble Appellate Tribunal in the Full Bench Judgment dated 07.04.2016 in a batch of Appeals titled ***UHBVNL and Anr. v. CERC and Others*** has held as under:

> *"162. It is true that as stated by counsel for Adani Power the said Act must be interpreted to fulfil the statutory objectives of safeguarding the interest of the consumers and at the same time protecting the interest of stakeholders by providing for recovery of cost of electricity in a reasonable manner. It is also true that private sector is to be encouraged for overall growth of the electricity sector and to secure uninterrupted supply of electricity at a competitive price which is fair to all stakeholders. Nobody can deny that consumer interest takes priority. But, it is also true that electricity must be made available at reasonable rates so as to ensure that the sector sustains itself on the return it gets because if the sector perishes the consumers will suffer. Cheapest price is desirable but at the same time it must be reasonable and sustainable. Having accepted this, we must note that all actions of the Regulator must be within the framework of the said*

Act, the PPA and the said Guidelines which are in consonance with the said Act…"

128. Article 12 of PPA which deals with force majeure does not provide for termination of PPA in case of force majeure. In fact, as noted by the Hon'ble Appellate Tribunal in its Full Bench judgment dated 07.04.2016 in a batch of Appeals titled ***UHBVNL and Anr. v. CERC and Others,*** the scope of Article 12 of Amended and Restated PPA is far wider than Section 56 of the Contract Act.

129. Since the parties cannot avoid the contract on account of force majeure, Article 12.7 provides that the adjudicating body has the power to mould relief in a manner that the parties can continue performing their obligations under PPA. The same has been upheld by the Hon'ble Tribunal in the Full Bench Judgment as quoted above.

130. Given the long-term nature of PPA, its provisions are intended to ensure that an affected party is restored to a condition wherein it can continue to perform its obligations. The objective of providing a wide and inclusive provision for relief for force majeure events under Article 12.7 of PPA is aimed at ensuring that the adjudicating authority can mould relief in an appropriate manner so as to undo the impact of the force majeure event. In absence of the relief of termination of PPA, this Hon'ble Tribunal ought to allow:-

(a) Extension of SCOD in terms of Article 4.5 of Amended and Restated PPA on account of force majeure events which have delayed completion and commissioning of the Project.

(b) Right to use fuel from alternate sources for generation and supply of power to Respondent and recover cost thereof on account of cancellation of allocation of the Captive Coal Blocks.

F. <u>RELEVANT PROVISIONS OF RESTATED AND AMENDED PPA AND OTHER DOCUMENTS RELIED UPON BY BOTH THE PARTIES</u>

131. Claimant has made claim for extension of SCOD the basis of Provisions related to Force Majeure and Change in Law in the Restated and Amended PPA. It is therefore necessary to examine these provisions. The relevant provisions of Re-stated and Amended PPA are given below:

c. Term "Law" has been defined as:

*"**Law** means, in relation to this Agreement, all laws including Electricity Laws in force in India and any statute, ordinance, regulation, notification or code, rule, or **any interpretation of any of them by an Indian Government Instrumentality and having force of law** and shall further include **all applicable rules, regulations, orders, or notifications by an Indian Government Instrumentality** pursuant to or under any of them and shall include all rules, regulations, decisions and orders of the Appropriate Commission."*

d. And term "Indian Government Instrumentality" has been defined as:

*"**Indian Government Instrumentality** means the GOI, Government of Punjab, and any ministry or, department or board or agency either regulatory or quasi-judicial authority controlled by GOI or Government of Punjab where the Procurer and Project are located and includes the Appropriate Commission."*

e. Article 13.1.1 defines Change in Law to mean the occurrence of any of the following events:

"(i) the enactment, bringing into effect, adoption, promulgation, amendment, modification or repeal, of any law or (ii) a change in the interpretation of any Law by a

Competent Court of Law, Tribunal or Indian Governmental Instrumentality provided such Court of Law, tribunal or Indian Governmental Instrumentality is final authority under law for such interpretation or (iii) change in any consents, approvals or licenses available or obtained for the Project*, otherwise than for default of the Seller, which results in any change in any cost of or revenue from the business of selling electricity by the Seller to the Procurer under the terms of this Agreement, but shall not include (i) any change in withholding tax on income or dividends distributed to the Shareholders of the Seller, or (ii) change in respect of UI Charges or frequency intervals by an Appropriate Commission."*

f. Article 13.1.2 defines Competent Court as:

"The Supreme Court or any High Court, or any tribunal or any similar judicial or quasi juridical body in India that has jurisdiction to adjudicate upon issues relating to the Project."

G. <u>RELIEFS/ CONCLUSIONS</u>

132. Perusal of the provisions quoted above would make in amply clear that the Order of Hon'ble Supreme Court nullifying allotment of coal mines, the Ordinance and Subsequent Act passed by the Parliament fits into the definition of the term "Change in Law" as given in Restated and Amended PPA. In fact Respondent has also not contested on this issue very seriously. Learned Counsel for Respondent submitted that Claimant is only entitled for the relief provided as per Article 13 of Restated and Amended PPA and extension of SCOD is not permissible as per this Article related to Change in Law.

133. It is not in dispute that Article 13 of Restated and Amended PPA also provides for relief under the circumstances of change in law and does not include extension of SCOD. But there could be cases where there is change in law and extension of SCOD becomes necessary. During hearing Tribunal had put a specific query in this regard

> *"According to new Environmental Laws notified by GoI, every thermal plant has to have, inter alia, cooling towers and Fuel Gas De-sulferisation (FGD) plant by 1.1.2017. Consider a case where SCoD of a project was 31.3.2017 and the plant was designed without cooling towers and FGD which are required to be installed as per new norms. It may require change in layout. These equipments cannot be installed when plant is running and complete shutdown is necessary. This would delay commissioning of plant by one or two years. Can we say that Change in Law would not permit extension of SCoD?"*

134. Respondent has replied to this query that *"It is reiterated that the rights and obligations of Claimant and Respondent are governed by the contractual terms and conditions agreed under Amended and Restated PPA and the applicable law as pleaded before this Hon'ble Tribunal."*

135. In the light of above we find that the contention of Respondent has no merit and is liable to be rejected. Accordingly, under the circumstances Change in Law, if established, would also permit extension of SCOD.

136. Claimant has also contended that cancellation of allotment of coal blocks and their acquisition by the GoI as per Coal Order of Hon'ble Supreme Court and subsequent enactment of Coal Act is a Force Majeure event as per Article 12 of Restated and Amended PPA. Article 12 of Amended and Restated PPA deals with Force Majeure. As per Article 12.3 Force Majeure has been defined as:

***Article 12.3*:-**

"Any event or circumstance or combination of events and circumstances including those stated below that wholly or partly prevents or unavoidably delays an Affected Party in the performance of its obligations under this Agreement, *but only if and to the extent that such events or circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided if the Affected Party had taken reasonable care or complied with Prudent Utility Practices:*

i. Natural Force Majeure Events

ii. Non Natural Force Majeure Events:-

I. Direct Non-Natural Force Majeure Events

a) Nationalization or compulsory acquisition by any Indian Governmental Instrumentality of any material assets or rights of the Seller or the *Seller's contractors; or…*

12.7 Available Relief for a Force Majeure Event:-

…

(b) Both parties shall be entitled to claim relief in relation to a Force Majeure Event in regard to its obligations, including but not limited to those specified under Article 4.5".

137. According to above quoted provision any event including Nationalization or compulsory acquisition of any material assets or rights of the seller by any Indian Government Instrumentality that wholly prevents of unavoidably delays, affected party in the performance of its obligation under Agreement would amount to "Force Majeure" event only if such event is beyond the reasonable control of the affected party.

138. The question arises that "does acquisition of coal block by GoI as a result of Coal Order and Subsequent enactment of Coal Act is a compulsory acquisition?" Answer would be YES.

139. Next question would be "Is Government of India qualifies to be a Government Instrumentality"? The answer would again be YES.

140. Then comes the question "Were Coal Blocks acquired by GoI material assets of the Claimant?" The answer would again be YES. Claimant could not generate electricity in the absence of coal. Therefore the Coal Blocks qualifies to be material assets of the Claimant.

141. The last question would be "did the Claimant had any control over the Coal Order or enactment of Coal Act". Clearly the answer would be NO. Claimant had no control over passing of the Coal Order and subsequent enactment of Coal Act. Therefore, acquisition of Coal Blocks by GoI as a result of Coal Order and subsequent enactment of Coal Act squarely fits into the term "Force Majeure" defined by Restated and Amended PPA.

142. In the light of above we hold that Cancellation of Coal Blocks pursuant to the judgment of the Supreme Court on 25.08.2014 and Promulgation of Ordinance are a Change in Law Events, according to Article 13 of Power Purchase Agreement as well as a Force Majeure Events, according to Article 12 of Power Purchase Agreement

143. The fourth issue framed by us is "Whether in view of pendency of the Petition filed by Claimant U/S 86 of the Electricity Act, 2003, any further consequential relief or reliefs could still be granted to the Claimant by this Tribunal?"

Learned Counsel for Respondent had argued that the proceedings in Petition no. 33 of 2015 and 65 of 2013 are pending before the State Commission. Accordingly this Tribunal cannot grant consequential relief to Claimant. On the other hand Learned Counsel for the Claimant submitted that the matters relating to Force Majeure and Change in Law had been referred to this Tribunal in Toto including consequential relief and the Commission has kept with themselves the issue relating to alternate fuel and commissioning of the project.

144. The Commission decided to refer the disputes between GVK and PSPCL on the issue of extension in Scheduled Commercial Operation Date (SCOD) to Arbitration and passed Order dated 12.08.2015.

> *"The Commission has perused the entire record filed by the Claimant and PSPCL in both the petitions i.e. 65 of 2013 and 33 of 2015 through petitions, replies, rejoinders and various submissions. The Commission notes that there remains a wide difference in the respective positions of the Claimant and PSPCL with regard to alleged Force-Majeure and Change-in-Law events, which according to the Claimant are Change-in-Law and / or Force-Majeure events and have caused delay in SCOD of the project and according to PSPCL these events are irrelevant and also are not 'Change-in-Law' and / or Force Majeure events. The issues can be decided only after taking the*

evidence. In the view of the Commission, all the disputes arisen between the parties regarding alleged Force-Majeure Events and Change-in-Law events resulting in delay in SCOD can be better decided through Arbitration after taking evidence, documentary and oral.

2. The Commission held common proceedings thereafter in these Petitions ***limited to the issue of devising the alternative mechanism for coal for the Project*** *and the submissions of the parties with regard to this issue only are culled from the Petitions and are discussed briefly, hereunder.*

145. Perusal of Commission's Order dated 12.8.2015 quoted above would make it clear that the Commission had kept with itself only the issue relating to alternative mechanism for coal for the project and all issues relating to Force Majeure and Change in Law, including extension of SCOD have been referred to this Tribunal.

(a) RELIEFS GRANTED

146. The Claimant in its claim petition has prayed for following Reliefs:

(a) *Declare that the Cancellation of the Coal Blocks pursuant to the judgment of the Hon'ble Supreme Court dated 25.08.2014 and Order dated 24.09.2014 is Change in Law Event in terms of Article 13 of the PPA.*

(b) *Declare that the Promulgation of the Ordinance is a Change in Law event in terms of Article 13 of the PPA.*

(c) *Declare that the Cancellation of the Coal Blocks pursuant to the judgment of the Hon'ble Supreme Court dated 25.08.2014 and Order dated 24.09.2014 is Force Majeure Event in terms of Article 12 of the PPA.*

(d) *Declare that the Promulgation of the Ordinance is a Force Majeure Event in terms of Article 12 of the PPA.*

(e) *Devise an alternate mechanism for the sourcing of Fuel in terms of the suggestions provided by the Claimant in Paragraph 109 to 115 of the Statement of Claim including necessary amendments to the Amended and Restated PPA;*

(f) *Grant consequential extension of SCOD till the issue of procurement of fuel is decided by this Hon'ble Commission.*

We have already addressed issues relating to relief (a) to (d) in paragraphs132 - 144 above. As pointed out above in para 145 that the Commission vide its Order 12.8.2015 has kept with itself the issue relating to alternate mechanism for sourcing fuel and did not refer the same to this Tribunal. Accordingly, this Tribunal cannot grant any relief in respect of prayer (e) above. We have already decided that the issues relating to "Change in Law" and "Force Majeure" in favour of the Claimant viz., Cancellation of Coal Blocks pursuant to Coal Judgment and Order of Hon'ble Supreme Court and subsequent Promulgation of Ordinance are "Change in Law" events as well as "Force Majeure" events. Accordingly, the Claimant/Petitioner is entitled for extension of SCOD from date of Coal Order till COD is actually achieved. Parties to bear their respective costs.

147. Award pronounced in open court on 10/04/2017.

Parties to bear their respective costs.

(Justice Mukul Mudgal)	(Justice Deepak Verma)	(Mr. V J Talwar)
Co- Arbitrator	Presiding Arbitrator	Co-Arbitrator

ANNEXURE P-10

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION
SCO NO. 220-221, SECTOR 34-A, CHANDIGARH

Petition No.65 of 2013

In the matter of : Petition under Section 86 (1) (a), (b) and (f) and other applicable provisions of the Electricity Act, 2003 for adjudication of the disputes and for directions - Power Purchase Agreement for purchase of power from 2 x 250 MW (+20%) Goindwal Sahib Thermal Power Plant at Goindwal Sahib, Punjab.

AND

In the matter of: GVK Power (Goindwal Sahib) Limited, Paigah House, 156-159, Sardar Patel Road, Secunderabad-540003.

Versus

Punjab State Power Corporation Limited, The Mall, Patiala

To

1. M/s GVK Power (Goindwal Sahib) Limited,
   Paigah House, 156-159,
   Sardar Patel Road,
   Secunderabad-500 003.
   Andhra Pradesh, India

2. Chief Engineer/ARR & TR,
   Punjab State Power Corporation Limited,
   Shed No.F-4, Shakti Vihar,
   Patiala.

3. Shri Oliver Tyagi,
   GVK Power (Goindwal Sahib) Ltd.
   SCO 1, Second Floor, Sector 17-E,
   Chandigarh-160017.
   Phone: 0172 2700264

No.PSERC/Reg / 9219-21

Dated: 8/12/15

A copy of the Order dated 08.12.2015, passed by the Commission, in Petition No. 65 of 2013 and Petition No. 33 of 2015, is enclosed herewith.

DA/As above.

Registrar

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION
SCO NO. 220-221, SECTOR 34-A, CHANDIGARH

Date of hearing: 07.12.2015
Date of Order: 08-12-2015

Present: Smt. Romila Dubey, Chairperson
Shri Gurinder Jit Singh, Member

Petition No.65 of 2013

In the matter of : Petition under Section 86 (1) (a), (b) and (f) and other applicable provisions of the Electricity Act, 2003 for adjudication of the disputes and for directions - Power Purchase Agreement for purchase of power from 2 x 250 MW (+20%) Goindwal Sahib Thermal Power Plant at Goindwal Sahib, Punjab.

AND

In the matter of: GVK Power (Goindwal Sahib) Limited, Paigah House, 156-159, Sardar Patel Road, Secunderabad-540003.

-------Petitioner

Versus

Punjab State Power Corporation Limited, The Mall, Patiala

-------Respondent

Petition No.33 of 2015

In the matter of : Petition under Section 86 of the Electricity Act, 2003 and Articles 12, 13 and 17 of the Amended and Restated Power Purchase Agreement dated 26.05.2009 executed between GVK Power (Goindwal Sahib) Limited and Punjab State Power Corporation Limited (formerly known as Punjab State Electricity Board) for declaration of the occurrence of Change in Law and Force Majeure events.

AND

In the matter of: GVK Power (Goindwal Sahib) Limited, Paigah House, 156-159, Sardar Patel Road, Secunderabad-500003, Andhra Pradesh

------- Petitioner

Versus

Punjab State Power Corporation Limited, T-8, Thermal Design Complex, PSPCL, Patiala-147001, Punjab

-------Respondent

For petitioner: Shri Rohit Venkat, Advocate
Shri Mannava Sodekar, Advocate
Shri Oliver Tyagi

For PSPCL: Smt. Suparna Srivastava, Advocate
Shri Lakhvinder Singh, SE/IPC
Shri J.P.S. Trehan, SE/TR-2,
Shri Kewal Singh, Sr.XEN/IPC
Shri Jaspal Singh, Sr.XeN

ORDER

PSPCL and GVK (Goindwal Sahib) Limited were directed vide Order dated 28.08.2015 as under:-

"During course of arguments, it transpired that GVK has already submitted a proposal to PSPCL vide Ref.GPGSL/PSPCL/65/2015 dated 24th August, 2015 suggesting certain amendment in PPA dated 26.05.2009 with regard to fuel related issues in view of the cancellation of the captive coal block for the project by Hon'ble Supreme Court and the Ordinances and Act pursuant thereof. Copy of this letter was filed by GVK subsequent to the hearing of the petition on 26.08.2015.

In view of above developments, the Commission observes that GVK and PSPCL should hold meetings and decide these issues including amendment in PPA expeditiously. The parties shall submit the status of the matter by 24.09.2015. The petitions shall now be taken up for further hearing for this aspect / issue on 29.09.2015 at 11.30 A.M."

The hearing of the petitions was adjourned to 06.10.2015 vide Commission No.PSERC/Reg./ 6063/66 dated.09.09.2015.

GVK Power (Goindwal Sahib) Limited filed affidavit dated 28.09.2015 submitting status of the proposed amendments to be made in PPA and also latest information about subsequent events in respect of coal arrangements for the project. PSPCL vide C.E./ARR & TR memo No.5693 dated 05.10.2015 had submitted as under:-

"In this regard, it is submitted that PSPCL has constituted a committee to deliberate the issue of alternate coal arrangement proposed by GVK vide letter dated 24.8.2015. The committee deliberated the issue in this connection on 28.8.2015 and 10.09.2015 and also discussed the same with GVK representatives on 15.9.2015 and 16.9.2015. On 16.9.2015, GVK has submitted a fresh draft PPA with the proposed amendments. PSPCL is further examining the issue and obtaining legal opinion of the Advocate General, Punjab on the same, as such the issue is under consideration of the competent authority".

The parties were directed vide Order dated 07.10.2015 to conclude the process of amendments to be made in PPA expeditiously and file a joint submission by 28.10.2015. During hearing on 10.11.2015, GVK (Goindwal Sahib) Limited filed submissions regarding occurrence of events subsequent to 06.10.2015 i.e. last date of hearing enclosing the copies of the correspondence exchanged between GVK and PSPCL. No concrete proposal was submitted by the parties as directed in the earlier orders of the Commission. The parties were again directed to further negotiate the terms of interim coal supply and submit the proposal by 26.11.2015. Instead, PSPCL has filed additional submissions vide memo dated 04.12.2015. Para No. (9) and (10) of these submissions are reproduced:

"9. That the statements made in the aforesaid letter dated 6.11.2015 are also not tenable and do not reflect the correct factual position. Firstly and as stated above, the relief of carrying out amendments in the existing Amendment and Restated PPA is a consequential relief prayed with the main relief of declaration of occurrence of force majeure/change in law events and can not be granted by this Hon'ble Commission till arbitration proceedings are pending. Having referred the disputes to arbitration, any proceedings for grant of consequential relief would tantamount to parallel proceedings before this Hon'ble Commission, which is impermissible. Further, various proposals/suggestions given by the Petitioner regarding arrangement of fuel supplies on interim basis, adoption of Coal India prices and suggested amendments in the Amended and Restated PPA dated 26.5.2009 have been deliberated in the meetings held between the Petitioner and the Respondent pursuant to oral directions of this Hon'ble Commission; however, no commitment in this regard has been made by the Respondent and nothing has been finalized because the Petitioner has not intimated any source of power procurement, whether on interim or on long-term basis. It is only thereafter, the Petitioner has been requested to intimate the firm source of coal.

10. That vide letter dated 20.11.2015, the Petitioner has forwarded to the Respondent a Memorandum of Understanding (MoU) dated 19.11.2015 it is stated to have entered into for procurement of 2.4mmts imported coal on an annualized basis for a period of 2 years from January, 2016. The MoU states that the parties "can have" a detailed sales and purchase contract for coal as per the draft shared in the past. The Petitioner has thus reached an in-principle understanding with the coal supplier for importing coal for a period of 2 years for supply to the project and a detailed sales and purchase contract for the same is yet to be executed. Further, the MoU suggests only an interim source of fuel supply and the Petitioner is yet to intimate a firm source of supply for the entire period of Amended and Restated PPA for carrying out any amendments therein. The Petitioner has itself stated in its letter dated 6.11.2015 that various measures taken by it for procuring fuel for the project are under consideration of the appropriate authorities and are awaiting approvals in due course of time. That being so and without prejudice to the submissions made

hereinabove, no question of carrying out any amendments in the Amended and Restated PPA can at all arise."

The Commission heard the views of PSPCL and GVK (Goindwal Sahib) Limited on the issue of interim arrangement for the coal supply for the project till the long term arrangement for supply of coal for the project from the firm source is finalized in due course of time. After hearing the parties, the Commission directed that an interim arrangement for coal supply be worked out through mutual discussions by PSPCL and GVK, which can be implemented for a period till the final arrangement of coal is made for the project. In the meanwhile, the petitioner is directed to make sincere and concerted efforts to firm up long term source of coal supply for the project. The proposal be submitted by GVK to PSPCL within a week and both parties shall meet thereafter to finalize the same within another week. The mutually agreed proposal be submitted to the Commission by 29.12.2015.

The petition shall be taken up for further hearing on 05.01.2016 at 11.30 A.M.

(Gurinder Jit Singh)
Member

(Romila Dubey)
Chairperson

Chandigarh
Dated: 08-12-2015

Authenticated
Registrar
Punjab State Electricity Regulatory Commission
Chandigarh

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION

SCO NO. 220-221, SECTOR 34-A, CHANDIGARH

Petition No.33 of 2015

In the matter of : Petition under Section 86 of the Electricity Act, 2003 and Articles 12, 13 and 17 of the Amended and Restated Power Purchase Agreement dated 26.05.2009 executed between GVK Power (Goindwal Sahib) Limited and Punjab State Power Corporation Limited (formerly known as Punjab State Electricity Board) for declaration of the occurrence of Change in Law and Force Majeure events

AND

In the matter of: GVK Power (Goindwal Sahib) Limited, Paigah House, 156-159, Sardar Patel Road, Secunderabad-500003, Andhra Pradesh

Versus

Punjab State Power Corporation Limited, T-8, Thermal Design Complex, PSPCL, Patiala-147001, Punjab

To

1. Shri Amit Kapur Advocate,
   J.Sagar Associates,
   B-303, 3rd Floor, Ansal Plaza,
   Hudco Place, August Kranti Marg,
   New Delhi-110049
   Mobile: 9818644755

2. M/s GVK Power (Goindwal Sahib) Limited,
   Paigah House, 156-159, Sardar Patel Road,
   Secunderabad-500003,
   Andhra Pradesh.

3. Shri Oliver Tyagi,
   GVK Power (Goindwal Sahib) Ltd.
   SCO 1, Second Floor, Sector 17-E,
   Chandigarh-160017.
   Phone: 0172 2700264

4. Chief Engineer/ARR & TR,
   Punjab State Power Corporation Limited,
   Shed No.F-4, Shakti Vihar,
   Patiala.

No.PSERC/Reg / 9222–24

Dated: 8/12/15

A copy of the Order dated 08.12.2015, passed by the Commission, in Petition No. 65 of 2013 and Petition No. 33 of 2015, is enclosed herewith.

DA/As above.

Registrar

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION
SCO NO. 220-221, SECTOR 34-A, CHANDIGARH

Date of hearing: 07.12.2015
Date of Order: 08-12-2015

Present: Smt. Romila Dubey, Chairperson
Shri Gurinder Jit Singh, Member

Petition No.65 of 2013

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-------Petitioner

Versus

Punjab State Power Corporation Limited, The Mall, Patiala

-------Respondent

Petition No.33 of 2015

In the matter of : Petition under Section 86 of the Electricity Act, 2003 and Articles 12, 13 and 17 of the Amended and Restated Power Purchase Agreement dated 26.05.2009 executed between GVK Power (Goindwal Sahib) Limited and Punjab State Power Corporation Limited (formerly known as Punjab State Electricity Board) for declaration of the occurrence of Change in Law and Force Majeure events.

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------- Petitioner

Versus

Punjab State Power Corporation Limited, T-8, Thermal Design Complex, PSPCL, Patiala-147001, Punjab

-------Respondent

For petitioner: Shri Rohit Venkat, Advocate
Shri Mannava Sodekar, Advocate
Shri Oliver Tyagi

For PSPCL: Smt. Suparna Srivastava, Advocate
Shri Lakhvinder Singh, SE/IPC
Shri J.P.S. Trehan, SE/TR-2,
Shri Kewal Singh, Sr.XEN/IPC
Shri Jaspal Singh, Sr.XeN

ORDER

PSPCL and GVK (Goindwal Sahib) Limited were directed vide Order dated 28.08.2015 as under:-

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In view of above developments, the Commission observes that GVK and PSPCL should hold meetings and decide these issues including amendment in PPA expeditiously. The parties shall submit the status of the matter by 24.09.2015. The petitions shall now be taken up for further hearing for this aspect / issue on 29.09.2015 at 11.30 A.M."

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"In this regard, it is submitted that PSPCL has constituted a committee to deliberate the issue of alternate coal arrangement proposed by GVK vide letter dated 24.8.2015. The committee deliberated the issue in this connection on 28.8.2015 and 10.09.2015 and also discussed the same with GVK representatives on 15.9.2015 and 16.9.2015. On 16.9.2015, GVK has submitted a fresh draft PPA with the proposed amendments. PSPCL is further examining the issue and obtaining legal opinion of the Advocate General, Punjab on the same, as such the issue is under consideration of the competent authority".

The parties were directed vide Order dated 07.10.2015 to conclude the process of amendments to be made in PPA expeditiously and file a joint submission by 28.10.2015. During hearing on 10.11.2015, GVK (Goindwal Sahib) Limited filed submissions regarding occurrence of events subsequent to 06.10.2015 i.e. last date of hearing enclosing the copies of the correspondence exchanged between GVK and PSPCL. No concrete proposal was submitted by the parties as directed in the earlier orders of the Commission. The parties were again directed to further negotiate the terms of interim coal supply and submit the proposal by 26.11.2015. Instead, PSPCL has filed additional submissions vide memo dated 04.12.2015. Para No. (9) and (10) of these submissions are reproduced:

"9. That the statements made in the aforesaid letter dated 6.11.2015 are also not tenable and do not reflect the correct factual position. Firstly and as stated above, the relief of carrying out amendments in the existing Amendment and Restated PPA is a consequential relief prayed with the main relief of declaration of occurrence of force majeure/change in law events and can not be granted by this Hon'ble Commission till arbitration proceedings are pending. Having referred the disputes to arbitration, any proceedings for grant of consequential relief would tantamount to parallel proceedings before this Hon'ble Commission, which is impermissible. Further, various proposals/suggestions given by the Petitioner regarding arrangement of fuel supplies on interim basis, adoption of Coal India prices and suggested amendments in the Amended and Restated PPA dated 26.5.2009 have been deliberated in the meetings held between the Petitioner and the Respondent pursuant to oral directions of this Hon'ble Commission; however, no commitment in this regard has been made by the Respondent and nothing has been finalized because the Petitioner has not intimated any source of power procurement, whether on interim or on long-term basis. It is only thereafter, the Petitioner has been requested to intimate the firm source of coal.

10. That vide letter dated 20.11.2015, the Petitioner has forwarded to the Respondent a Memorandum of Understanding (MoU) dated 19.11.2015 it is stated to have entered into for procurement of 2.4mmts imported coal on an annualized basis for a period of 2 years from January, 2016. The MoU states that the parties "can have" a detailed sales and purchase contract for coal as per the draft shared in the past. The Petitioner has thus reached an in-principle understanding with the coal supplier for importing coal for a period of 2 years for supply to the project and a detailed sales and purchase contract for the same is yet to be executed. Further, the MoU suggests only an interim source of fuel supply and the Petitioner is yet to intimate a firm source of supply for the entire period of Amended and Restated PPA for carrying out any amendments therein. The Petitioner has itself stated in its letter dated 6.11.2015 that various measures taken by it for procuring fuel for the project are under consideration of the appropriate authorities and are awaiting approvals in due course of time. That being so and without prejudice to the submissions made

hereinabove, no question of carrying out any amendments in the Amended and Restated PPA can at all arise."

The Commission heard the views of PSPCL and GVK (Goindwal Sahib) Limited on the issue of interim arrangement for the coal supply for the project till the long term arrangement for supply of coal for the project from the firm source is finalized in due course of time. After hearing the parties, the Commission directed that an interim arrangement for coal supply be worked out through mutual discussions by PSPCL and GVK, which can be implemented for a period till the final arrangement of coal is made for the project. In the meanwhile, the petitioner is directed to make sincere and concerted efforts to firm up long term source of coal supply for the project. The proposal be submitted by GVK to PSPCL within a week and both parties shall meet thereafter to finalize the same within another week. The mutually agreed proposal be submitted to the Commission by 29.12.2015.

The petition shall be taken up for further hearing on 05.01.2016 at 11.30 A.M.

(Gurinder Jit Singh) **Member**	**(Romila Dubey)** **Chairperson**

Chandigarh
Dated: 08-12-2015

Authenticated
Registrar
Punjab State Electricity Regulatory Commission
Chandigarh

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION

ANNEXURE P-11 (Colly.)

GVK

Ref: GPGSL/PSPCL/2016/J/128
Date: 01.04.2016

(WITHOUT PREJUDICE)

To
The Chairman & Managing Director,
Punjab State Power Corporation Limited (PSPCL),
The Mall, Patiala-147001
Punjab.

Sir,

Sub: 2 X 270 MW GVK Goindwal Sahib Coal based thermal power plant at Goindwal Sahib Village, Tarn Taran District, Punjab- Unit#1 COD run as per PPA-reg

Ref: 1. GVK Letter No. GPGSL/PSPCL/2016/J/112 dated 25.03.2016.
2. GVK Letter No. GPGSL/PSPCL/2016/J/114 dated 26.03.2016.
3. GVK Letter No. GPGSL/PSPCL/2016/J/115 dated 28.03.2016.
4. GVK Letter No. GPGSL/PSPCL/2016/J/119 dated 29.03.2016.
5. GVK Letter No. GPGSL/PSPCL/2016/J/120 dated 30.03.2016.
6. GVK Letter No. GPGSL/PSPCL/2016/J/124 dated 31.03.2016

In continuation to the above cited letters, it is to inform you that Unit-1 is being operated with full load or above 95% capacity generation since 5:00 hours of 28.03.2016 i.e, for the last 100 hours the unit-1 is running at full load and the same is getting recorded in Punjab SLDC website also. As the PSPCL team has considered COD run from 9:00 AM of 29.03.2016, as per that also the Unit#1 COD run of 72 hours was successfully completed on 01.04.2016 at 9:00 AM. Independent Engineer will issue the Certificate as per the PPA.

This is a great mile stone achievement for PSPCL and GVK. We thank you and all the concerned at PSPCL for extending the cooperation in conducting the COD test successfully.

All this information is being communicated to PSPCL as per clause 6.2.2 of Amended and Restated PPA.

Yours sincerely,
for **GVK Power (Goindwal Sahib) Limited,**

M Rama Murty

M. Rama Murty
Director

CC: 1. CE-PP&R, PSPCL, Thermal Design Complex, Patiala.
2. CE-Thermal Designs, PSPCL, Thermal Design Complex, Patiala.
3. Independent Engineer, Lahmeyer International (India) Pvt. Ltd, Gurgaon.

PSPCL
Powering Punjab. Enriching Lives.

PUNJAB STATE POWER CORPORATION LIMITED
OFFICE OF THE CHIEF ENGINEER/PP & R
(INVESTMENT PROMOTION CELL)
 # T-8, THERMAL DESIGN COMPLEX, PSPCL, PATIALA-147001
Tele Fax: 0175-2220784, email:se.ipc.ppr@gmail.com

To

1. Chief Engineer/SLDC,
   PSTCL, SLDC Complex,
   Ablowal.

2. Chief Engineer/Thermal (Designs),
   PSPCL, Patiala.

Memo No.: 557/568 /IPC-GVK-2 PPA/Vol-22nd Dated: 12.04.2016

Subject: Scheduling of Power from Unit#1 of GVK Goindwal Sahib Thermal Power Project.

Ref: Final Test Certificate submitted by Independent Engineer (IE) dated 05.04.2016.

Please refer to the Commissioning/Performance Test conducted by GVK Power (Goindwal Sahib) Limited for the Unit#1 (270 MW) of GVK Goindwal Sahib Thermal Power Project from 09.00 hrs of 29.03.2016 to 09.00 hrs of 01.04.2016 for continuous Seventy Two (72) hours followed by Ramp-up and Ramp-Down Test which was completed at 12:18 hrs on 01.04.2016.

Independent Engineer (IE) vide letter dated 05.04.2016 (Original copy received by PSPCL on 12.04.2016) has submitted the Final Test Certificate of Unit#1(270 MW) of GVK Goindwal Sahib Thermal Power Project.

As per the Final Test Certificate of Independent Engineer (IE), the Commissioning/Performance Test has been carried out in accordance with Article–6 and Schedule 3 & 4 of Amended & Restated Power Purchase Agreement and is acceptable to him. IE has also specified in the above certificate that

a) The results of the Performance Test show that the Unit's Tested Capacity is not less than ninety five percent (95%) of its contracted capacity as existing on the effective date.

b) The Unit demonstrated the Ramp-up and Ramp- Down Rates above 50% of the rated load in accordance with Schedule 3 of PPA. The Ramp-Up of 1.28% & 1.30% per minute and Ramp – Down Rate of 1.29% & 1.25% per minute was demonstrated which meets the requirement of Schedule 3 of PPA.

c) All the systems and equipment of the unit have been commissioned and are operational."

Accordingly, the above Commissioning/Performance Test carried out by GVK Power (Goindwal Sahib) Limited for Unit#1 is accepted.

As per clause 6.3.1 of Amended & Restated PPA dated 26.05.2009, Unit #1 shall be declared/considered commissioned on 06.04.2016 (i.e. the day after one day from the date of issue of letter dated 05.04.2016 by Independent Engineer) under interim arrangement subject to the outcome of Appeal No. 68 of 2016, IA No. 175 of 2016, Appeal No. 69 of 2016 & IA No. 176 of 2016 before APTEL against the PSERC order dated 01.02.2016 and Arbitration Case with respect to extension in SCOD on account of alleged Force- Majeure and 'Change in Law' and/ or Force Majeure events before Arbitral Tribunal (constituted by the PSERC vide its order dated 02.09.2015).

It is, therefore, requested to schedule the power from Unit#1(270 MW) of GVK Goindwal Sahib Thermal Power Project to PSPCL by considering COD of the Unit#1 as 06.04.2016.

This issues with the approval of Competent Authority.

Encl: Final Test Certificate of the IE Dated 05.04.2016

Superintending Engineer/IPC
PSPCL, Patiala.

CC:

1. Sr.Pvt.Secy. to CMD, PSPCL, Patiala for information of CMD,PSPCL.
2. Sr.Pvt.Secy. to CMD, PSTCL, Patiala for information of CMD,PSTCL.
3. Sr.Pvt.Secy. to Director/Distribution, PSPCL, Patiala for information of Director/D,PSPCL.
4. Sr.Pvt.Secy. to Director/ Generation, PSPCL, Patiala for information of Director/G,PSPCL.
5. Sr.Pvt.Secy. to Director/ Commercial, PSPCL, Patiala for information of Director/C,PSPCL.
6. Sr.Pvt.Secy. to Director/ Finance, PSPCL, Patiala for information of Director/F,PSPCL.
7. Sr.Pvt.Secy. to Director/ Finance & Commercial, PSTCL, Patiala for information of Director/ Finance & Commercial, PSTCL.
8. Sr.Pvt.Secy. to Director/ Technical, PSTCL, Patiala for information of Director/ Technical,PSTCL.
9. Chief Engineer/PP&R,PSPCL, Patiala
10. M/s GVK Power (Goindwal Sahib) Limited, Paigah House, 156-159, Sardar Patel Road, Secunderabad – 500 003, Andhra Pradesh, India.

Ref: GPGSL/PSPCL/2016/J/165
Date: 15-04-2016

GVK

(WITHOUT PREJUDICE)

To
The Chief Engineer, PP&R,
Punjab State Power Corporation Limited (PSPCL),
Thermal Design Complex, Patiala-147001
Punjab.

Sir,

Sub: 2 X 270 MW GVK Goindwal Sahib Coal based thermal power plant at Goindwal Sahib Village, Tarn Taran District, Punjab- Submission of Final Test Certificate for Unit-2 COD-reg

Ref: 1. Lahmeyer letter No. LII/H/501024/02/UJR dated 15.04.2016.

With reference to the cited letter, we enclose herewith a photocopy of the Final Test Certificate for unit-2 COD issued by the Independent Engineer. M/s Lahmeyer, the Independent Engineer, had already dispatched the said document in original to PSPCL on 15.04.2016 as per Clause 6.2.5 of Amended and Restated PPA.

This is for your kind information and taking further necessary action by PSPCL.

Thanking you,

Yours sincerely,
for **GVK Power (Goindwal Sahib) Limited,**

M. Rama Murty

M. Rama Murty
Director

CC: 1. CMD, PSPCL, The Mall, Patiala.
2. CE-Thermal Designs, PSPCL, Thermal Design Complex, Patiala.
3. SE-IPC-PPR, PSPCL, The Mall, Patiala.
4. Mr. Ujjwal Roy, Lahmeyer International (India) Pvt. Ltd, Gurgaon.

Encl: The Final test Certificate for unit-2 COD issued by the Independent Engineer.

LAHMEYER INDIA

Ref: LII/H.501024/02/UJR
Date: 15th April, 2016

To:
The Chairman & Managing Director,
Punjab State Power Corporation Limited (PSPCL)
The Mall, Patiala – 147001
Punjab State.

Subject: –H.501024: Independent Engineer's Services for 2X270 MW Thermal Power Plant of GVK Power (Goindwal Sahib) Ltd. – Issue of Final Test Certificate for Unit #2

Ref: Test Data submitted by M/s. GVK Power (Goindwal Sahib) Ltd.

Dear Sir,

With reference to the Commissioning Test of Unit #2 of the above Project, witnessed by the Independent Engineer in the presence of a representative of M/s. GVK Power (Goindwal Sahib) Limited and Punjab State Power Corporation Limited, please find attached the Final Test Certificate of Unit #2 by the Independent Engineer.

Ujjwal Roy

Ujjwal Roy
Project Manager & Group General Manager

Lahmeyer International (India) Pvt. Ltd.,
Corporate Office & Correspondence address:
Intec House, Plot No. 37, Institutional Area, Sector 44, Gurgaon
122002, National Capital Region (INDIA)

Tel: (91-124) 469 8500
Fax: (91-124) 469 8585
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Corporate Identification Number:
U74899DL1993PTC055028
Registered Office:
A-3 (2nd Floor), Neeti Bagh
New Delhi – 110 049

LAHMEYER INDIA

Date: 15th April, 2016

TO WHOM IT MAY CONCERN

FINAL TEST CERTIFICATE OF THE INDEPENDENT ENGINEER (IE)

This is to certify that the Commissioning/ Performance Test for Unit #2 of 2X270 MW Thermal Power Project being developed by M/s. GVK Power (Goindwal Sahib) Ltd. has been successfully carried out in accordance with Article – 6 and Schedule 3 & 4 of Power Purchase Agreement between The Punjab State Electricity Board (the "Procurer", represented by Punjab State Power Corporation Limited, PSPCL) and M/s. GVK Power (Goindwal Sahib) Ltd. (the "Seller"). The Performance Test of Seventy Two (72) hour commenced at 17:18 hrs of 11th April, 2016 and was completed on 17:18 hrs of 14th April, 2016. The above test was followed by two numbers of Ramp – Up and Ramp – Down Tests which were completed by 19:20:40 hrs on 14th April, 2016.

This is further to certify that:

a) The Commissioning Test has been carried out in accordance with Schedule 4 of PPA and the results are acceptable to the IE.
b) The results of the Performance Test show that the Unit's Tested Capacity is not less than ninety five (95%) percent of its contracted capacity as existing on the Effective Date.
c) The unit demonstrated the Ramp – up and Ramp – Down Rates above 50% of the rated load in accordance with Schedule 3 of PPA. The Ramp – Up rate of 1.30% & 1.32% per minute and Ramp – Down rate of 1.37% & 1.29% per minute was demonstrated which meets the requirement of Schedule 3 of PPA.
d) All the systems and equipment of the unit have been commissioned and are operational.

Ujjwal Roy

Name: Ujjwal Roy

Designation: Project Manager & Group General Manager

M/s. Lahmeyer International (India) Pvt. Ltd.

Lahmeyer International (India) Pvt. Ltd.,
Corporate Office & Correspondence address:
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PUNJAB STATE POWER CORPORATION LIMITED
OFFICE OF THE CHIEF ENGINEER/PP & R
(INVESTMENT PROMOTION CELL)
T-8, THERMAL DESIGN COMPLEX, PSPCL, PATIALA-147001
Tele Fax: 0175-2220784, email:se.ipc.ppr@gmail.com

To

1. Chief Engineer/SLDC,
   PSTCL, SLDC Complex,
   Ablowal.
2. Chief Engineer/Thermal (Designs),
   PSPCL, Patiala.

Memo No.:576/589/IPC-GVK-2 PPA/Vol-2 3rd Dated: 18.04.2016

Subject: Scheduling of Power from Unit#2 of GVK Goindwal Sahib Thermal Power Project.

Ref: Final Test Certificate submitted by Independent Engineer (IE) dated 15.04.2016.

Please refer to the Commissioning/Performance Test conducted by GVK Power (Goindwal Sahib) Limited for the Unit#2 (270 MW) of GVK Goindwal Sahib Thermal Power Project from 17:18 hrs of 11.04.2016 to 17:18 hrs of 14.04.2016 for continuous Seventy Two (72) hours followed by Ramp-up and Ramp-Down Test which were completed at 19:20:40 hrs on 14.04.2016.

Independent Engineer (IE) vide his letter ref.L11/H.501024/02/UJR dated 15.04.2016 (Original copy received by PSPCL on 18.04.2016) has submitted the Final Test Certificate of Unit#2(270 MW) of GVK Goindwal Sahib Thermal Power Project.

As per the Final Test Certificate of Independent Engineer (IE), the Commissioning/Performance Test has been carried out in accordance with Article–6 and Schedule 3 & 4 of Amended & Restated Power Purchase Agreement and is acceptable to him. IE has also specified in the above certificate that

a) The results of the Performance Test show that the Unit's Tested Capacity is not less than ninety five percent (95%) of its Contracted Capacity as existing on the Effective Date.

b) The Unit demonstrated the Ramp-up and Ramp- Down Rates above 50% of the rated load in accordance with Schedule 3 of PPA. The Ramp-Up rate of 1.30% & 1.32% per minute and Ramp – Down Rate of 1.37% & 1.29% per minute was demonstrated which meets the requirement of Schedule 3 of PPA.

c) All the systems and equipment of the unit have been commissioned and are operational."

Accordingly, the above Commissioning/Performance Test carried out by GVK Power (Goindwal Sahib) Limited for Unit#2 is accepted.

As per clause 6.3.1 of Amended & Restated PPA dated 26.05.2009, Unit #2 shall be declared/considered commissioned on 16.04.2016 (i.e. the day after one day from the date of issue of letter dated 15.04.2016 by Independent Engineer) under interim arrangement subject to the outcome of Appeal No. 68 of 2016, IA No. 175 of 2016, Appeal No. 69 of 2016 & IA No. 176 of 2016 before APTEL against the PSERC order dated 01.02.2016 and Arbitration Case with respect to extension in SCOD on account of alleged Force- Majeure and 'Change in Law' and/ or Force Majeure events before Arbitral Tribunal (constituted by the PSERC vide its order dated 02.09.2015).

It is, therefore, requested to schedule the power from Unit#2(270 MW) of GVK Goindwal Sahib Thermal Power Project to PSPCL by considering COD of the Unit#2 as 16.04.2016 under interim arrangement.

Encl: Final Test Certificate of the IE
Dated 15.04.2016

Chief Engineer/PP&R,
PSPCL, Patiala.

CC:

1. Sr.Pvt.Secy. to CMD, PSPCL, Patiala for information of CMD,PSPCL.
2. Sr.Pvt.Secy. to CMD, PSTCL, Patiala for information of CMD,PSTCL.
3. Sr.Pvt.Secy. to Director/Distribution, PSPCL, Patiala for information of Director/D,PSPCL.
4. Sr.Pvt.Secy. to Director/ Generation, PSPCL, Patiala for information of Director/G,PSPCL.
5. Sr.Pvt.Secy. to Director/ Commercial, PSPCL, Patiala for information of Director/C,PSPCL.
6. Sr.Pvt.Secy. to Director/ Finance, PSPCL, Patiala for information of Director/F,PSPCL.
7. Sr.Pvt.Secy. to Director/ Finance & Commercial, PSTCL, Patiala for information of Director/ Finance & Commercial, PSTCL.
8. Sr.Pvt.Secy. to Director/ Technical, PSTCL, Patiala for information of Director/ Technical,PSTCL.
9. Chief Engineer/PP&R,PSPCL, Patiala
10. M/s GVK Power (Goindwal Sahib) Limited, Paigah House, 156-159, Sardar Patel Road, Secunderabad – 500 003, Andhra Pradesh, India.
11. Dy.CE/PR, PSPCL, Patiala.
12. Dy.CE/ISB, PSPCL, Patiala.

BEFORE THE HON'BLE PUNJAB STATE ELECTRICITY REGULATORY COMMISSION

IN THE MATTER OF:

GVK Power (Goindwal Sahib) Limited ...Petitioner

Versus

Punjab State Power Corporation Limited ...Respondent

INDEX

GVK Power (Goindwal Sahib) Limited/Petitioner

Through

J. Sagar Associates
Advocates for the Petitioner
B-303, 3rd Floor, Ansal Plaza
Hudco Place, August Kranti Marg
New Delhi - 110 049

Date: 29 December, 2017

ANNEXURE P-12 (Colly.)

LAHMEYER INTERNATIONAL INDIA

IDBI BANK
इंडस्ट्रियल डेवलपमेंट बैंक ऑफ इंडिया लिमिटेड
Industrial Development Bank of India Limited

IDBI BANK LIMITED

GVK

GVK POWER (GOINDWAL SAHIB) LIMITED

2x270 MW COAL BASED
THERMAL POWER PROJECT
AT
TARN TARAN DISTRICT,
PUNJAB, INDIA

REVISED COST AND TIME OVERRUN REVIEW REPORT

PREPARED BY

LAHMEYER INTERNATIONAL (INDIA) PVT. LTD.
THE LENDER'S ENGINEER

LII-GELE09054-L-00108-005 R0 **October 2013**

TABLE OF CONTENTS

1 INTRODUCTION

GVK Power (Goindwal Sahib) Limited (GVKPGSL), herein referred to as the Project Company is setting up a 2x270 MW coal fired Thermal Power Project in Tarn Taran District of Punjab, pursuant to an Implementation Agreement with Government of Punjab dated 25th August 2000. The Project Company has been promoted by GVK group, who have executed thermal power plants of more than 1200 MW across various locations in India.

Lahmeyer International (India) Pvt. Ltd. has been appointed as Lender's Engineer (henceforth referred to as LE), on behalf of IDBI Bank Ltd. vide letter dated 26th December 2009.

1.1 Definitions

Project	:	2x270 MW Coal Based Thermal Power Project
Lead Lender	:	IDBI Bank Ltd.
Project Company/ Owner (Power Project)	:	GVK Power (Goindwal Sahib) Limited (GVKPGSL)
Power Purchaser	:	Punjab State Power Corporation Limited (Earlier Punjab State Electricity Board)
Fuel Supplier	:	GVK Coal (Tokisud) Company Pvt. Ltd. through GVK's Captive Mines in Tokisud, Jharkhand
Lender's Engineer (LE)	:	Lahmeyer International (India) Pvt. Ltd. (LII)

1.2 Scope of Services

Project Company provided revised project cost of 3746.07 crore in May 2013, for which a Project Cost Overrun Review Report ***(Ref: - LII-GELE09054-L-00108-004 R1)*** was submitted by LE to Lenders in May 2013. Further Project Company has submitted a second revision thereby proposing project cost of 3986 Crores in September 2013. The present scope of services includes analysing the second proposal for increase in Project Cost & Project Time Overrun based on documents submitted by the Project Company.

1.3 Basis of Report

This Revised Cost and Time Overrun Review Report has been prepared on the basis of review of the project documents provided by the Project Company. A list of such documents received from the Project Company is attached as **Appendix-1** of this report.

Disclaimer

LE has made no search of any public records nor independently validated the information provided by Project Company with any external source, and save for the reviewed documents, listed elsewhere in this Report, LE has not examined any other documents relating to the matters of the Project Company for the purpose of this Report.

LE's findings are strictly limited to the issues stated herein and are not to be read as extending by implication to any other issue. It is given, as on the date of writing this Report, solely for the benefit of the Lenders and may not be disclosed to or relied upon by anyone else without LE's prior consent, provided that, this opinion may be disclosed to the auditors or any professional advisors of any of *the addressees or to any regulatory authority (as may be required by such regulatory authority) or otherwise pursuant to a court order or legal process.*

2 REVISED PROJECT COST- CAPEX

Project Company has provided the Revised Project Cost for the 2x270 MW coal fired Thermal Power Project. LE's observations on the same have been discussed in the following paragraph.

2.1 Capex Estimate Break up

The original estimated cost during due diligence stage of the aforesaid project is Rs. 3200 crore. Project Company provided revised project cost of 3746.07 crore in May 2013, for which a Project Cost Overrun Review Report ***(Ref: - LII-GELE09054-L-00108-004 R1)*** was submitted by LE to Lenders in May 2013. Further Project Company has submitted a 2nd revision to revised project cost in September 2013. The estimated revised capital expenditure after 2nd revision is Rs 3998 crores.

The original Project Cost is funded with a Debt-Equity ratio of 75:25.

As informed by the Project Company, there has been an increase in the cost of the project, which is mainly on account of

i) Increase in site grading, pile foundation work and adoption of ground improvement technique due to poor soil condition of the project site,

ii) Change in scope of the project viz. coal handling system, railway siding, ash handling system, etc, and design changes based on actual work conditions

iii) Increase in IDC due to time overrun and increase in interest rate.

iv) Delay in acquisition of land for railway siding & raw water pipeline,

v) Delay in procurement of BTG & BOP items

vi) Increase in cost of BTG Spares, construction power, start-up fuel etc

The break-up of the Original and Revised CAPEX under major heads as provided by Project Company is given in Table-2.1 below:

Table – 2.1
Break up of original and Revised CAPEX

In Rs. Crores

Sl No	Description	Original Project Cost	Revised Project Cost	Difference
1	Land*	176.25	182.1	5.85
2	BTG#	1213.39	1213.4	0.01
3	BOP	955.00	992.50	37.50
4	Non EPC**	135.00	347	212
5	Spares	39.65	70.7	31.05
6	Design & Consultancy Fee	7.50	13.70	6.2
7	Construction Power	12.00	32.00	20
8	R & R Cost	5.00	0.00	(5)

Sl No	Description	Original Project Cost	Revised Project Cost	Difference
9	Startup fuel	15.00	78.66	63.66
10	Construction Insurance	11.44	11.44	0
11	Other overheads & Pre-operative Expenses	55.00	134.00	79
12	Financing Cost	37.13	24.5	(12.63)
13	Interest During Construction	387.44	756.1	368.66
14	Contingency	92.94	62	(30.94)
15	Working Capital Margin	57.26	80	22.74
16	**Total Project Cost**	**3200.00**	**3998.1**	**798.1**

*The cost towards site grading work was earlier considered with Land cost; now it has been included under Non-EPC work.
BTG package includes Foreign Component of USD 30.34 Million and Euro 19.58 Million.
** The cost of service building was earlier considered in BoP package awarded to Punj Lloyd Ltd; now it has been considered in the scope of Non-EPC package under Revised Project Cost

The review of Cost and Time Overrun is submitted below under each head

2.2 Land Cost (182.1 Crore)

LE observed that the land cost has increased from Rs 176.25 Crores to Rs 182.1 Crores i.e. an increase of Rs 5.85 Crores. The breakup of 182 crores has been indicated below:

S. No.	Description	Area in acres	Amount (Rs. in Cr)
1.	Private land purchased directly	53.58	2.60
2.	Plant land through award	1014.32	164.07
3.	Land missing in plant award and purchased directly to make it contiguous.	6.7	1.15
4.	Railway siding and water pipeline corridor through award	37.98	12.09
5.	Extra amount paid to Hotian and Biharipur farmers on 17.7313 acres to make them on par with Khadur Sahib award rate (part of Railway Siding and Water Pipeline corridor)	-	1.35
6	Compensation paid to farmers	-	0.17

S. No.	Description	Area in acres	Amount (Rs. in Cr)
	for crop towards crop during acquisition of land for railway siding / raw water pipeline.		
6.	Small patches of land missing in Railway siding award and purchased directly	1.0936	0.38
7.	Purchase of a piece of land in March, 2013 towards making land contiguous, which was missed out by SDM while issuing the Award for land acquisition for Railway Siding.	-	0.19
	Total	**1113.675**	**182**

Around1068 acres of land, including 479 acres for the future expansion have been identified for the Project site. Land for main plant (70 acres), ash dyke (244 acres), green belt (190 acres), coal storage facilities (25 acres) and balance miscellaneous facilities has been estimated for Project. *The above land does not include land required for raw water intake pump house & pipeline and railway siding.*

Out of 1067.9 acres, the company acquired 1014.32 acres under Land Acquisition Act through SDM order and the balance 53.58 acres acquired is private land.

Project Company informed that they have acquired around 37.98 acres of additional land under Land Acquisition Act for the purpose of railway siding and water pipeline through award from SDM, which was not included in the original acquisition of 1014.32 acres.

There were small patches of land totalling 1.0936 acres missing in Railway siding award and purchased directly. Further, the company also had to purchase small patches of land missing in the above acquisition totalling 6.7 acres as per SDM order to make the land contiguous. There is an increase in the price of land paid to the farmers in respect of 37.98 acres acquired for raw water pipe line and railway siding.

2.3 BTG Cost (1213.4 Crore)

The company has entered into an agreement (Supply Contract and Services) with M/s Bharat Heavy Electrical Ltd (BHEL) on February 06, 2009 for BTG Contract. The Contract is envisaged to be fixed time fixed price contract (Rs.1213.4 crore including Foreign Currency component of USD 30.34 Million and Euro 19.58) except for variation in foreign exchange rate and change in law for taxes, if any.

Project Company informed that BTG cost will not increase on account of Foreign Exchange variation & change in law towards taxes and duties considering balance payment to be made.

LE has reviewed the information and explanation furnished by the Project Company and observed that the BTG package cost has not increased.

2.4 BOP Cost (Rs 992.50 Crores)

LE observed that the cost estimate for BOP package has increased from Rs 955.00 Crores to Rs 992.50 Crores i.e. by Rs 37.50 Crores.

The detailed break up of increase in cost of Rs 37.53 Crores is indicated in Table 2.2 below:

Table 2.2
Increase in BOP Cost

Particulars	Amount in Rs. Crs
Vibro Compaction work	10.38
Extra Piling length	22.83
HCSD system	19.72
SCADA System	0.25
Claims arising out of BOP Contract (PLL) – Change in Design of Coal Handling Plant	21.22
Total	**74.40**
(Less): Cost of Service Building	36.88
Variance (Net)	**37.52**

The company has indicated that cost of BoP package has increased by Rs. 74.40 crore on account of additional scope of work which inter-alia includes execution of Vibro-compaction work (10.38 crore), Extra piling length (22.83 crore), Implementation of High Concentration Slurry Disposal System (19.72 crore), SCADA System (0.25 crore) and change in design of coal handling plant (21.22 crore).

The vibro-compaction was carried out in power island, water island, switchyard, cooling towers, ash handling system, coal handling system, raw water pump house, chimney, boiler and its auxiliaries, non plant buildings, colony areas of the plant.

The details are as under:

- <u>Execution of Vibro compaction work (Rs 10.38 Crores)</u>
  Project Company informed that the existing underground strata of the project area are uniformly fine grained sand with high ground water table. The plant area is in seismic zone-IV and the project site would be subject to liquefaction effect during the occurrence of earthquakes.

  Professor K. S Rao from IIT, Delhi and M/s Keller- a German Consulting firm had carried out a study regarding liquefaction effect of soil and recommended the use of vibro compaction method to mitigate the liquefaction effect. To mitigate the same, Project Company adopted the vibro compaction method and as a result additional site grading was carried out.

The vibro-compaction was carried out in power island, water island, switchyard, cooling towers, ash handling system, coal handling system, raw water pump house, chimney, boiler and its auxiliaries, non plant buildings, colony areas of the plant.

The BOQ and rates for Vibro compaction within the plant boundary is indicated in Table-2.3 below:

Table 2.3
BOQ and rates for Vibro Compaction

S. No	Item description	Unit	Rate (Rs / Unit)	Quantity	Amount in Rs Crores
1	Mobilization and demobilization of all necessary equipments and personnel to site (1rig)	LS	1400000	1	0.14
2	Setting up execution of vibro-compaction works to max depth 10m below working platform level measured from edge to edge of the treatment area (tributary influence zone) etc. for 3 m c/c square grid pattern.	CUM	70	1050000	7.35
3	Setting up execution of vibro-compaction works to max depth 2m below working platform level measured from edge to edge of the treatment area (tributary influence zone) etc. for 3 m c/c square grid pattern.	CUM	45	240000	1.08
4	Total of item No.2 and 3				8.43
5	Add Overheads@ 10% on S.N. 4				0.84
6	Total with overheads (1+4+5).				9.41
7	Service Tax 10.3% on S.No.6				0.97
8	**Total (6+7)**				10.38

As per the scope change order with M/s Punj Lloyd Limited, LE observed that Vibro- compaction was included as additional item.

Based on the above LE is of the view that Rs 10.38 Crores towards cost of vibro-compaction is found to be generally in order.

- Extra Piling length due to poor soil condition(Rs 22.83 Crores)

Initially, the pile length of about 15m to 17m was envisaged by the Project Company. The company has indicated that due to poor soil condition on account of underground strata of the project site area having uniformly fine grained sand with high ground water table and the project site being subjected to liquefaction effect during the occurrence of earthquakes, the pile length has been increased in the main plant area from 15 m to maximum of 26 m and in the remaining areas from 17 m to maximum of 26 m. The total no. of piles in the project are 6791, out of which 6751 have been executed till March 2013 by Punj Lyold; the total additional length of piles is about 59943 m which has increased the cost by around 22.83 crore.

As per the scope change order with M/s Punj Lloyd Limited, the base pile length is indicated in Table 2.4 below:

Table 2.4
Base Pile length

Sl No	Area	Length of Pile
1	Main Plant Area	15 meters
2	remaining area within plant boundary	17 meters

However, the area wise actual pile length carried out during execution in different areas of plant is indicated in Table 2.4 below:

Table 2.4
Actual Pile Length

SL NO	AREA	PILE DIAMETER (IN MM)	BASE PILE DEPTH LEVEL (INM AS PER GEO-TECHNICAL REPORT)	EXECUTED PILE DEPTH BELOW CUT OFF LEVEL (IN M)
1	BOILER 1	750	15	26
		500	15	23
2	BOILER 2	750	15	26
		500	15	23
3	ESP 1	500	15	23
		600	15	26
4	ESP2	600	15	26
		500	15	23
5	TG-1	600	15	26
6	TG·2	600	15	26
7	CHIMNEY	600	17	26
8	Power House-Unit 1	750	15	26
		600	15	26
		500	15	23
9	Power House-Unit 2	600	15	26
		750	15	26
		500	15	23

SL NO	AREA	PILE DIAMETER (IN MM)	BASE PILE DEPTH LEVEL (INM AS PER GEO-TECHNICAL REPORT)	EXECUTED PILE DEPTH BELOW CUT OFF LEVEL (IN M)
10	TRANSFORMER YARD	500	15	23
		600	15	26
11	SWITCHYARD	750	17	26
		600	17	26
		500	17	23
12	BFP	500	15	23
13	MILL BAY·1	750	15	26
14	MILL BAY·2	750	15	26
15	ESP CONTROL BUILDING	600	17	26
		500	17	23
16	ID FAN Unit·1 & 2	750	17	26
17	SUPPORT UNIT 1 & 2 (Fan Handling & ID)	500	17	23
18	ELECTRICAL BAY	750	15	26
		600	15	26
19	FUEL OIL PUMP HOUSE	750	17	26
		600	17	26
		500	17	23
20	LDO & HFO TANK	500	17	20
21	PA FAN	500	15	20
22	FD FAN	500	15	20
23	DUCT SUPPORT (FAN HANDLING)	500	15	20
24	STACKER RECLAIMER	600	17	26
		600	17	23
25	JNT·1	600	17	23
		500	17	23
26	JNT-2	600	17	23
27	JNT-3	750	17	26
		600	17	23
		500	17	23
28	CRUSHER HOUSE	750	17	26
		600	17	26
		600	17	23
29	BCN-4	500	17	20
		500	17	23
30	BCN-8	500	17	20
31	BCN·9	500	17	20

SL NO	AREA	PILE DIAMETER (IN MM)	BASE PILE DEPTH LEVEL (INM AS PER GEO-TECHNICAL REPORT)	EXECUTED PILE DEPTH BELOW CUT OFF LEVEL (IN M)
		600	17	23
32	BCN-10	500	17	20
		600	17	23
33	Raw Water Pump House	750	17	23
		500	17	20
34	CWPH SWGR. ROOM	500	17	20
35	CWPH CHLORINATION ROOM	600	17	23
		500	17	20
36	CW PUMP HOUSE	600	17	26
		600	17	23
37	ASH HANDLING AREA	750	17	23
		600	17	23
		500	17	20
38	COMPRESSOR HOUSE	750	15	26
39	Stator Lifting Foundation	750	15	26

LE observed from the above table that, the pile length in the main plant area has increased from 15 meters up to maximum of 26 meters and in the remaining areas from 17 meters up to maximum of 26 meters.

The detailed break up of additional cost on account of additional piling is indicated in the Table 2.5 below:

Table 2.5
Additional Cost of Piling

Particulars	Amount in Rs Crores	Average cost in Rs/ Meter
Additional Cost of Material	12.29	2050.28
Services	6.46	1077.69
Overheads	1.875	312.80
Service Tax	0.73	122.10
Additional cost of power	1.47	245.23
Total	**22.83**	3808.10

LE is of the view that the additional cost for additional piles is generally in order which includes BOP Contractor's overhead and service tax.

- Adoption of High Concentration Slurry Disposal (HCSDs) system to comply with the MoEF requirement (Rs 19.72 Crores)

The ash handling system envisaged in the original project configuration inter-alia included bottom ash handling system, fly ash handling system and ash disposal system. It was proposed to implement lean slurry disposal system for disposal of bottom ash and Fly ash.

The scope of work for BoP package was finalised with PLL and LOI was issued on May 06, 2008. Subsequently, the project received environmental clearance from MoEF on May 09, 2008 which stipulated implementation of HCSD as part of the project.

As per MoEF clearance; unutilized Fly Ash shall be disposed of in Ash Pond in the form of High Concentration slurry and the bottom ash in conventional slurry mode i.e. lean concentration slurry system.

Accordingly, to comply with MoEF norms, the company awarded the work of HCSD system to PLL at fixed cost of Rs. 19.72 crore inclusive of taxes/duties

LE found in Environmental Clearance that HCSD system is required to be installed to comply with MoEF requirement. LE observed in the Environment Clearance that Bottom Ash shall be disposed of through slurry mode.

The breakup of Supply and Service cost is indicated in the Table 2.6 below:

Table 2.6
Cost breakup of HCSD System

Sl No	Particulars	Amount in Rs Crores
1	***Supply***	
	Concrete	0.31
	Steel	0.73
	Mechanical/Electrical/ C & I	14.66
	Mandatory Spares	0.35
	Other civil material	0.16
	Sub total	16.22
	Overhead@10%	1.62
	ED@10.3%	Included above
	CST@2%	Included above
	Total	17.84
2	***Service***	
	Engineering	0.66
	Erection & Commissioning	0.85
	Civil Works	0.85
	Overhead@10%	0.23
	Service Tax	0.27
	Total Service	2.87

Sl No	Particulars	Amount in Rs Crores
3	**Deductions**	
	ERW Pipes instead of DRC Lining	1.0
4	**Total**	**19.72**

LE is of the view that cost of High Concentration Slurry Disposal (HCSD) system is found to be generally in order. The Lean Slurry Disposal System shall be used for disposal of Bottom Ash.

- Extra Claims by BOP Contractor (Rs 21.22 Crores) - Change in Design of Coal Handling Plant

As per the documents submitted by the Project Company, LE observed that the extra claim was made by the BOP contractor due to change in design of Coal Handling Plant. The following design changes were carried out:

- *Coal Feeding system for the project has been changed.* As informed by the Project Company, the project company is having a dedicated coal mine for supply of coal to the project. As per the coal supply agreement, the coal shall be supplied the coal at (-) 100 size. While receiving the coal at (-)100 size initially the ash content will be less in the upper seems of coal mine and the coal will be sent to bunkers through 25 mm screen and crushers. The analysis of coal indicates an ash percentage of 34% in the coal. It is expected that with mining over a period of time the ash content may increase beyond 35% at which condition we may have to go for washing of the coal before transporting it to the power plant as per the guidelines of MoEF. With coal washing done at coal mine the coal particle size at the coal mine shall be around < 50 mm. The coal pulverizers provided by BHEL for the project are designed for an input coal particle size of 50 mm. When coal of < 50 mm size is received from the coal mines it is directly fed to the coal pulverizers of the boilers bypassing the crushing system thereby saving auxiliary power. Due to the incorporation of the additional bypass coal feeding arrangement from BCN 4 to BCN 5 conveyors, the crusher house dimensions has got changed. The dimensions of crushers have changed from 31mx20mx39m to 31mx20mx42m. The change in crusher house dimensions has resulted in increase in structural steel quantity and modification of the foundation for the revised structure.

- *Modification of wagon tippler has been carried out and there has been a change in railway line height.* As discussed with Project Company, the railway consultant had committed an error in railway siding survey for about 2.0 m while carrying out reduced levels. The railway consultant prepared his drawing based on that drawing wagon tippler contractor prepared his drawing. While executing the work at site this error was noticed and it was corrected accordingly to match the level of other structures. Because of the above reasons, there is a change in height of the railway line by 1.52 mtrs and associated modification of Wagon tippler.

- *The height of JNT # 3 is increased.* There was an error in the design of the chute inclination angle, it was different from what was specified. The same was corrected in the revised document which led to increase in height of JNT # 3 by around 500 mm.

- *Coal Stacker length has been changed from 875 mt. to 1050 mt.* Coal stack storage is planned for 45 days storage with length of initial 875 Mtrs. As informed by the Project Company, there will be a reduction in coal production during the monsoon as the monsoon is very Vigorous in coal mine area from July to October end. In addition to that, River Damodar is flowing very close to the mine area and there will be lot of seepage from River Damodar during this period which will also affect the coal production in the mine. Whereas power demand is maximum in Punjab during 15th June to 15th November every year to provide electrical supply for Khariff crop. This is about 30% of Punjab electricity demand. To avoid this mismatch, additional coal stack area was contemplated in order to ensure un-interrupted power generation during the peak demand in Punjab and low production at Jharkhand. Moreover as the coal is coming from very far area i.e. Jharkhand at a distance of 1625 kms from the power plant, the coal stock pile area was increased to 1050 mtrs i.e. by 175 mtrs to increase the storage capacity to 60 days from 45 days.

The detail break up additional cost is indicated in Table 2.7 below:

Table 2.7
Cost Breakup of extra claim made by BOP Contractor

Sl. No	Description	Amount (Rs Crores)
1	**Supply**	
1.1	Material for Civil Works	6.17
1.2	Material for Mechanical Work	3.36
1.3	Material for Electrical & C&I Work	0.55
1.4	Material for Structural Work	0.75
1.5	Subtotal Supply	10.83
1.4	Overheads and Profit 20% on items of 1.5	2.17
	Total Supplies	**12.99**
2	**Services**	
2.1	Civil Works	4.78
2.2	Mechanical Works	0.49
2.3	Electrical & C&I works	0.04
2.4	Structural Works	0.31
2.5	Engineering	0.49
2.6	Subtotal Services	6.10
2.7	Overhead and Profit @20% on item 2.6	1.22
2.8	**Total Services**	7.33
3	**Total Supply and Services**	20.32

Sl. No	Description	Amount (Rs Crores)
4	**Service Tax (12.36%" item 2.8)**	0.91
5	**Total Cost**	**21.22**

LE has reviewed the details furnished by Project Company and found the cost increase for CHP is in order.

➢ Removal of Service Building Cost from BOP Contractor's scope (Rs 36.88 Crores)

Project Company informed that originally the service building cost of Rs.36.88 crores was included in the scope of Punj Lloyd Ltd (PLL) who has been awarded the BOP contract. During the course of implementation, this service building work was deleted from the scope of PLL and awarded to GVK Projects & Technical Services Ltd. at a total cost of Rs. 19 crores.

LE observes that the justification and supporting information for this extra claim of PLL is in order.

2.5 Non- EPC Cost (Rs 347 Crores)

LE observed that the cost estimate for Non-EPC works has increased from Rs 135.00 Crores to Rs 347 Crores i.e. by Rs 212 Crores.
The company has awarded non-EPC works to GPTSL for Rs. 135 crore. The price under the work order is fixed and inclusive of taxes & duties except for effects from change in law. The company has revised the estimate for Non-EPC package work from 135 crore to 347 crore i.e. increase of about 212 crore, which is mainly on account of

- Increase in site grading work,
- Increase in Ash pond bund area
- Increase in cost of township,
- Change in scope of railway siding work and price revision,
- Inclusion of service building in Non-EPC work deleted from the scope of M/s Punj Lloyd Ltd etc.
- Project Company has indicated that they need to make payment of Rs. 17.80 crore to Railways towards i) Codal charges of about Rs. 5.80 crore, ii) Land license fee of Rs. 2.00 crore for 6434 m^2 of railway land required for facilitating 'Y' connection from the main line at Khadur Sahib railway station and iii) Railway Maintenance Deposit of Rs. 10.00 crore (recurring cost towards maintenance and staff deployment for a period of 10 years) as per terms of the railways applicable for siding work.

The net increase in Non EPC works has been tabulated below:

S. No.	Particulars	Original estimates	Revised estimates	Increase

1	Site Grading	20	64	44
2	Ash pond (10 m high bund)	29	44	15
3	Residential colony	38	64	26
4	Railway siding of power plant	25	121	96
5	Service building (excluded from scope of BoP contractor and awarded to GTPSL)	-	19	19
6	Compound wall, pump house, fire station etc	11	11	-
7	Workshop, storage shed, security office etc	9	9	-
8	Administration building	1	1	-
9	Green belt	2	2	-
10	Plant Enabling work and other Miscellaneous work	-	12	12
	Total Non EPC Cost	135	347	212

The detailed explanation of same is given below:

a) <u>Increase in site grading area and additional filling due to vibro compaction (Rs. 44 Cr)</u>

As per DPR, site is fairly flat with elevations ranging from 217 m MSL to 224 m MSL. The power plant area is in the flood plain of the river and is surrounded by flood protection embankment constructed by the Government to protect the villages in the eastern side of the plant area and highway embankment on its southern side. The plot plan indicates that the finish floor level of the TG building at 219.650 m, which is well below the high flood level (222.20 m) as given in the DPR.

Project Company informed that additional site grading and filling work was carried out in the plant area, colony area, approach road formations, main entrance, part of flood protection bund, railway siding embankment and part of green belt area, along the periphery of the boundary wall etc.

As informed by Project Company, due to adoption of ground improvement technique (soil compaction), there was a settlement of soil by about 1.2 m to 1.75 m in certain areas. This settlement had to be backfilled to the required level of 219.5 m. The company has indicated that average filling of about 2.25 m was carried out on 617 acres of land. As a result, site grading quantity increased from 2 million cum to 5.8 million cum

LE observed that the site grading work within plant boundary is excluded from the BOP Contract scope of work. Project Company informed that site grading work and additional filling work for entire project area is in the scope of Non-EPC Contractor.

LE observed that the original site grading quantity was 2 million cum and the rate was Rs 130/cum in the Non-EPC Contract with M/s GVK Projects and Technical Services Ltd.

As per scope change order with M/s GVK Projects and Technical Services Ltd, LE observed that the site grading quantity has been increased from 2.0 million cum to 4.5 million cum then to 5.8 million cum i.e. by 3.8 million cum.

LE observed that the rate of Rs 130/ cum has not been revised with revised volume and the overall cost is found to be generally in order.

b) Increase in bund area (Rs 15 Crores)

Initially the project envisaged construction of ash pond bund of 10 m in height and 56 m in bottom width. The ash pond bund height has been kept same as 10 m and the bottom width has been changed from 56 m to 64m i.e. 8 m increase in bottom width. Project Company informed that bund base width has increased due to poor bearing capacity of the existing soil strata of bund area.

The pond area is also increased due to return water pond and settling ponds. Some part of the bund area was removed and refilled due to poor soil condition. Vibro compaction was carried out in certain critical areas of the bund which resulted in refilling with additional quantity of soil.

Project Company also informed that the LDPE lining area was increased due to increase in bed area and side slopes, lining in still pond and return water pond.

The detail break up of original and revised quantity of Bund work and Ash Pond LDPE Lining is indicated in Table 2.8 below:

Table 2.8
Break up of original and revised quantity of Bund work and Ash Pond LDPE Lining

Description	**Unit**		**Original**		**Revised**	
Ash Pond		Rate (Rs/ unit)	Qty in cum	Amount in Rs Crores	Qty in cum	Amount in Rs Crores
a) Bund work	cum	130.0	1,200,000	15.60	1,889,000	24.56
b) Ash Pond LDPE Lining	sqrm	350.0	630,000	22.05	868,500	30.40
c) Rock Toe	cum	2,500.0	11,700	2.93	11,700	2.93
Total				**40.58**		**57.89**
Cost with Discount				**29**		**44.0**

LE found that the cost increase works out to be Rs 15 Crores after discount. ***LE is of the view that the increased cost of Rs 15 Crores is found to be generally in order, based on the information and explanation provided by the Project Company.***

c) Increase in Railway Siding and Development of Khadur Sahib Railway Station (96 crores)

A railway siding is being constructed from nearest Khadur Sahib Railway station (about 3.7 km) to bring coal directly into the plant premises.

The Project Company has informed that the contractor / sub-contractor were unable to commence the railway siding work due to delay in receipt of possession of land required for lead track and approvals from Railways. Meanwhile, there has been increase in construction cost which necessitated revision of item rates agreed in the work order with GPTSL. Further, due to non-availability of suitable grade material in Punjab, blanketing material was sourced from nearby states viz. Jammu & Kashmir and Himachal Pradesh

In addition to above, there has been revision in the scope of railway siding which inter-alia includes construction of Lead line (5.4 km), in-plant rail facilities (9 km) and conversion of Khadur Sahib Railway station into block / crossing station

➢ Lead line Railway Siding Cost with 5.40 km lead line (Rs 30 Crores)

Project Company informed that the length of lead line of 5.4 KM includes 3.75 KM outside the plant boundary and balance 1.65 KM inside the plant boundary up to railway Weigh Bridge. Project Company also informed that the lead line is coming in about 10 meter deep cutting near the plant boundary. The gradient of 1 in 150 approved by Railways increased the cutting area and length of lead line. Due to uniform sandy strata, RCC retaining wall was constructed at both sides of rail track. The farmers who had parted with the land demanded additional structures in lead line like service road, culverts, siphons, drain pipes etc.

The detailed BOQ and rates in original Non-EPC Contract and the revised BOQ and rates are indicated Annexure-I of this Report.

S. No.	Particulars	Original Quantity	Revised Quantity
1	Laying of Broad Gauge track (km)	3.52	5.40
2	Earthwork embankment (cum)	6,900	57,500
3	Mechanical compaction of embankment (cum)	9,900	1,12,500
4	Earthwork in cutting (cum)	86,000	5,39,200
5	Moorum blanketing (cum)	3,000	55,000

6	Density of sleeper (per km)	1540	1660
7	Retaining wall (Length x Height)	Not envisaged	960m * 10m

The details of estimated quantities and rates are given at Annexure and broad break-up of cost is as under:

S. No.	Particulars	Original Cost	Revised Cost	Increase
1	Blanketing material	0.2	9.6	9.4
2	Earthwork	1.0	8.3	7.3
3	Laying of track of about 5.4 km	3.0	11.4	8.4
4	Retaining wall	-	7.1	7.1
5	Provision of road diversion	1.1	1.7	0.6
6	Other associated work	1.0	3.7	2.7
	Total cost of lead line (Including discount @ 15.625%)	**5.4**	**35.4**	**30.0**

LE observed that the cost has increased due to increase in quantity and rates of these items and construction of additional items like retaining wall, road over bridge and drains. However, In-motion rail Weigh Bridge which is excluded from scope is included in BOP Contractor's scope of work.
LE is of the view that the cost increase of Rs 30 Crores is found to be justifiable and generally in order.

- <u>Increase in plant yard Railway Siding Cost with 9.02 km inside the plant (Rs 27 Crores)</u>

Initially it was proposed to lay seven lines (as against five lines envisaged in DPR) in the plant yard to handle three rakes per day. The company has entered into Coal Transportation Agreement (CTA) with East Central Railways on December 11, 2008. In terms of CTA, railway may supply maximum of five rakes per day and such five rakes may be supplied four times in a ten day period. Thus, company is required to complete construction of Private sidings to handle maximum of five rakes in a day at loading and unloading points. Accordingly, the Railways have increased the number of lines in plant area from five to nine lines of various lengths aggregating to 9.02 km.

Project Company informed that Railways had increased the no. of lines required in plant siding yard from 5 to 9 during approval of DPR and Engineering Scale Plan (ESP). The cost of material for construction of Railway siding has also increased due to delay in approval of DPR and ESP from Railway Authority. Due to poor soil condition, Railways proposed 1 meter thick blanketing between formation level & ballast which was purchased at higher cost from Jammu & Kashmir @ Rs 1100 per cum to Rs 1500 per cum.

The detailed BOQ and rates in original Non-EPC Contract and the revised BOQ and rates are indicated **Annexure-II** of this Report.

LE observed that the cost has increased due to increase in quantity and rates of Railway siding work items.
LE has reviewed the documents furnished by Project Company and is of the view that the cost increase of Rs 27 Crores is in order.

➢ Increase in cost due to development of Khadur Sahib Railway Station (Rs 39 Crores)

Project Company informed that the Khadur Sahib station has only a main line and no loops were available for the purpose of crossing / stabling of rakes. The Northern Railways, while approving the DPR, stipulated conversion of the Khadur Sahib station into a three lines block station with simultaneous reception & dispatch facilities and construction of rail level platforms. In terms of the Railways approval dated May 5, 2011, entire capital cost of the new crossing station including staff quarters, loop lines, signalling, electrification and other infrastructure shall be borne by the company.

The company has indicated that work in Railway premises area inter-alia includes

- ✓ 51 staff quarters,
- ✓ 2 loop lines,
- ✓ level crossings,
- ✓ station building,
- ✓ overhead water tank,
- ✓ RPF room, lock up room,
- ✓ Pump house,
- ✓ 500 m long Platforms,
- ✓ S&T systems,
- ✓ Electrical substation etc.
- ✓ Extension of 5 existing bridges
- ✓ Colony road
- ✓ Compound wall

The cost of development of Khadur Sahib Railway Station which was not envisaged in original construction plan has been estimated at Rs. 38.8 crore by the company. The details of estimated quantities and rates is as under:

S. No.	Description	Amount
1	Blanketing material	3.2
2	Laying of track of about 3.8 km	8.7
3	Supply and laying of Signalling and Telecommunication system	11.2
4	Station building & quarters	1.9
5	Railway Colony	9.6
6	Other miscellaneous work	4.4
	Total	**39.0**

LE has reviewed the documents provided by Project Company and is of the view that the cost of Khadur Sahib Railway Station development work is found to be generally in order.

- Codal charges - Rs 5.80 Crores

  Project Company informed that the codal charges are based on estimated costs as approved by Railways. ***LE observed that codal charge of Rs 5.80 Crores is in line with demand note raised by Northern Railways.***

- Land license fee - Rs. 2.00 crores

  Project Company informed that 6434 sqm of railway land needs to be taken on land licensing for facilitating 'Y' connection from the main line at Khadur Sahib railway station. The proposed fee is for this 'Y' connection.
  LE observed that land license fee of Rs 2.00 Crores is in line with Railway guidelines.

- Railway Maintenance Deposit - Rs.10.00 Crores
  Project Company informed that Railway Maintenance fee shall be deposited at the time of commissioning of the railway siding.

d) Increase in Township (Colony Cost, Electrical Cost, Water Supply etc.) - Rs 26 Crores

The power plant is located near Goindwal Sahib Village, which is about 20 km away from Tarn Taran main town. The residential and social infrastructure in the vicinity of the plant is not adequate for the power plant employees. Hence, the company proposed to develop a residential colony which is spread over area of 1.85 lakh sq. ft as part of the project. Accordingly, the GPTSL was awarded colony work which inter-alia includes construction of GM bunglows (6 nos.), field hostel (G+1), 177 residential units (G+2), hospital, nursery school, internal roads, sewage treatment plant, electrical supply, street lighting, recreation club, guest house, etc.

The company has also approved revision of unit rate for township work due to i) increase in foundation cost as company has adopted (G+1) structural configuration [against (G+2) proposed earlier] on account of poor soil condition, ii) increase in steel & cement price and iii) increase in cost of sand & Hard Broken Granite material (used for foundation) as Punjab Government has imposed ban on local quarrying and iv) overall increase in construction cost in Punjab.
Also the quantities of steel & cement estimated for township has increased as company has adopted (G+1) structural configuration [against (G+2) proposed earlier] due to poor soil conditions and project area falling under high seismic zone (Zone-IV)

The detailed BOQ and rates in original Non-EPC Contract and the revised rates are indicated Table 2.9 below:

Table 2.9
Original and Revised BOQ and rates

Sl No	Description	Unit	Original Qty	Original Rate (Rs/ Unit)	Revised Rate (Rs/ Unit)	Difference in Rs Crores
1	Colony-183 unit (G+2 Construction)	Sq.mt	17193.3	17000	27350	17.80
2	Electrical works in colony Buildings					-
a	Electrical works in colony Buildings	Nos	183	120000	212000	1.68
b	Colony electrical supply, distribution system	L		2500000	31250000	2.88
c	6.6 kv/415v Transformer	Nos	2	200000	1120000	0.18
d	Building for incoming and outgoing feed panels	Sq.mt	139.41	12000	38450	0.37
3	Water supply & Sewage system for colony supporting 100 KL capacity	KL	100	50000	308750	2.59

Sl No	Description	Unit	Original Qty	Original Rate (Rs/ Unit)	Revised Rate (Rs/ Unit)	Difference in Rs Crores
4	Colony roads 7 mt width	Sq.mt	56000	1500	2075	3.22
5	Colony covered parking area	Sq.mt	1500	1500	6675	0.78
6	Street Lighting	Nos	60	85000	315000	1.38
7	Discount @					15.625%
8	**Total**					**26.05**

LE is of the view that based on the information provided by Project Company, the increase in Colony Cost, Electrical cost, Water Supply cost is found to be generally in order.

e) Plant Enabling Works (Rs 12 Crores)

The Plant enabling works includes initial roads to facilitate the movement of the site grading vehicles as the site is a sandy and very loose terrain, clearing of vegetation i.e. trees, shrubs stripping of grass, removal of field bunds, filling of existing wells and field drains, digging of trap drain along the western boundary of plant about 5 km to divert the surface run-off from the existing villages of Hanswala, Hotian and Pindian.

The detailed breakup of Plant enabling works is indicated in Table 2.10 below:

Cost break up for Plant enabling works

Sl No	Description of Work	Unit	Qty	Rate (Rs/ Unit)	Amount in Rs Crores
1	**Sub Base-1-**Providing and laying WBM in layers of 100 mm thickness HBG metal, including spreading of metal (40 mm to 63 mm) loose metal, hand packing, filling the voids with spalls chips and stone dust/gravel and rolling the each layer with 10 tons power roller with similtaneous watering completed as directed by engineer-in-charge.	M2	89597	260	2.32

Sl No	Description of Work	Unit	Qty	Rate (Rs/ Unit)	Amount in Rs Crores
2	**Sub Base-2-**Providing and laying WBM in layers of 100 mm thickness HBG metal, including spreading of metal (40 mm to 63 mm) loose metal, hand packing, filling the voids with spalls chips and stone dust/gravel and rolling the each layer with 10 tons power roller with similtaneous watering completed as directed by engineer-in-charge.	M2	89597	260	2.32
3	**Final Base-1-**Providing and laying WBM in layers of 75 mm thickness HBG metal, including spreading of metal (53 mm to 22.4 mm) loose metal, hand packing, filling the voids with spalls chips and stone dust/gravel and rolling the each layer with 10 tons power roller with similtaneous watering completed as directed by engineer-in-charge.	M2	89597	236	2.11
4	**Final Base-2-**Providing and laying WBM in layers of 75 mm thickness HBG metal, including spreading of metal (53 mm to 22.4 mm) loose metal, hand packing, filling the voids with spalls chips and stone dust/gravel and rolling the each layer with 10 tons power roller with similtaneous watering completed as directed by engineer-in-charge.	M2	89597	240	2.15
	Discount				**15.625%**
	Sub Total				**7.52**
5	Storm Water Discharge Pipe lIne				**2.50**
6	Vibro Compaction in colony Area				**2.50**
	Total				**12.53**

LE is of the view that based on the information provided by the Project Company, the cost of plant enabling works is found to be generally in order.

f) Additional work of constructing service buildings (Rs19.00 Crores)

Project Company informed that originally the service building cost of Rs.36.88 crores was included in the scope of Punj Lloyd Ltd (PLL) who has been awarded the BOP contract. During the course of implementation, this service building work was deleted from the scope of PLL and awarded to GVK Projects & Technical Services Ltd.

As per scope change order awarded to GVK Projects & Technical Services Ltd, LE observed that the size of the service building is 25mX15.17mX22.27m with 5 floors.

LE observed that the Rs 19.00 Crores is in line with contract value. LE is of the view that the cost for constructing service building of 25mX15.17mX22.27m with 5 floors is found to be realistic and generally in order.

LE observed that the total Non-EPC revised cost works out to be Rs 347 Crores.

2.6 Spares (Rs 31.05 Crores)

LE observed that the cost estimate for Spares has increased from Rs 39.65 Crores to Rs 70.7 Crores i.e. by Rs 31.05 Crores. As per documents provided by the Project Company, LE observed that the total cost of supply of spares excluding transportation cost is Rs 54.43 Crores. Project Company informed that the balance amount shall be used for BOP spares.

BTG spares are identified after discussing with BHEL under A,B and C category and accordingly purchase order has been placed on BHEL. Project Company has provided Purchase order for supply of BTG spares. For BoP spares, the O & M Team has identified list of spares and is in the process of inviting quotes and finalizing the contract. The Company expects the total value of BoP spares to be procured will be within the balance amount available of Rs.16 Cr.

LE opines that as per CERC norms regarding initial spares, the spares should be 2.5% of the Project Cost which works out to be around 100 crores. Based on the same, LE found that the revised cost estimate of spares is generally in order.

2.7 Design and Consultancy Fees (Rs 13.70 Crores)

LE observed that the cost estimate for Design and Consultancy fees has been increased from Rs 7.5 Crores to Rs 13.70 Crores i.e. by Rs 6.2 Crores. Project Company informed that the increase in cost is due to professional charges payable to the Owner's Engineer.

Brief scope of work is discussed below:

- Review of Design and Engineering of EPC Contractors work
- Quality Assurance
- Project Monitoring Services
- Review of O & M Manuals

LE observed that the revised cost is in line with the Contracts Awarded to TCE for Design and Consultancy works.

2.8 Construction Power (Rs 32 Crores)

LE observed that the cost estimate for Construction Power has increased from Rs 12.0 Crores to Rs 32.0 Crores i.e. by Rs 20.0 Crores.

Project Company informed that PSPCL is charging the tariff on temporary category basis against permanent category thereby increasing the Project cost. The Company has written letters to PSPCL on the said subject but they have not accepted Project Company's request.

Further, the energy consumption has increased on account of i) higher dewatering to control water seepages as project site has high ground water table, ii) increased piling length, iii) additional scope work in railway siding, coal handling, ash handling area and extended project schedule.

The original and revised construction power cost is indicated in Table 2.11 below:

Table 2.11
Break up of Original and revised construction power cost

SL. No	Description	Original Estimate		Revised Estimate		Differential cost (Rs Crores)
		Quantity	Amount (Rs Crores)	Quantity	Amount (Rs Crores)	
1	Receiving substation & distribution network (66/11/0.415 kV)		3	66/11/0.415kV	4.90	1.9
2	Energy Cost for Non EPC	13 MkWh	9	17.73 MkWh	18.63	9.6
3	Estimated Energy Cost for balance period	0	0	4.8 MkWh	6.51	6.5
4	Startup Energy Cost to PSEB	0.36MkWh	0.10	1.80 MkWh	2.095	2.0
Total			12.1		32.0	**20.0**

LE found that as per clause no.2.1.11, the BTG package contractor (BHEL) will pay the tariff applicable for bulk supply for HT consumer i.e. 409 paise per Kwh of energy rate. Any increase in the tariff rates beyond 10% of the PSEB tariff rate shall be reimbursed by the Project Company.
LE observed that construction power shall be chargeable basis on prevailing tariff under permanent category as indicated in the Appedix A1 i.e. SCOPE, TERMINAL POINTS AND EXCLUSIONS.

Based on the information given in the Table 2.11 above, LE found that the temporary tariff for Non- EPC energy cost works out to be Rs 10.50 Unit, Estimate of energy cost for balance period works out to be Rs 13.58 Unit and Start up power works out to be Rs 11.66/ Unit.
Project Company informed that they have not yet received permanent connection for construction power and they have to bear the additional cost on account of temporary power tariff prevailing in Punjab.

LE observes that the increase in cost of construction power is chargeable to the Project.

2.9 R & R Cost

LE observed that R & R cost has not been envisaged in the revised cost estimate.

2.10 Start-Up fuel cost (Rs 78.66 Crores)

LE observed that the cost estimate for Start-up fuel has been increased from Rs 15.0 Crores to Rs 78.66 Crores i.e. by Rs 63.66 Crores.

The Company has furnished the details of start-up fuel costs and infirm power recovery as estimated by their O & M team, the details of which are given as follows:

Table 2.12

	LDO	HFO	Coal	Carpet Coal - 1st layer	Consumption Value	Anticipated Power (Mus)	Infirm Power Recovery	Net Startup Fuel Cost	PLF
Unit	KL	MT	MT	MT					
Rate	Rs. 60,000	Rs. 55,000	Rs. 6,250	Rs.560/-			Rs. 3818/-		
Consumption (Quantity)									
Upto Oil Synchronisation	1860	1000			16.66	Nil		16.66	
Carpet Coal				25000	1.40			1.40	
Synchronisation with Coal	500	1000	10000		14.75	14.00	6.16	8.59	21%
Flame Stabilisation & full load	200	1000	15000		16.08	35.07	12.43	3.65	65%
Trial Operations	40	200	40000		26.34	67.55	16.61	9.73	85%
TOTAL	**2600**	**3200**	**65000**	**25000**	**75.23**	**116.62**	**35.20**	**40.03**	
Consumption Value - 1st Unit	**15.60**	**17.60**	**40.63**	**1.40**	**75.23**		**35.20**	**40.03**	
Consumption Value - 2nd Unit	**15.60**	**17.60**	**40.63**	**-**	**73.83**		**35.20**	**38.63**	
Total - Startup Fuel	**31.20**	**35.20**	**81.25**	**1.40**	**149.05**	**0.00**	**70.39**	**78.66**	

The start up fuel costs includes the cost of LDO / HFO consumption during steam blowing steam dumping, safety valves checking, rolling, electrical testing and synchronization and cost of carpet coal. The revised start up fuel cost is estimated at Rs. Cr taking blended coal (imported coal blended with Indian coal) for trial runs, which is approximately Rs.6250/- per ton as against Rs.3818/- of estimated cost of coal from Tokisud mine.

LE has examined the consumption of primary and secondary fuel trial runs basis during start up period and observed that the estimates are on conservative basis and may be required.

LE observed that as per clause 1.2.3.2.1 of PPA, the fuel charges linked to coal cost based on the quantity and quality of coal delivered at project site are not to exceed the cost as prevailing in the PSEB'S existing Pachhawara Captive coal mine.

Project Company informed that the fuel cost recovery through infirm power is low which is due to following reasons:

1) During coal firing and stabilisation phase of unit operations, the number of start ups is high. The cost of fuel upto synchronisation is not recoverable.
2) Poor Heat rate for the following reasons
    - Part load operation as pulverisers has to be commissioned and stabilised one after the other.
    - To attain water and steam purity as per OEM recommendations, boiler blow down is to be carried out continuously. Any fluctuation in load also results in boiler water chemistry deviations, which necessitates additional blow down.
    - The various tests during commissioning require part load operation which adversely affects heat rate.

Project Company informed that the unit heat rate during coal firing and stabilisation phase is expected to be in the range of 2700 to 2900 K cal/Kwhr.

LE observed that clause no. 1.2.9 of PPA stipulates recovery of the primary and secondary fuel charges for infirm power. The PPA does not specify any method for calculation of primary and secondary fuel charge. However, clause no 1.2.3.1 of PPA specifies that the energy charges shall be calculated and paid as approved by PSERC as per CERC (terms & Conditions of Tariff) Regulations. LE observed that CERC specifies method of calculation of energy charge & secondary fuel charge for commercial operation.

For commercial operation, energy charge is based on Station Heat Rate expected for normal operation of the plant. The Station Heat Rate during commissioning of coal pulverisers is likely to be higher than station heat rate during normal commercial operation.

2.11 Construction Insurance

LE observed that the Construction Insurance cost has not increased.

2.12 Other Overheads including pre-operative expenses (Rs 134 Crore)

LE observed that the cost estimate for Overheads including project related pre-operative expenses has increased from original estimated cost of Rs 55.0 Crores to Rs 134 Crores i.e. by Rs 79 Crores.

Project Company informed that the increase in cost is due to time overrun by 14 months of both Unit 1 and Unit 2 from respective scheduled COD as per financing documents, increase in salaries, wages, travelling expenses, security charges ROC Fees etc.

The breakup of original and revised project related pre-operative expense and overhead charges along with reasons for cost increase as informed by Project Company is indicated in Table 2.13 below:

Table 2.13
Breakup of original and revised pre-operative expense and overhead charges

Sl. No.	Particulars	Original Cost (Rs Crores)	Revised Cost (Rs Crores)	Reason for Cost Overrun
1.	Salaries & Allowances:		58.59	This is incurred towards salaries and allowances for the time overrun of 14 months paid to professionals employed at site which includes O&M staff who have been recruited on time
2.	Establishment Expenses		28.32	As Detailed below
3.	Travelling & Conveyance		13.93	The major expenditure incurred on monthly review meetings, visiting BHEL units, follow up with Railways, liaison with government departments, etc.
4.	Misc Expenses incl. site expenses		9.12	Guest house maintenance expenses, ROC Fee
5.	O & M Expenses till COD		4.00	Expenses on chemicals and consumables for commissioning and routine maintenance not met by contractor, as stated by

Sl. No.	Particulars	Original Cost (Rs	Revised Cost (Rs	Reason for Cost Overrun
				project company
6.	Deposit with PSPCL		2.11	
7.	Margin Money against BG		2.48	
8.	Misc Fixed Assets, Fire Tenders, Dozers, etc		20.92	This is incurred towards miscellaneous purchase, fire tenders, dozers, locos, furnishing of quarters in colony and vehicles etc.
9.	**TOTAL**		**139.47**	
10.	Less: Interest / Dividends / Other Income (net of taxes)		10.09	
11.	NET PREOPERATIVE EXPENSES	**50**	**129.38**	
12.	O&M Mobilization Advance	**5**	**5**	
	Total	**55**	**134.38**	

The detail break up of Establishment Expenses is indicated in Table 2.14 below:

Table 2.14
Break up of Establishment Expenses

Sl.No.	Particulars	Amount in Rs, Crores	Reason for Cost Overrun
1	Rent	6.10	Guest houses for staff at Goindwal Sahib for last four years, renting of offices at Delhi and Hyderabad, etc
2	Rental Deposits	0.61	Rental deposits for the guest houses rented
3	Other Advances	0.01	
4	Repairs & Maint - Rented Buildings	1.69	Furnishing of rented buildings, maintenance. Etc
5	Vehicles / other assets Maintenance	1.90	Vehicles used at site for entire project team, including airport pickups

Sl.No.	Particulars	Amount in Rs, Crores	Reason for Cost Overrun
6	Legal & Professional Charges	5.71	
7	Security Charges	4.37	Manning entire project area of 1040 acres
8	Advertisement Expenses	0.86	
9	Communication Costs	1.09	
10	Electricity Charges	4.50	
11	Printing & Stationery	0.57	
12	Rates & Taxes	0.87	
13	Audit Fee	0.04	
	Total	**28.32**	

LE is of the view that the project related preliminary and preoperative expense should be within a range of 3% to 5% of the project cost.

LE found the revised project related preliminary and preoperative expenses is 3.23% of Project Cost which is in order.

2.13 Financing Cost (Rs 24.5 Crores)

LE observed that the Financing cost has been decreased from Rs 37.13 Crores to Rs 24.5 Crores i.e. by Rs 12.63 Crores.
As on date, the Company has incurred an amount of Rs.16.03 Cr towards finance charges consisting of syndication fee, upfront fee, appraisal fee, underwriting fee, etc. The balance is the provision provided in the revised project cost towards raising of additional debt to meet the cost overrun. Hence the provision of Rs.24.54 Cr by the Company taking revised project cost into account.

Lenders may like to review the same.

2.14 IDC (Rs 368.66 Crores increase)

LE observed that the cost estimate for IDC has been increased from Rs 387.44 Crores to Rs 756.1 Crores i.e. by Rs 368.66 Crores.

Project Company informed that the increase in IDC is due to time overrun coupled with increase in interest rate from 11.25% at the time of financial closure to 13.75% over last three years. The present interest rate reset is 13.25% w.e.f. 01.02.2013. Lenders may like to review this.

2.15 Contingency

LE observed that the Contingency cost originally provided was Rs.92.97 Crore.

However, the company submits that additional claims to the extent of Rs.25 Crore are expected from M/s Punj Lloyd Ltd towards following items:

- Ultra Filtration System
- Drain pipe laying
- Dewatering expenses for wagon tippler
- Escalation in diesel prices
- Additional cost due to ban on sand aggregate mining
- Emergency Ground Hopper
- Increase in WCT from 4% to 5% and now 6% (change in law)
- Other claims

The company further claims that the actual claims will be allowed after due negotiations with M/s Punj Lloyd Ltd.

Also Project Company informed that, Railways have stipulated construction of Road Over Bridge at LC-32 (Level Crossing) crossing while approving the SIP drawings, which will cost around Rs.28 Cr as per estimates approved by Railways. Railways are insisting for construction of Road over Bridge (ROB) at existing level crossing on the Beas-Goindwal Sahib-Tarn Taran section of the main line. However, the company has requested railways authorities to consider continuation of the level crossing instead of constructing a ROB. The matter is pending with railways

Also Project Company intends to keep Rs. 9 crores meeting for any unforeseen cost increase as contingency in the revised project cost estimate.

Hence, the contingency of Rs.62 Crore (Rs.25 Crore + Rs.28 Crore+ Rs. 9 crores) is included by the company in the revised project cost.

2.16 Margin Money for Working Capital (80 crores)

LE observed that the cost estimate for Margin Money for working Capital has been increased from Rs 58.1 Crores to Rs 80 Crores i.e. by Rs 21.9 Crores.

Project Company has informed that the increase in working capital is mainly on account of coal price increase over a period of last 3 years leading to higher cost of inventory and receivables. Lenders may like to review the same.

Lenders may like to review the same.

3 CONCLUSION ON COST OVERRUN

LE has reviewed the revised cost against the appraised costs, the major cost increase is in a) BOP area on account of vibro compaction due to poor soil condition, inclusion of HCSD system as per MoEF guidelines, modification in CHP area for increased storage area and coal feeding arrangement, b) Non-EPC area on account of additional site grading, vibro compaction in colony area, Railway Siding works as stipulated by Railways, c) BTG Spares, d) IDC on account of time overrun by 14 months and increase in rate of interest, e) Pre-operative Expenses on account of time overrun, f) construction power and consultancy charges. As observed in the Report, the reasons/justifications given by GPGSL for increase in the project cost have been analysed by LIE and are found to be generally in order but more professional soil investigation in the initial development stage of the project could possibly have avoided the cost increase to a considerable extent by the way of inclusion of these items in the appraised cost itself.

4 TIME OVERRUN

As far as the issue of time overrun of 2x270 MW Thermal Power Project at Goindwal Sahib is concerned, the major and important reasons for delay in project progress were indicated by the LIE in his quarterly Construction Monitoring Reports. At the same time, the Construction Monitoring Report highlighted and emphasized on specific action points aimed at recovery of the lost progress of the Project. It is seen that the initial delay caused to the project construction was largely on account of the soil conditions and parameters that were discovered after the commencement of construction. For the construction of this report, details of all those issues have been obtained from the Project Company and placed in the proper perspective.

As per the BTG Package Contract with BHEL, the COD of the first unit is envisaged as 33 months (18.07.2012) from the Zero date (19.10.2009) and COD for unit – II is after 36 months i.e. 18.10.2012. As per the Facility Agreement with Lenders, the Project COD date has been considered as 01.02.2013.

As per Progress Report of August 2013 provided by the Project Company, the overall project progress as revealed from the 'S' curves is 89.40% as against 100.0% planned till August 2013. The procurement progress of is 98.72 % against planned 100% till August 2013. The construction progress is 93.75% in BOP areas and 84.5 % in BTG area till August 2013. The 'S' Curves are prepared on the basis of internally revised COD of August 2013.

As per the present physical progress at site and the rate of progress, estimated date of COD for Unit-1 will be extended to 31-12-2013. Reasons for this slow progress and delay in achieving COD at site after May 2013 are as follows:

BOP Issues:

BOP contractor work progress is very slow on Coal Handling System and Ash Handling system. BOP Contractor delayed in material supply of ash handling and coal handling results in delay in these two systems. Project Company is yet to get 5% to 8% of the material for these systems. Cable laying is going on in coal handling and ash handling areas. During construction monitoring visits LE had advised to speed up the execution of Coal Handling and Ash Handling Packages. Project Company is strongly advised to ensure that all the material for aforesaid packages is available at site. The Project Company is advised to closely monitor and follow up with Coal Handling and Ash Handling Packages to ensure that the work is completed by November 2013.

Raw water intake system construction was delayed as PLL sub-contractor could not execute the work on time due to high flood levels in the river Beas and abnormal seepage. These issues delayed the construction of intake pump house. Cooling towers work is also delayed. HT & LT switch-gear works also delayed on account of late supplies as well as delay in cable laying by BOP contractor. Cable laying for various BHEL equipment is also in progress. UAT transformer foundation is delayed on account of CW pipeline work.

ETP supplies are yet to be completed and the work is in progress.

BTG issues:

As informed by the Project Company and observed by LE, BTG Contractor work progress has been very slow at Mills, Fans and insulation work. Equipment supplies from BHEL units Trichy, Hardwar, Ranipet are delayed beyond 1 year. Further, BHEL equipment erection is also going very slow. In some areas especially in TG area, the BOP contractor handed-over the TG foundations 8 months after the scheduled date and even though some part of it is retrieved. The BTG contractor could not retrieve the entire delay. The problems in fuel oil system commissioning for HFO unloading contributed to the delay commissioning activities. HFO could not be unloaded for 2 months as HFO was not flowing due to low temperature. Further, it took some time to attain specified para-metres on DM water quality that also delayed the commissioning activities about 2 months.

Captive coal mine:

As captive coal mine is yet to commence the production, coal availability is also an issue to achieve the COD. Even-though, BHEL agreed to burn the imported coal in the Boiler, they are imposing a condition that his imported coal firing can be taken-up only after the performance tests are completed. Because of this, GVK is trying to get tapering coal linkage for Indigenous coal from the Ministry of Coal. Ministry of Power has recommended this Project to Ministry of Coal to provide 50,000 MT of carpet coal and 1,00,000 MT of start-up coal vide MoP letter No.FU-11/2010-IPC (Vol.III), dated 24-07-2013. Project Company is pursuing with the Ministry of Coal on this recommendation from Ministry of Power. Copy of the letter is enclosed as Annexure – 2.

On arranging alternate coal, GVK has explored lot of options to import the coal. But PSPCL is not agreeing to reimburse the coal cost by stating that wherever cost will be as per PPA which stipulates that coal cost will be limited to PSPCL existing Pachhwara captive coal mine coal cost. Based on this, if Project Company import the coal, the additional cost burden is huge and the explode option of imported coal is not viable.

Therefore, the company has been trying for the tapering coal linkage for indigenous coal from Ministry of Coal or to offer the plant to PSPCL on Wet Lease basis. Once tapering coal linkage coal is provided by Ministry of Coal & wet lease is accepted by PSPCL, The project company will take up the commissioning activities of Unit-1 & Unit-2.

LE is of the view that as per present progress, Unit-1 & 2 will be ready for commissioning by 31st December 2013 if the coal is made available. This will also be contingent upon arrangement of coal supply.

LE had earlier advised the Project Company to prepare a progress recovery plan for the project in order to recover the progress to the extent possible at this advanced stage of project construction. In this regard, LIE suggested an action plan to recover lost progress. The points of that action plan as indicated in the last CMR are indicated below:

- Expedite Commissioning activities of Unit-1.
- Expedite Turbo Generator and Boiler erection activities for unit-2

- Project Company is advised to pay special attention to Railway Siding work outside plant boundary and indicate any issues in its timely completion.
- Project Company is required to keep track of progress of transmission lines work by PSTCL to ensure timely completion of evacuation facility.
- Examine the possibility of augmenting manpower strength of BoP contractor/subcontractor further as also augment its own manpower strength to accelerate project progress.
- Prepare a project progress recovery plan to mitigate the overall delay in project progress and submit the same to Lender/LE.
- Provide details of arrangements made/being made for coal required for operation of the plant before full capacity of coal mining commences at Tokisud.

The reasons for time overrun up to May 2013 of the project as stated by the Project Company and the corresponding comments on each reason made by LE are reiterated below:

Table 4. 2

Reasons for time overrun and LE's comments

Sl.No	Item	Reason for delay stated by project company	LE's Comments
1	Acquisition of land for railway siding & water pipeline	The Govt., of Punjab vide its Award dated 12.08.2008 did not acquire the land that is required for the water pipeline and railway siding. The award for the acquisition of the above said land for 37.98 acres was passed by the Govt., of Punjab on 15.07.2011. Although, the award was passed by Govt., of Punjab, the peaceful possession of the above said land was given by the Govt., of Punjab only by 09-02-2013. This led to a delay in the commencement of works pertaining to railway siding and also the laying of pipeline for water. This was initially envisaged to be completed by 30-03-2012.	The reasons advanced by the project company were, largely, beyond the control of the project company. However, since the delay in activities relating to award for acquisition and physical possession of land was visible and predictable, the project company needs to have planned for temporary road transportation of coal, obtained from planned alternative source in view of delay in commencement of mining operations at Tokisud. (Attached as Annexure-4 is a copy of the Land Possession Certificate; Annexure-5 is the award letter copy for 37.98 acres of land)
2	Poor soil conditions	Due to poor soil conditions at the site leading to liquefaction effect during the occurrence of earthquakes, the vibro compaction method was	The reasons of poor soil condition and the corrective action as furnished by the project company for delay

<table>
<tr><th>Sl.No</th><th>Item</th><th colspan="2">Reason for delay stated by project company</th><th>LE's Comments</th></tr>
<tr><td rowspan="6"></td><td rowspan="6"></td><td colspan="2">adopted to mitigate the same. The plant area is in seismic zone-4 and hence the need to do vibro compaction work. This was not originally envisaged and this vibro compaction work was awarded to M/s. PLL / GVKPTSL. This has led to a delay of 6 months in the handing over of various civil works by BOP contractor to the BTG contractor. The delays are as follows:</td><td rowspan="6">are tenable. However, LE observes that some of this delay could definitely have been reduced by accelerating the speed of soil reconditioning work (vibro compaction and backfilling). At the same time, the fact of failure on the part of the Soil Investigating Agency to identify correctly the soil characteristics cannot be overlooked.</td></tr>
<tr><td>1. Handing over of foundation of turbine of Unit-1</td><td>original schedule (28/02/11) Revised Schedule (20/08/11)</td></tr>
<tr><td>2. Handing over of foundation of turbine of Unit-2</td><td>original schedule (31/05/11) Revised Schedule (10/04/12)</td></tr>
<tr><td>3. Ash handling / Coal handling</td><td>original schedule (31/05/12) Revised Schedule (10/05/13)</td></tr>
<tr><td>4. Water systems</td><td>original schedule (31/05/12) Revised Schedule (10/05/13)</td></tr>
<tr><td colspan="2">The above delay in handing over of the civil works has contributed to the time overrun.
During vibro compaction, there was a settlement of soil from 1.2 meters to 1.75 meters. This settlement had to be backfilled to the required level 219.5 meters level which results in excess quantity.</td></tr>
</table>

Sl.No	Item	Reason for delay stated by project company	LE's Comments
3	Extra piling length	The poor soil conditions as explained above, has required extra piling length to be executed at the plant site. Originally it was envisaged for 3500 no. of piles at a depth of 15 - 17 meters. After the soil investigation, this had to be increased by 6719 no. of piles and a further depth of 20 - 26 no. of meters. This extra piling length was awarded as additional work to BOP Contractor. Copy of such contract is attached. This requires high quantum of back filling requirement as the existing soil is having very poor bearing capacity. This has led to an increase in time overrun from 6 months to 8 months.	The reasons stated for the delay are tenable in technical terms. The project company has provided copies of relevant contracts testifying to the reasons.
4	High Ground water table	Due to existing high ground water table i.e. at the depth of 0.75 mtrs from the existing ground level, the excavation activity becomes very difficult because of seepage of water. To control the seepage dewatering was done at the rate of 1500 Cum per hour with 1 MW power consumption. This high ground water, delayed the construction of foundations, whose founding depth was varying from (-)3.5 Mtrs to (-) 22 Mtrs. Controlling seepage water at that depths to execute pile breaking and casting of foundations are extremely difficult and it took around 12 months' time to control the seepage water to cast the foundations.	The reasons advanced for the delay are technically tenable.

Sl.No	Item	Reason for delay stated by project company	LE's Comments
5	Railway siding	While approving the engineering plan, the railways insisted to provide 51 quarters, railway station building, RFP building, DG room with DG sets, electrical substation, water tank etc. These have contributed for the time overrun. The work at the railway siding was awarded to M/s.GVKPTSL. The railways have taken almost 2 1/2 years for approving the DPR and Engineering Scale Plans. This was originally submitted in July 2009 and approvals have been received only by May 2011. Further, ESPs processing was also delayed by Railways. ESPs submitted for approval during June 2011 and got the approval in March 2012. Approval of SIP drawings are awaited. This has contributed to huge cost escalations in railway siding works of Lead Line Area. The lead line is coming in uniform grained sand retaining of cutting depth of 10 meters which is a very difficult terrain and hence RCC retaining walls on both sides of railway track has been adopted. Further, the farmers who had parted with the land requested the Company to make additional service roads, culverts, siphons, drain pipes etc., to facilitate flowing of water from one side to the other side of the track because their borewells were located at one side of track. While approving the plan, railways have increased the number of lines in plant siding yard from 5 to 9. The suitable grade of blanketing material is not available in Punjab and hence the same had to be procured from J&K.	The reasons stated for the delay are tenable, being beyond the control of the project company. The project company has provided copies of relevant contracts testifying to the reasons. (Attached as Annexure-6 is a copy of DPR Approval letter from Railways. At Annexure-7 is the ESP approval letter from Railways and at Annexure-8 is the Railway Siding Sketch)

LE's observation on overall time overrun:

In the recent site visit of the LE during 3rd week of September 2013, it was observed that there has been very minimal progress on both BOP and BTG fronts since the last quarter. Extra civil works connected with Railway siding like construction of culverts, canals and bridges have added to the delay. These extra works, as stated by Project Company, were included by Railway Authorities in the Scope of Work. The raw water intake system progress has virtually stalled. It is complete only to the extent of 60%. LE observes that slow progress in BTG and BOP areas is linked with the slow deliveries/erection by Contractors as also the problem of non-availability of coal which GVKGSL has been unable to resolve so far.

4.1 Conclusion on time overrun

The updated Time schedule as provided by Project Company has been tabulated below:

Particulars	Start Date	Completion Date	% age completion (2013)	Revised Completion Date
Notice to Proceed – zero date	1/12/2009	30/11/2012	90%	31/03/2014
Detailed Engineering	1/12/2009	30/06/2012	100%	30/12/2012
Civil Works	1/12/2009	30/11/2012	95%	31/03/2014
Delivery of Plant & Machinery	18/2/2010	30/08/2012	98%	31/12/2013
Erection & installation of the plants	30/7/2012	30/09/2012	93%	31/01/2014
• Coal handling plant	01/05/2010	30/09/2012	86%	31/01/2014
• Ash Handling Plant	01/01/2011	30/09/2012	82%	31/01/2014
• Railway Siding	15/09/2011	30/09/2012	75%	31/12/2013
Trial run				
Commissioning & trial of Unit-1	19/05/2012	18/07/2012	93%	April 1, 2014
Commissioning & trial of Unit-2	19/08/2012	18/10/2012	83%	

In the light of what has been stated above, LE observes that the reasons for time overrun of the project are largely genuine and correct. However, it must be said that with more proper diligence and planning, the Project Company may have avoided some of the situations leading to the loss of progress in construction of the project. This is mainly in the context of the adverse characteristics of soil, which could have been ascertained in advance by the Soil Investigating Agency. Avoidable slow pace of heavy pile foundation work necessitated by soil liquefaction that came to light also contributed to the delay. With better anticipation of the coal supply scenario, proactive steps could have been taken to avoid the delay in commissioning of Unit-I on coal. This stated, LE also observes that the other reasons for delay i.e. delay in acquisition of land for railway siding and water pipeline and delay in approval of ESP by Railways Department were largely beyond the control of the project company.

Appendix-I

List of documents used for this Report

1. **Copies of contract documents**
2. **Auditor's Certificates on sources and application of funds**
3. **Clarifications/information provided by GCTCPL in response to LE's queries regarding cost increase of various item heads of project.**
4. **Miscellaneous project related documents.**

LAHMEYER INDIA

To:

Ref.: LII/ GELE09054/001 (R)/SDM
Date: 30.07.2014

IDBI Bank Ltd,
WTC Complex, Cuffe Parade,
MUMBAI – 400 005

Kind attn: Mr. K K Upadhyay, GM (ICG)

Sub: GELE09054-Lender's Independent Engineer for 2x270 MW TPP of GVK Power (Goindwal Sahib) Limited at Tarn Taran, Punjab.

Ref: Email Dated 07/07/2014 from GVK Power (Goindwal Sahib) Limited

Dear Sir,

This is with reference to the email dated 07/07/2014 sent by Project Company for Limited Project cost review of GVK Power (Goindwal Sahib) project. LE has reviewed the Re-Revised Project cost vis-à-vis the Approved revised project cost by Lenders. The review is based on the Revised Financial Model (as per the latest COD schedule of the project) and justification provided by Project Company.

LE had submitted Revised Project Cost Overrun Report ***(Ref: - Document Number LII-GELE09054-L-00108-005 R0 dated 12.10.2013)*** to the Lenders as per which the original appraised project cost of Rs. 3200 Crore was revised to Rs. 3998.1 crore. As informed by the Project Company, Lenders had approved Rs. 4000 crore as the Revised Project Cost. The details of the same are tabulated below in Table-1:

Table 1

S. No.	Particulars	As appraised by Lenders Engineer	As per Financial Model approved by IDBI
1	Land	182.1	182.06
2	BTG	1213.4	1213.39
3	BOP	992.5	992.42
4	Non EPC	347.0	347.0
5	Spares	70.7	70.65
6	Pre-operative Expenses	294.29	295.48
7	IDC	756.1	745.93
8	Contingency	62.0	56.07
9	Margin for Working Capital	80.0	97.0
	TOTAL COST	3998.1	4000.0

The major differences in the appraised cost by Lenders Engineer and approved cost by IDBI Bank have been explained below.

- <u>Interest During Construction</u> – IDC has changed from Rs. 756.1 crore to Rs. 745.93 crore. As informed by Project Company, Revised cost is as appraised by IDBI. Changes are mainly due to change in phasing schedule during appraisal.

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- Contingency – Contingency has changed from Rs. 62 crore to Rs. 56.07 crore. As per Revised Project Cost & Time Overrun Review Report **(Ref: - Page 31, Document Number LII-GELE09054-L-00108-005 R0 dated 12.10.2013)** submitted by Lenders Engineer, Contingency of Rs.25 Crore towards PLL claims, Rs.28 crore towards Run Over Bridge(ROB) and Rs 9 crore towards meeting unforeseen cost has been envisaged. As informed by Project Company, IDBI did not allow further contingency of Rs.9 crore. However Contingency amount kept for PLL Claims (Rs. 25 crore) and towards ROB (Rs. 28 crore) has been appraised. IDBI also included Rs.3.07 crore in contingency for rounding off of the project cost to Rs.4000 crore.
- Margin for Working Capital (WCM):- WCM has changed from Rs. 80 crore to Rs. 97 crore as appraised by IDBI.

Under the present assignment, the approved project cost by Lenders of Rs. 4000 crore has changed from Rs. 4000 Crore to Rs. 4122 crore. The breakup of the appraised cost by Lenders and revised project cost has been tabulated in Table-2 below:

Table-2

S. No.	Particulars	Approved Revised Cost	Revised	Difference
1.	Land	182.06	182	-
2.	Plant & Machinery			-
3.	-BTG	1,213.39	1,193	(20)
4.	-Balance of Plant (BoP)	992.42	992	-
5.	-Spares	70.65	71	-
6.	Non EPC	347.00	347	-
	Sub-total (Hard Cost)	**2,805.52**	**2,786**	**(20)**
7.	Pre operative expenses	295.48	295	-
8.	IDC	745.93	916	170
9.	Contingency	56.07	28	(28)
10.	Margin money for WC	97.00	97	-
	Sub-total	**1,194.48**	**1,336**	**142**
	Total	**4,000.00**	**4,122**	**122**

The difference in Cost for different line items as tabulated in Table-2 is explained below:

BTG Cost – LE noted that BTG cost has changed from Rs. 1213.39 crore to Rs. 1193 crore. As informed by the Project Company, there is a saving of Rs 20 Crore in BHEL contract on account of taxes. Taxes are payable subject to actual including change in law. There have been changes in Excise Duty/Service Tax from 14.42% to 10.3% and to 12.36% during the period of project implementation. Similarly, on certain imported/bought out items, the taxes are reimbursed to BHEL are at actual paid to their sub-contractors in terms of the contracts.

Interest During Construction – LE noted that IDC has changed from Rs. 745.93 crore to Rs. 916 crore (i.e. Increase of Rs. 170 crore) due to change in COD from 01.04.2014 to 01.10.2014.

As per Project Cost & Time Overrun report submitted by LE in October 2013, the commissioning of Unit-1 and Unit-2 of project has been mentioned as 1st April 2014. During present assignment, Project Company has informed that the COD for Unit-1 is expected on 01.10.2014 & COD for Uunit-2 is expected on 01.12.2014.

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As per the minutes of the JLM dated 16.05.2014, the Company has obtained 150,000 MT ***of coal*** allocated by CIL. Out of this, 75,000 MT of coal is from Central Coal Fields (CCL). The Company has already paid for the value of coal and obtained the relevant delivery order. Delivery of coal is in progress as on date. The balance of the coal (75,000 MT) has been allotted to the Company from BCCL. The first consignment of 75,000 MT of coal will be received at site in full by mid August, 2014. Hence, the Testing, Commissioning and Synchronization of Unit-1 will be completed by September, 2014 and COD accordingly declared. The 2nd consignment of 75,000 MT of coal will be received at the site by end September/early October, 2014. The Testing, Commissioning and Synchronization of Unit-2 will be completed by October/November, 2014 and COD declared by 01.12.2014. The coal from Tokisud is expected from November, 2014 for Unit-1 and peak level by end February, 2015 subject to obtaining the balance permits & clearances. The Railway lines are already laid and Project Company is planning to complete the Coal Handling Plant work before COD of the Project. As informed by the Project Company, Surface Miners shall be deployed in Tokisud Mine to excavate coal less than 200 mm size which will be directly transported to plant site.

The plant was in receipt of test wagon and locomotive for testing of track and wagon tippler for unloading of coal and this was completed on 29.06.2014. The calibration of in-motion Bridge was also completed. The stock yard sprinkler system will be completed by end of July 2014. As regards Unit-2, the commissioning is in progress with respect to the second wagon tippler which is envisaged to be completed by the end of this month. The cooling tower for Unit-2 is also likely to be completed by the end of July 2014. The status of the balance systems though not a hold for Unit operations, are in progress and are likely to be completed by end/early August, 2014. The railway siding agreement has been executed on 30.06.2014 and the notification for siding is likely to be issued by the end of July 2014. The latest progress (May 2014) as provided by the Project Company is indicated below:

Description	Overall Project Progress	
	Planned	Actual
For BTG areas (as per BHEL Report)		
Unit-1	100%	99.95%
Unit-2	100%	99.51%
As per TCE report		
Unit-1	100%	97.0%
Unit-2	100%	95.6%
Overall Progress	100%	96.5%

LE is of the opinion that the COD for Unit-1 on 01.10.2014 & COD for Unit-2 on 01.12.2014 can be achieved provided coal is available at site.

After the COD is declared by the Company further operations will be based on the linkage coal allotted by CIL. Project Company informed that the Punjab Government has recommended to the Central Government for a linkage of coal of 2.4 million tonnes of coal per annum which will take care of the Company's one year requirement. The Standing Linkage Committee (SLC) meeting for the same was conducted on 27.06.2014 and the minutes are awaited.

Lenders may like to review the IDC with reference to revised project schedule.

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Contingency - LE noted that Contingency has changed from Rs. 56.07 crore to Rs. 28 crore (i.e. Decrease of Rs. 28.07 crore).

As discussed in Revised Project Cost & Time Overrun Review Report submitted by LE **(Ref: - Page 31, Document Number LII-GELE09054-L-00108-005 R0 dated 12.10.2013)** Railways stipulated construction of Road Over Bridge at LC-32 (Level Crossing) crossing while approving the SIP drawings, which would have cost around Rs.28 Cr as per estimates approved by Railways. Railways were insisting for construction of Road over Bridge (ROB) at existing level crossing on the Beas-Goindwal Sahib-Tarn Taran section of the main line. As informed by Project Company, construction of ROB is planned to be constructed after 2 years from Project COD. Project Company informed that they have also paid required codal charges of Rs.56 lacs. However, the construction of ROB can't be commenced before the end of this financial year as Railways are yet to revert with finalization of design of ROB, final estimates, detailed construction drawings, etc. Post receipt of construction drawings / necessary approvals, it will take more than one year to call for bids, select the contractor and implement the ROB. Hence, the cost of ROB as informed by the Company will be met through other borrowings by the Company. In view of this, Contingency is reduced by Rs.28 Cr in Re-Revised Project Cost. In view of this, Contingency is reduced by Rs 28 Crore in Re-Revised Project Cost.

As informed by Project Company, the contingency of Rs.28 Crore kept in the re-revised project consists of Rs.25 crore towards Punj Lloyd Limited (PLL) Claims and Rs.3.07 Crore as allowed by IDBI while rounding off the project cost.

Financial Viability Assessment

LE observed that the electricity Tariff is calculated based on CERC guidelines (2009-14). The broad assumptions are given below:

- ✓ Installed capacity – 2X270 MW
- ✓ Project life- 25 years
- ✓ Plant Availability Factor and Plant Load Factor – 85%
- ✓ Auxiliary Power Consumption- 9%
- ✓ Gross Heat Rate- 2365 kCal/kWh including 6.5% margin towards partial load and degradation as per CERC norms
- ✓ Landed price of coal including transportation charges- Rs 3817/ MT in the year 2014
- ✓ Annual Escalation on coal price – 3%
- ✓ Secondary Fuel Consumption- 1 ml/kWh
- ✓ Secondary Fuel price- Rs 60.0/ Liter with yearly escalation of 3%
- ✓ O & M Expense – Rs 22.74 laks/MW/Year with yearly escalation of 5.72%
- ✓ Post Tax RoE – 15.5%

- ✓ Tax Holiday under section 80 IA for 10 years
- ✓ Discount Factor- 13.1%
- ✓ Re-revised project cost- Rs 4122 Crores
- ✓ Debt- Rs 2920 Crores, Equity –Rs 1080 Crores, Deferred Liability Rs.122 Crs which will be met other borrowings by the Company
- ✓ Phasing of project expenditure- Rs 3392 Crores (FY 2014) and Rs 734 Crores (FY 2015)
- ✓ Project Schedule - COD for Unit-1 is expected on 01.10.2014 & COD for Uunit-2 is expected on 01.12.2014

Based on the above assumptions, the levelised Tariff details are given below:

Particulars	Rs/kWh
Levelised Fixed Charges per unit (25 yrs)	2.447
Levelised Variable Charges p.u.(25 yrs)	2.741
Levelised Fixed Charges p.u. (15 yrs)	2.469
Levelised Variable Charges p.u. (15 yrs)	2.591
Levelised Tariff (25 years)	**5.19**
Levelised Tariff (15 years)	**5.06**

The Financial Ratios for Project are indicated below:

Particulars	Values
Minimum DSCR	1.27
Average DSCR	1.33
Project IRR	12.81%

LE observed from the revised financial model that Project IRR is 12. 81% is with the revised project cost of Rs 4126 Crores including working capital margin money. LE found that the cash flow requirement from year to year movement in working capital has not been considered in the Project IRR calculation. The minimum DSCR for long term debt is more than 1.2 considering deferred Liability of Rs.122 Crs to be met through other borrowings by the Company. The above financial ratios are comparable to similar projects selling power under CERC guidelines. Hence, the Project is viable subject to approval of Re-revised project cost and Tariff from the Punjab State Electricity Regulatory Commission.

Thanking you and assuring you of our best services at all times.

With regards,

For **Lahmeyer International (India) Pvt. Ltd.**

Ujjwal Roy.

Ujjwal Roy
Project Manager

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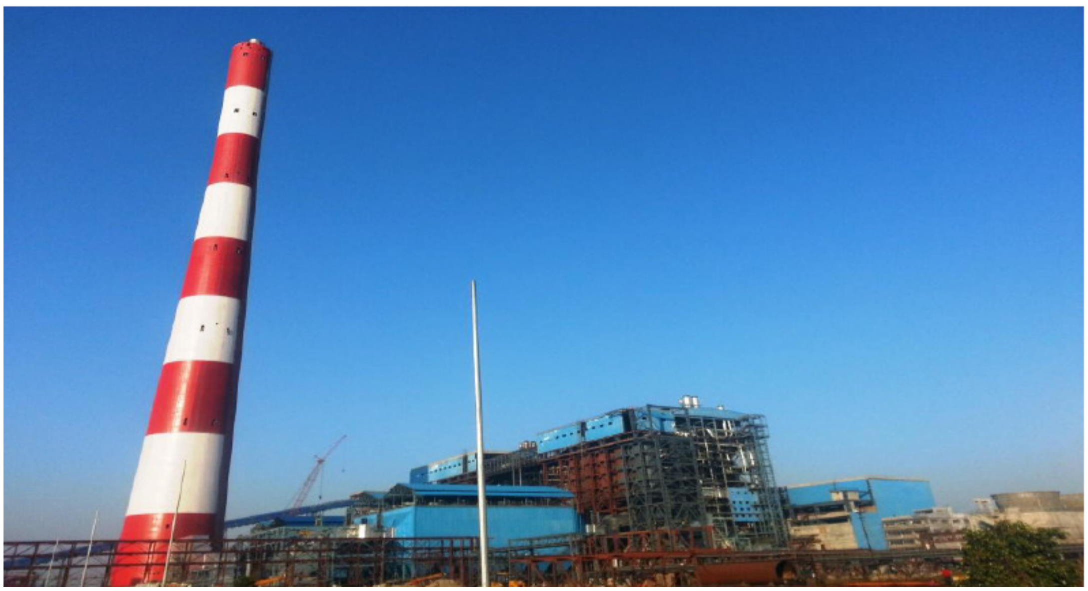
IDBI BANK

GVK POWER (GOINDWAL SAHIB) LIMITED

Techno Economic Viability Report for 2X270 MW Coal based Thermal Power Project at Taran District, Punjab



Techno – Economic Viability Report
(March, 2015)

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LAHMEYER INDIA

IDBI BANK

GVK POWER (GOINDWAL SAHIB) LIMITED

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R01	12-03-2015	LII	Revised in line with Client Comments

TABLE OF CONTENTS

ANNEXURE

Annexure - 1	:	Financial Model Furnished by Project Company

LIST OF ACRONYMS

AAI	:	Airport Authority of India
BHEL	:	Bharat Heavy Electricals Ltd
BOP	:	Balance of Plant
BTG	:	Boiler Turbine Generator
C&I	:	Control & Instrumentation
CHP	:	Coal Handling Plant
cm^2	:	Square Centimeter
COD	:	Commercial Operation Date
CTU	:	Central Transmission Utility
CW	:	Cooling Water
DG	:	Diesel Generator
DM	:	De mineralize
DPR	:	Detailed Project Report
EPC	:	Engineering, Procurement & Construction
ESP	:	Electrostatic Precipitator
FSA	:	Fuel Supply Agreement
GCV	:	Gross Calorific Value
Govt.	:	Government
GVKPGSL	:	GVK Power (Goindwal Sahib) Ltd.
GVKPIL	:	GVK Power (Infrastructure) Ltd.
GCTCPL	:	GVK Coal (Tokisud) Company Pvt. Ltd.
hr	:	Hour
IBR	:	Indian Boiler Regulations
IDC	:	Interest During Construction
INR or Rs.	:	Indian Rupee
kV	:	kilo Volt
kVA	:	kilo Volt Ampere
LE	:	Lender's Engineer
LII	:	Lahmeyer International (India) Pvt. Ltd.
Ltd.	:	Limited
LV	:	Low Voltage
MCC	:	Motor Control Center

MoEF	:	Ministry of Environment & Forest
MTPA	:	Million Tonne Per Annum
MW	:	Mega Watt
NH	:	National Highway
No.	:	Number
NOx	:	Oxides of Nitrogen
NTP	:	Notice to Proceed
O&M	:	Operation & Maintenance
PA	:	Primary Air
PCB	:	Pollution Control Board
PGCIL	:	Power Grid Corporation of India Ltd
PPA	:	Power Purchase Agreement
PSEB	:	Punjab State Electricity Board
PSERC	:	Punjab State Electricity Regulatory Commission
RCC	:	Reinforcement Concrete Cement
SG	:	Steam Generator
SPV	:	Special Purpose Vehicle
ST	:	Steam Transformer
STG	:	Steam Turbine Generator
STU	:	State Transmission Utility
TPH	:	Tonnes Per Hour

1 EXECUTIVE SUMMARY

GVK Power (Goindwal Sahib) Limited (GVKPGSL), herein referred to as the Project Company is setting up a 2x270 MW coal fired Thermal Power Project in Tarn Taran District of Punjab.

Lahmeyer International (India) Pvt. Ltd. has been appointed as Lender's Engineer (henceforth referred to as LE), on behalf of IDBI Bank Ltd. vide letter dated 26th December 2009.

As part of ongoing assignment, LE was asked to carry out the Techno Economic Viability Study including the review Project Cost and time overrun an account of change in proposed COD.

The Project Company has estimated a revised Project Cost of Rs. 4573.0 Crores against the previously appraised Project Cost of Rs. 4122 Crores with a revision of Rs. 451.0 Crores. The cost overrun includes is on account of increase in Hard Cost by Rs. 7 Crores (1.6% of overall increase) and the balance amount of Rs. 444 Crores is on account of increase in Pre-operative Expenses of Rs. 42 Crores (9.3% of overall increase), increase in IDC of Rs. 391 Crores (by 86.7% of overall increase) and increase in Margin Money for Working Capital of Rs. 11 Crores (by 2.4% of overall increase).

The original project cost of Rs.3,200 Crores, was funded with a debt equity ratio of 75:25 (ie., Rs.2,400 Crores of debt and Rs.800 Crores of equity) with a COD of 01.02.2013 and at an estimated interest rate of 11.50% as per the Facility Agreement. Later on, the project cost has been revised to and approved at Rs. 4,122 Crores, an increase of Rs.922 Crores with the revised COD as on 01.12.2014 and the debt equity ratio of this cost overrun is at 69.6 : 30.4 (Debt Rs. 642 Crores and Equity of Rs. 280 Crores), thus making cumulative debt/equity ratio of 73.8 : 26.20. The further cost overrun of Rs. 451 Crores (Considering the revised COD as on 01.11.2015) is now proposed to be funded in the same cumulative debt / equity ratio of 73.80 : 26.20.

Construction and Erection activities of both the Units are almost completed. Construction activity on River Water Intake System, civil works on roads and drains are in progress. For River Water Intake System, Project Company plans to arrange temporary pumps near the pump house and draw water by making use of the River Water Pipeline already laid. Both Units are already synchronised using oil firing and kept ready for coal firing. Project Company mentioned the revised COD as 1st November 2015 primarily on account of de-allocation of Tokisud Coal mine, which initially allocated to this Project. Project Company has furnished the mile stone for various activities needs to be performed to achieve the COD by 1st November 2015. LE is also of the view that as both the Units has already synchronised in Oil, COD is achievable by 1st November 2015 provided necessary coal linkage is established and Coal Supply Agreement, Coal Transportation Agreement are in place as per dates proposed by the Project Company.

Project Company has entered into Power Purchase Agreement (PPA) with Punjab State Electricity Board (now PSPCL) for sale of total installed capacity (540 MW) minus the auxiliary power consumption. Evacuation of power from the proposed Project will be done at 220 kV level. As per the PPA, the Procurer (PSPCL) is responsible for the evacuation of power from the switchyard bus bar and will build the transmission facility till the nearest STU substation.

Project Company has intimated that "the company has filed a petition for extension of time for COD with PSERC in December, 2013. The same has been admitted by PSERC in the month of September, 2014. The request for extension of time has been made for Project COD till November, 2015. The arguments have been completed by both the sides and next date of hearing is on 10.03.2015. In the meantime, the company has brought to the notice of PSERC that the Tokisud Coal Block has been de-allocated in view of the Supreme Court decision. Once the extension of time is decided by PSERC, the company will be filing a request with PSERC for approval of the Revised Capital Cost of the Project. In terms of CERC guidelines, the approval of

Capital Cost will have to be filed 6 (six) months prior to the date of Project COD. The Power Purchase Agreement takes reference to the coal supplied from the Tokisud coal mine only. As this mine has been de-allocated, the company has already approached PSPCL (formerly PSEB) for an amendment to the provisions the Power Purchase Agreement. This amendment will reckon the linkage coal / imported coal for reimbursement of energy charges."

LE has reviewed the Techno-Economic Viability of the Project based on the financial models provided by the Project Company. To assess the viability of the Project under the present circumstances, 100% Power Sale through PSERC Tariff has been considered for the Capital Structure mentioned above. LE's observations on Techno Economic viability of the Project is mentioned in the subsequent chapter of this Report. LE found that the Project is Techno-Economically Viable, subject to observations in this Report. Financial indicators represented in this Report are based on the Financial Model submitted by the Project Company and are subjected to:

1) Approval of Revised Project Cost from Punjab State Electricity Regulatory Commission (PSERC).

2) Amendment of PPA with respect to revised Project Cost and Revised Project Schedule.

2 INTRODUCTION

2.1 Background

GVK Power (Goindwal Sahib) Limited (GVKPGSL), herein referred to as the Project Company, is setting up a 2x270 MW coal fired Thermal Power Project in Tarn Taran District of Punjab, pursuant to an Implementation Agreement with Government of Punjab dated 25th August 2000.

Lahmeyer International (India) Pvt. Ltd. has been appointed as Lender's Engineer (henceforth referred to as LE), on behalf of IDBI Bank Ltd. vide letter dated 26th December 2009.

2.2 Definitions

Project	:	2x270 MW Coal Based Thermal Power Project
Lead Lender	:	IDBI Bank Ltd.
Project Company/ Owner	:	GVK Power (Goindwal Sahib) Limited (GVKPGSL)
Power Purchaser	:	Punjab State Power Corporation Limited – PSPCL (formerly PSEB)
Fuel Supplier	:	GVK Coal (Tokisud) Company Pvt. Ltd., Jharkhand
Lender's Engineer (LE)	:	Lahmeyer International (India) Pvt. Ltd. (LII)

2.3 Scope of Services

The scope of services of LE includes for the ongoing assignment includes the following:

1. To carry out an independent time and cost overrun study of the project with comments on achievability of COD by 01.11.2015
2. Analysis of revised Project Cost in comparison with Original Project Cost under various heads
3. SWOT Analysis of Company's Business and Operations
4. Analysis of key assumptions underlying financial projections of the company and evaluation of Technical, Financial and Economic viability of the Project

2.4 Basis of Report

This Report has been prepared based on LE's review of documents provided by the Project Company and discussions with the Project Personnel. Following documents have been received from the Project Company vide e-mail till 28th February, 2015:

- CA Certificate dated 23rd January, 2015 indicating the expenditures incurred till 31st December, 2014.
- Information / Justification on Cost and Time Overrun from the Project Company
- Railway Siding demand Letter from Northern Railways dated 10th February, 2015
- Original Facility Agreement
- Break – up of Preliminary and Pre – Operative Expenses
- Financial Model

2.5 Disclaimer

LE has made no search of any public records nor independently validated the information provided with any external source, and save for the Reviewed Documents mentioned above, LE has not examined any other documents relating to the matters of the Project Company for the purpose of this Report. LE's findings are strictly limited to the matters stated herein and are not to be read as extending by implication to any other matter. It is given as at today's date solely for the benefit of the Lenders and may not be disclosed to or relied upon by anyone else without LE's prior written consent, provided that, this opinion may be disclosed to the auditors or any professional advisors of any of the Addressees or to any regulatory authority (as may be required by such regulatory authority) or otherwise pursuant to a court order or legal process.

3 PROJECT DESCRIPTION

The proposed project will consist of two (2) nos. of Steam Turbine Generator (STG) sets of 270 MW and two (2) nos. of Pulverized Coal Fired Steam Generators and associated balance of plant.

The consumptive water required for the Project will be drawn from Beas River, which is at a distance of 900 m from the plant boundary. Domestic Coal is the main fuel for the project. Tokisud North sub-block located in District Hazaribagh, Jharkhand was allotted to the Project Company as captive coal block. Accordingly, an SPV named GVK Coal (Tokisud) Company Pvt. Ltd. (GCTCPL) was formed by Project Company for mining of the coal from the coal block and Project Company entered into Fuel Supply Agreement on 06.06.2009 with GCTCPL for supply of coal from the Tokisud coal block. Also, Coal Transportation Agreement was entered into with East Central Railway for transporting required coal from the coal block to the Project Site. However, the same Coal Block has been De-allocated and Project Company is in the process of making necessary applications for linkage coal to Ministry of Coal.

Project Company has entered into Power Purchase Agreement (PPA) with Punjab State Electricity Board (now PSPCL) for sale of total installed capacity (540 MW) minus the auxiliary power consumption. Evacuation of power from the proposed Project will be done at 220 kV level. As per the PPA, the Procurer (PSPCL) is responsible for the evacuation of power from the switchyard bus bar and will build the transmission facility till the nearest STU substation.

Project Company is executing the entire plant through three (3) separate packages viz BTG, BOP and Non-EPC works, on turnkey basis. Project Company has awarded Boiler Turbine Generator (BTG) to M/s BHEL, Balance of Plant (BOP) Package to M/s Punj Lloyd and Non-EPC works to M/s GVK Projects and Technical Services Ltd. Project Company has signed the O&M contract with GVK Power & Infrastructure Limited (GVKPIL) to carry out operation & maintenance of plant.

As per the BTG Package Contract with BHEL, the Commercial Operation Date (COD) of the first unit was envisaged as 33 months (18.07.2012) from the Zero date (19.10.2009) and COD for unit – II was after 36 months i.e. (18.10.2012) from zero date. As per the Financial Documents, the Project Commissioning dates are scheduled as 36 months (01.02.2013).

Project Company informed during Lender's Meet on 1st November 2014 that tokisud mine was to commence regular supply of coal to Goindwal Sahib effective November, 2014. However, due to de-allocation of mine, work got stopped at Tokisud, which is the main reason for delay in commencement of commercial operations of the power plant and beyond the control of the promoters and the Company. In view of this company officials requested the lenders for considering extension of COD by one year along with consequential shift in repayment schedules of existing terms loans. Company also requested for revision in project cost and means of finance, sanction of additional term loan on account of cost overrun and sanction additional credit facilities required for the purpose of acquiring coal mines. Based on the submissions made by the company, it was also decided to explore the possibility of revise the COD to November 1, 2015.

3.1 Present Physical Status of the Project

Construction and Erection activity of both the Units and Balance of Plant are already complete. Technically, the plant is ready for operation. However, construction activity on River Water Intake System, civil works on roads and drains are in progress. Civil works pending are not critical at present for commissioning on technical ground, but are required from the point of Consent to Operate. For River Water Intake System, Project Company plans to arrange temporary pumps near the pump house and draw water by making use of the River Water Pipeline already laid. At present, since construction and erection is already completed, Project Company has to perform preservation of boilers and other equipments, which are already executed as per the recommendation of the BTG Supplier. Both Units are already synchronised using oil firing and kept ready for coal firing. Balance activities are firing with coal and commissioning of coal handling plant. Coal handling plant erection is also completed.

As per overall 'S' curves furnished by the Project Company indicates the progress of 97.50% as against 100.0% planned till September 2014.

The Planned Vs. Actual progress as per the last Construction Monitoring Report (till September 2014) is indicated in the table below:

Table 3.1 – Planned Vs. Actual Progress

Description	Overall Project Progress	
	Planned	Actual
Unit – 1 BTG	100	99.98
Unit – 2 BTG	100	99.98
Overall	100	97.5

The major reason for delay in Plant Commissioning is due to unavailability of coal.

3.2 Transmission Facilities & Power Evacuation

Evacuation of power from the Project is proposed at 220kV level. As per PPA, PSPCL is responsible for the evacuation of power from the switchyard bus bar and will build the transmission facility till the nearest STU substation. Project Company has informed that power will be evacuated at 220kV level through following three (3) number PSEB Transmission Lines.

a) First double circuit Sultanpur Lodhi Line. The line is in charged condition.
b) Second 220 kV double circuits Cholah Sahib Line. At present, roughly 91% is completed.
c) Third 220 kV Botianwala Transmission Line. At present, roughly 38% is completed.

4 PROJECT COST OVERRUN REVIEW

The Original Project Cost as per Banking Base Case was Rs. 3200.0 Crores with Debt Equity ratio of 75:25. The Revised Project Cost is estimated at Rs. 4573.0 Crores with an increase of Rs. 440.0 Crores. The summary of original and revised project cost and financing plan is given below:

Table: 4.1 – Project Cost Summary

Amount in Rs. Crores

Description	Original Project Cost (1)	Previously Appraised Project Cost (2)	Revised Project Cost (3)	Increase w.r.t. Previously Appraised Project Cost (3-2)
Project Cost	3200	4122	4573	451
Debt	2400 (75%)	3042 (73.8%)	3375 (73.8%)	333
Equity	800 (25%)	1080 (26.2%)	1198 (26.2%)	118

Notes:

✓ *Rs. 3200 Crores was the Original Project Cost as per the Facility Agreement. Subsequent to Cost and Time overrun, previously appraised project cost by Lenders was Rs. 4122 Crores. Revised Cost Proposal by the Project Company is Rs. 4573 Crores based on the revised Project COD as on 01st November 2015.*

LE has reviewed the details of the Revised Project Cost of Rs. 4573.0 Crores with respect to the previously appraised Project Cost of Rs. 4122.0 Crores. The breakup of the previously appraised Project Cost Vis-a-Vis the Revised Project Cost proposed by the Project Company is indicated in the Table – 4.4 below:

Table 4.2 – Break up of Previously Appraised and Revised Project Cost

Amount in Rs. Crores

Particulars	Previously Appraised Cost (1)	Revised Cost (2)	Increase in Cost (2-1)	Percentage of Total Increase
Land	182	182	-	-
Plant & Machinery				
– BTG	1,193	1,193	-	-
– Balance of Plant (BoP)	992	992	-	-
– Spares	71	71	-	-
Non EPC	347	354	7	1.6
Sub-total (Hard Cost)	**2,786**	**2,793**	**7**	**1.6**
Pre operative expenses	295	337	42	9.3
IDC	917	1,308	391	86.7
Contingency	28	28	0	0.0
Margin money for WC	97	108	11	2.4
Sub-total	**1,337**	**1,780**	**444**	**98.4**
Total	**4,122**	**4,573**	**451**	**100.0**

From the above mentioned Table, it is observed that the Cost Increase is on account of increase in Hard Cost by Rs. 7 Crores (1.6% of overall increase) and the balance amount of Rs. 444 Crores is on account of increase in Pre-operative Expenses of Rs. 42 Crores (9.3% of overall increase), increase in IDC of 391 Crores (by 86.7% of overall increase) and Increase in Margin Money for Working Capital of Rs. 11 Crores (by 2.4% of overall increase). The component wise increase in cost are analysed below:

4.1 Increase in Hard Cost (Rs. 7 Crores)

Increase in hard cost contributes only Rs. 7 Crores i.e. 1.6% of overall increase of Rs. 440 Crores in the revised Project Cost. As informed by the Project Company, in the previous appraised project cost, under Non-EPC cost head of Rs. 347 Crores, the payments to Railways was considered as Rs.18 Crores, which is now estimated as Rs. 25 Crores.

The Break-up of the revised payment of Rs. 25 Crores as furnished by the Project Company is given below:

i) Codel Charges paid against ROB @ 2% on estimated cost - Rs. 0.56 Crores
ii) Cost of deployment of manpower & Maintenance as per the demand from Railways - Rs.23.93 Crores (Including Rs.2.58 Crores already paid)
iii) Cost of vehicles, plotters, computers and other equipment provided to Railways - Rs. 0.29 Crores [Vehicles (2) – Rs.15.75 Lacs, Plotters – Rs.8.85 Lacs and computers & others – Rs. 4.70 Lacs]
iv) Electricity connections required for railway operations - Rs. 0.03 Crores
v) Monthly electricity charges till handing over of Railway Line - Rs. 0.05 Crores
vi) Others - Rs. 0.06 Crores

LE observed that vide Letter Reference 380-T/GVK/TPP/Pt-III dated 06.02.2015, DRM office of Northern Railway intimated M/S GVK Power Limited to deposit revised estimated amount of Rs. 23.93 Crores towards Supervision/departmental & recessing charges towards maintenance and staff deployment for 10 years. As per the said letter it is mentioned that such payment is to be made before commissioning the siding. As per letter dated 10.02.2015 from Northern Railway, it is noted that out of 23.93 Crores, Rs. 2.59 Crores has already been paid by the Project Company. Further, as per Letter Ref No. 7-W/154/ASR/Pt-13 dated 31st May 2013 from Divisional Officer, N Rly, Firozpur, Project Company was advised to deposit Rs. 0.56 Crores on account of Plan & Survey Charges @ 2% of Cost of ROB in lieu of level crossing No. C-32 as per Codel Provision. Hence total payments to Railways, based on the document furnished by the Project Company works out to be 24.49 Crores.

As per the CA certificate furnished by the Project Company, total of Rs. 320.90 Crores were spent towards Non-EPC package till 31st December 2014.

4.2 Increase in Preoperative Cost (Rs. 42 Crores)

Increase in preoperative expenses contributes Rs. 42 Crores i.e. 9.5% of overall increase of Rs. 440 Crores in the revised Project Cost. The Break-up of Preliminary and pre-operative expenses as provided by the Project Company is given below:

Table 4.3 – Break up Preoperative Expenses

Amount in Rs. Crores

Sl. No.	Particulars	As Per Previously Apprised Project Cost	Expenses as on 31.12.2014	As Per Revised Estimation
(i)	Salaries , Wages & Admin	129.38	149.27	176.81
(ii)	Startup Fuel	79.00	31.00	79.00
(iii)	Power & water for construction	32.00	10.88	23.98
(iv)	Insurance	11.44	10.87	11.59
(v)	Payments to OE (TCE)	13.50	12.13	12.13
(vi)	O & M Mobilization Advance	5.00	0.00	5.00
(vii)	Financing Charges	24.60	24.52	27.94

Sl. No.	Particulars	As Per Previously Apprised Project Cost	Expenses as on 31.12.2014	As Per Revised Estimation
	Total Pre-Operative Expenses	**294.92**	**238.67**	**336.45**

LE observed that as per CA Certificate furnished by the Project Company, preoperative expenses of Rs. 238.62 Crores have already been incurred till 31st December 2014.

LE is of the view that out of the out of the above cost head under preoperative expenses, "Salaries, Wages & admin expenses" may increase on account of time overrun and "Financing Charges" may increase on account of increased Project Cost mainly due to IDC (on account time overrun). Other Components are not directly linked to the time overrun and hence considerable change/revision is unlikely with respect to the previously appraised Project Cost.

Project Company with regard to increase in Salaries, Wages & admin expenses informed that "these expenses was mainly in the areas of staff salaries, establishment expenses, travelling expenses, etc due to time overrun of the project. The preoperative expense of Rs.294.92 Crores earlier approved was based on COD of 01.04.2014. Whereas, with the further time overrun of 19 months period (from 01.04.2014), the corresponding expenses increased to Rs.177 Crores are justified. Please note that when the project cost was revised from Rs.4,000 Crores to Rs.4,122 Crores with change in COD from 01.04.2014 to 01.12.2014, the pre-operative expenses were remain kept at earlier level of Rs.129 Crores without further revision with the assumption that the increase in expenses can be offset with the savings expected in other areas and overall project cost can be kept within Rs.4,122 Cr. However, with the further delays, the same could not be achieved."

The break-up of the Salaries, Wages and Admin Expenses as furnished by the Project Company is given in Table: 4.4 below:

Table 4.4 – Break up Salaries, Wages & Admin Expenses

Amount in Rs. Crores

Sl. No.	Particulars	As Per Previously Apprised Project Cost	Expenses as on 31.12.2014	As Per Revised Estimation (Till 31.10.2015)
(i)	Salaries & Allowances:	58.59	71.32	85.47
(ii)	Estabishment Expenses	28.32	35.76	41.07
(iii)	Travelling & Conveyance	13.93	15.56	16.36
(iv)	Misc Expenses incl. site expenses	9.12	8.77	9.77
(v)	O & M Expenses till COD	4.00	6.06	9.36
(vi)	Depsoit with PSPCL	2.11	2.11	2.11
(vii)	Margin Money against BG	2.48	2.75	2.75
(viii)	Misc Fixed Assets, Fire Tenders, Dozers, etc	20.92	20.46	23.56
(ix)	**Sub-Total**	**139.47**	**162.79**	**190.45**
(x)	Less: Interest / Dividends / Other Income (net of taxes)	10.09	13.52	13.64
(xi)	**Total**	**129.38**	**149.27**	**176.81**

As mentioned above, as per CA Certificate furnished by the Project Company, preoperative expenses of Rs. 238.62 Crores have already been incurred till 31st December 2014. Based on the break-up furnished by the Project Company of Rs. 238.6 Crores incurred till December 2014, it is found that Rs. 149.27 Crores is due to

the expenses incurred on account of Salaries, Wages and Admin Expenses till December 2014. LE is of the view that the further increase in Rs. 28 Crores in Salaries, Wages & Admin expenses is reasonable in pro-rata basis (plus 10% escalation) considering the time overrun of another 10 months reckoned from 1st January 2015 and accordingly Salaries, Wages and Admin Expenses till 31.10.2015 works out to be around Rs. 177 Crores (Rs. 149 Crores +28 Crores = Rs. 177 Crores).

With regard to expenditure on power and water during construction, Project Company informed that initially, Rs.32 Crores were envisaged; however Project Company revised the estimated figure to Rs. 23.98 Crores based on the actual expenditure incurred till date. ***LE noted that Construction activities of the Project are almost over.***

4.3 Increase in Interest During Construction-IDC (Rs. 391 Crores)

The Interest During Construction (IDC) is increased from Rs 917.0 Crores to Rs 1308.0 Crores i.e. by Rs 391.0 Crores primarily on account of delay in commissioning the Project and increased rate of interest with respect to original facility agreement. Increase in IDC contributes majority of overall cost increase i.e. about 88.9% of overall increase of Rs. 440 Crores in the revised Project Cost.

The revised capital structure proposed in the financial model for the TEV study with assumptions for interest rate as provided by the Project Company is as below:

The original project cost of Rs.3,200 Crores was funded with a debt equity ratio of 75:25 ie., Rs.2,400 Crores of debt and Rs.800 Crores of equity with a COD of 01.02.2013 and at an estimated interest rate of 11.50% as per the Facility Agreement. Later on, the project cost has been revised to and approved at Rs. 4,122 Crores, an increase of Rs.922 Crores with the revised COD as on 01.12.2014 and the debt equity ratio of this cost overrun is at 69.6 : 30.4 (Debt Rs. 642 Crores and Equity of Rs. 280 Crores), thus making cumulative debt/equity ratio of 73.8 : 26.20. The further cost overrun of Rs. 440 Crores (Considering the revised COD as on 01.11.2015) is now proposed to be funded in the same cumulative debt / equity ratio of 73.80 : 26.20.

Further, the interest rate applicable for original term loans at the time of financial closure on 01.02.2010 was 11.25% and linked to IDBI BPLR. The interest rate was subject to reset on 1st Feb of every year. Accordingly, the interest rate undergone changes as IDBI BPLR went up year on year. The current applicable interest rate is 13.25%. The interest rate fixed for cost overrun funding of Rs. 520 Crores (already tied up) is at 13.75%.

Lenders may review the interest rate assumed by the Project Company and the Interest During Construction calculated based on the revised COD as on 01.11.2015.

4.4 Increase in Margin Money for Working Capital (Rs. 11 Crores)

The working capital Margin Money is increase from Rs 97.0 Crores to Rs 108.0 Crores. The CERC working Capital Assumption (For the purpose of Tariff Determination) Vis-a-vis Project Company's Working Capital assumptions (For the purpose of margin money calculation) are indicated below:

Table 4.5

Working capital Assumptions	As Per CERC Tariff Regulation (2014-19)	Project Company's Assumption
Coal	2 Months	2 Months
Secondary fuel	2 Months	2 Months
O&M	1 Month	Not Considered

Working capital Assumptions	As Per CERC Tariff Regulation (2014-19)	Project Company's As-sumption
Receivables	2 Months	1.5 Months
Maintenance Spares as % of O&M Cost	20%	20%

The working capital Margin Money is increased mainly due to following reasons.

- ✓ Revised Working capital Assumptions are based on CERC Guidelines (2014-19).
- ✓ Increase in Coal Cost and Secondary Fuel Cost.

LE observed that in estimating margin money for working Capital, Project Company has assumed receivable for 1.5 months and No O&M cost are considered as can be seen from Table: 4.5 above. LE is of the view that Operation & Maintenance Cost needs to be considered in assessing the working capital.

5 PROJECT TIME OVERRUN REVIEW

The original and revised COD schedule is indicated in Table 5.1 below:

Table 5.1 – Original and Revised COD

Description	Original Schedule (As per Facility Agreement)	Revised Schedule	Overrun in Months
Project COD (Commissioning of Both the Units)	1st February 2013	1st November 2015	33 Months

The activity milestone till the Project COD, based on the schedule proposed by Project Company, is indicated in Table 5.2 below:

Table 5.2 – Milestone Till Project COD

Sl. No.	Mile Stones	Proposed Dates
1.	Oil Synchronisation of both the units	Completed
2.	Application for Linkage Coal	31.03.2015
3.	Railway Notification	31.03.2015
4.	Approval of working capital limits	31.03.2015
5.	Receipt of coal for testing - first lot of 75000 tons	30.04.2015
6.	Receipt of coal for testing - Bal 75000 tons	30.06.2015
7.	Completion of Trial runs	31.07.2015
8.	Approval for Linkage Coal	31.07.2015
9.	MoU for Linkage Coal	31.08.2015
10.	Reciept of first Linkage Coal	30.09.2015
11.	Accumulation of Linkage Coal to start operations	01.10.2015
12.	COD	01.11.2015

Project Company has intimated that achievement of above milestone is subjected to disbursement of Fund by Lenders. However, it may be noted that besides the disbursement of funds by the lenders, achievement of milestones shall also equally depend upon the promoters' bringing in their portion of equity.

Project Company has cited the reasons for delay in Project COD and Justification of the Revised Project Schedule which is replicated as under:

- **Delay in Railway Notification for commencement of Trial runs & declaration of COD:**

"The company has been allotted 150000 tons of coal for testing, commissioning and synchronization pending the captive coal mine getting ready. 75000 tons of coal has been lifted from CCL starting from 12th July, 2014 stacked at Bharka Khana Railway Station in Jharkhand. The railway siding at Goindwal Sahib is also ready in all respects with necessary clearances. However, there has been delay in issuing the railway siding notification by Railways as the deposit to be made for their fixed expenses and maintenance costs of the siding could not be decided and the company is in receipt of final demand vide letter dated 06.02.2015 from Northern Railways. Hence, the Company could not able to transport the Coal to the plant site to carry out the trial runs as per schedule. The company has made request to lenders in the consortium meeting held on 11th February, 2015 for release of funds out of additional term loans / bridge loans sanctioned for further progress of the project including funds required for transport of the said coal and to commence the trial runs. The delivery of balance 75000 tons of coal also will be taken after the funds are arranged."

- **De-allocation of Tokisud Coal Block**

"Goindwal Sahib Project has been allotted a captive coal mine viz., Tokisud North Block at Jharkhand. The coal mine was developed by a separate SPV viz., GVK Coal (Tokisud) Company Pvt Ltd. The Company had also declared COD of the mine on 01.07.2014. The diversion of forest land was given on 9th July, 2014 and consent to operate from JSPCB on 27th June, 2014. Immediately after obtaining consent to operate and forest land diversion, the company commenced OB removal. The Mine was supposed to complete the overburden removal and commence large scale mining from November, 2014 onwards and commence the supply of coal to Goindwal Sahib Project on a regular basis. Accordingly, we had earlier proposed the COD of Project by December 1, 2014, which was approved by Lenders.

However, the Supreme Court vide its order in August/September, 2014 has de-allocated 214 coal blocks including Tokisud North Block. In terms of the Ordinance issued by President of India dt. 21.10.2014, the de-allocated mines would be allocated by way of public auction. The Company has participated in the coal block auction in respect of our own Tokisud Coal Block and also Amelia North Coal Block, but could not be successful in getting the mine as the auctions concluded at a premium of Rs.1110/- per ton and Rs.712/- per ton respectively. It is not viable at all taking any of the mines at premium as the company has to subsidise substantial amounts. For example, in case the company opts for Tokisud coal mine, the impact will be around Rs.450 Cr per anum since it will not be a pass through for the purpose of variable cost. The variable cost other than rail transport amounts to Zero, whereas the landed cost of coal other than rail transport works out to around Rs.1,900/- per ton and taking on annual production of 2.32 million tons, the amount to be put out of pocket works out to around Rs.450 Cr in the auction. Since Goindwal Sahib Project is not successful in getting the coal mine in the auction, the Central Government assured linkage coal, which the company is in the process of making necessary applications to Ministry of Coal. The reasons for delay in achieving COD, stated hereinabove are beyond the control of the promoters."

Observation of LE:

- ***Based on the reasons of delay cited above, LE noted that due to de-allocation of of Tokisud Coal Block, Project Company needs to arrange linkage coal and accordingly Project Company has furnished the revised mile stones till the revised COD as on 01st November 2015. Based on the above milestone furnished by the Project Company, LE is of the view that Activities Sl. No. 2 to 11 are dependent upon the execution efficincy of the Task with the concerned authority as necessary to be carried out to get linkage coal at site.***

- ***LE is of the view that as both the Units have already synchronised in Oil, necessary trial run with coal, coal synchronisation and COD is achievable by 1st November 2015 provided necessary coal linnkage is established and Coal Supply Agrrement, Coal Transportation Agreement are in place as per dates proposed by the Project Company.***

6 TECHNO – ECONOMIC VIABILITY

The Original Project Cost as per Banking Base Case was Rs. 3200.0 Crores with Debt Equity ratio of 75:25. The Revised Project Cost is estimated at Rs. 4573.0 Crores with an increase of Rs. 1362.0 Crores. The summary of original (as per Facility Agreement) and revised Project Post and financing plan is given table 6.1 below:

Table: 6.1

Amount in Rs. Crores

Description	Original Project Cost	Revised Project Cost	Increase
Project Cost	3200	4573	1373
Debt	2400 (75%)	3375 (73.8%)	975 (71%)
Equity	800 (25%)	1198 (26.2%)	398 (29%)

Notes:

- ✓ *Rs. 3200 Crores was the Original Project Cost as per the Facility Agreement. Subsequent to Cost and Time overrun, previously appraised project cost by Lenders was Rs. 4122 Crores. Revised Cost Proposal by the Project Company is Rs. 4573 Crores based on the revised Project COD as on 01st November 2015.*
- ✓ *The Project Cost does not include any liability for delay or non supply of power to Punjub State Electricity Board (PSEB) as per the existing PPA.*
- ✓ *The Revised Project Cost is subjected to approval from Punjub State Electricity Regulatory Commission (PSERC).*

6.1 Compliance of RBI Guidelines

Lenders may examine the RBI Extent Guidelines independently with regards to revision in date of Commencement of Commercial Operation (DCCO), funding of Cost Overrun and Consequence Change in Repayment Schedule, as applicable.

6.2 Review of Financial Model

Project Company has provided financial models, where in Debt Equity Ratio (DER) is considered as 75 : 25 for the Project Cost initially considered in facility agreement. Increased Project Cost/additional funding of Rs. 1362 Crores is proposed to be funded at a DER of 71 : 29. Accordingly, overall DER for the revised Project Cost of Rs. 4573 Crores, as per Financial Model works out to be 73.8 : 26.2.

To assess the viability of the Project under the present circumstances, 100% Power Sale through PSERC Tariff has been considered for the Capital Structure mentioned above.

LE has reviewed the Techno-Economic Viability of the Project based on the financial models provided by the Project Company.

Assumption:

The technical assumptions in the financial model and LE's opinion on the same are discussed below:

Table: 6.2

Particulars	Values Based on Financial Model	LE's Comment
No of Units	2	
Capacity (MW)	270	• In line with EPC Contract Guaranteed Value • In line with the Contracted Capacity as per PPA
1st Unit COD	01-November-15	-

Particulars	Values Based on Financial Model	LE's Comment
2nd Unit COD	01-November-15	
Project COD Date	01-November-15	As per Facility Agreement (CLA), the Schedule COD is 01-02-2013. The revised COD is **33** Months extended from CLA Schedule COD and subject to approval by lenders.
Plant Load Factor (%)	85%	In line with PSERC/CERC Guidelines 2014-19
Auxiliary consumption (%)	9%	As per CERC Tariff Regulation 2014-19, for 200 MW series
Net Station Heat rate (kCal/kWh)	2321	EPC Contract Guaranteed Value is 2221 kCal/kWh X 1.045 as per CERC Tariff Guidelines
Secondary oil (ml/kWh)	0.5	In line with CERC Tariff Guidelines 2014-19

The fuel assumptions in the financial model are indicated below:

Table: 6.3

Particulars	GCV in kCal/kg	Price (As of 2014)	Escalation	Transportation Charges (Rs/ MT.) (As of 2014)	Escalation
Linkage Coal (100%)	4600	Rs. 1410/MT	3%	2610	3%
Transportation loss of coal by Rail	0.80%				
Secondary oil	9500	Rs. 60.0/ Lt	3%	-	-

- ✓ As per the EPC contract, the coal analysis provided for boiler design indicates a design GCV of 4521.76 kCal/kg and design range is 4127 to 4864 kCal/kg.
- ✓ ROM Coal Price as on FY 2014 of Rs. 1410/MT assumed in the Financial Model. In assessing the ROM Coal, basic price is taken as Rs. 970/MT (for GCV 4600 to 4900 kCal/kg) in line with price notification No. CIL:S&M:GM(F):Pricing 235 dated 27.05.2013. Final coal price of Rs. 1410/MT at mine end railway siding is inclusive of Crushing Charges, Transportation & railway loading charges, excise duty, Royalty, Stowing Excise duty, Clean Energy Cess, rake loading charges and VAT.
- ✓ The Coal Transportation loss of 0.8% is in line with CERC norms
- ✓ The Financial Model is prepared assuming 100% Linkage Coal. LE is of the view that actual landed price (summation of base price and transportation cost) of coal will be based on the final coal linkage to be obtained for this Project. Under the present circumstances, 100% domestic coal linkage is unlikely and accordingly 80% of total coal requirement may be obtained through linkage and the remaining 20% coal may require to be sourced either from imported sources and/or through e-auction. Hence, price of coal may vary. However, the price considered for financial model is reasonable.
- ✓ LE is of the view that GCV and the price considered for secondary fuel is reasonable.
- ✓ Annual Escalation Rates applicable for the period between 01.10.2014 and 31.03.2015 for the purpose of payment as per the Power Purchase Agreement entered into under the guidelines for Determination of Tariff by Bidding Process for Procurement of Power by Distribution Licensees:

  - Escalation rate for domestic coal: 1.24%
  - Escalation Rate for inland transportation charges upto 2000 Km distance: 2.28%

  Escalation rate published by CERC varies from time to time. LE is of the view that escalation rate assumed in the financial model is reasonable for the purpose of financial projection.

The O&M cost is considered as Rs 23.90 Lakhs/MW/Year for FY 2014-15 as base year with escalation rate of 6.3%. LE observed that the O&M expense is in line with CERC Norms 2014-19.

The working capital assumptions are indicated below:

Table: 6.4

Working capital Assumptions	For Tariff Determination	In Profit and Loss Statement
Coal	2 Months	2 Months
Secondary fuel	2 Months	2 Months
O&M	1 Month	Not Considered
Receivables	2 Months	1.5 Months
Maintenance Spares as % of O&M Cost	20%	20%

LE observed that the assumption for estimation of working capital considered for Tariff Determination is in line with CERC Norms 2014-19. However, in Profit & Loss Statement O&M Cost has not been considered in calculating working Capital. LE is of the view that 1 month O&M cost needs be considered for calculation of interest on working capital.

The financial assumptions considered in the Financial Model are indicated below:

Table: 6.5

Particulars	Values
Overall Debt to Equity Ratio as per financing plan	73.8 : 26.2
Return on Equity (Post Tax) as per CERC Guidelines	15.50%
Depreciation Rate for P&M for 1st 12 years as per CERC Guidelines	5.28%
Depreciation Rate for Civil Works 1st 12 years as per CERC Guidelines	3.34%
IT Depreciation Rate for P&M	15.00%
IT Depreciation Rate for Civil Works	10.00%
Section 80 IA benefit	Yes
Income Tax Rate as per current notification	33.99%
MAT Rate as per current notification	20.96%

Debt Schedule:

Table: 6.6

Debt Schedule (RTL-1: Total Debt Rs. 2400 Crores)	First Tranche	Second Tranche	Third Tranche	Fourth Tranche	Fifth Tranche	Sixth Tranche	Seventh Tranche	Eighth Tranche	Ninth Tranche	Tenth Tranche
Repayment instalments (Qtrs)	4	4	8	12	4	4	4	1	19	1
Repayment start Qtr	30-Jun-16	30-Jun-17	30-Jun-18	30-Jun-20	30-Jun-23	30-Jun-24	30-Jun-25	30-Jun-26	30-Sep-26	30-Jun-31
Repayment End Qtr	31-Mar-17	31-Mar-18	31-Mar-20	31-Mar-23	31-Mar-24	31-Mar-25	31-Mar-26	30-Jun-26	31-Mar-31	30-Jun-31
Repayment Amount (Rs Crores)	105.60	168.00	384.00	648.00	144.00	110.40	96.00	24.00	684.00	36.00

Instalment amount for each quarter	26.40	42.00	48.00	54.00	36.00	27.60	24.00	24.00	36.00	36.00
Interest Rate	13.25%	13.25%	13.25%	13.25%	13.25%	13.25%	13.25%	13.25%	13.25%	13.25%

Debt Schedule (RTL-2: Total Debt Rs. 975 Crores)	First Tranche	Second Tranche	Third Tranche	Fourth Tranche	Fifth Tranche	Sixth Tranche	Seventh Tranche	Eighth Tranche
Repayment instalments (Qtrs)	24	4	4	4	2	6	4	2
Repayment start Qtr	30-Jun-16	30-Jun-22	30-Jun-23	30-Jun-24	30-Jun-25	31-Dec-25	30-Jun-27	30-Jun-28
Repayment End	31-Mar-22	31-Mar-23	31-Mar-24	31-Mar-25	30-Sep-25	31-Mar-27	31-Mar-28	30-Sep-28
Repayment Amount (Rs Crores)	252.48	43.87	124.94	162.14	93.26	158.40	87.73	43.87
Instalment amount for each quarter	10.61	11.06	31.49	40.87	47.01	26.62	22.11	22.11
Interest Rate	13.75%	13.75%	13.75%	13.75%	13.75%	13.75%	13.75%	13.75%

Note: RTL-1 is the Debt Component as per Facility Agreement and RTL-2 is the debt Component of the Overall Cost Overrun assuming the COD as on 01.11.2015.

6.3 Determination of Tariff

Based on the above assumptions, the CERC Tariff for the life of the Project is indicated below:

Table: 6.7

	First full year (FY 2017) operation for both Units (₹Rs/kWh)	Levelized (for Project life in ₹Rs/kWh)
Cost of generation (w/o RoE)		
Capacity Charge (Fixed cost)	2.31	2.11
Energy Charge (Variable Cost)	2.49	3.02
Generation Tariff (incl. RoE)		
Capacity Charge (Fixed cost)	2.93	2.74
Energy Charge (Variable Cost)	2.49	3.02

LE's observation on Tariff:

- ***In Calculating Tariff (Interest on Term Loan & RoE Component of Fixed Cost/Capacity Charge), Project Cost is taken as Rs. 4438 Crores which is assumed as pass through for Tariff Determination Purpose. The mentioned Project Cost is different from the Overall Project Cost of Rs. 4573 Crores mentioned in Table: 6.1. Lenders may review the Project Cost Pass through vis-a-vis the revised Project Cost Proposed for funding at a DER 73.8 : 26.2.***

6.4 Financial Indicators

The financial indicators assuming CERC norms are given below:

Table: 6.8

Particulars	Revised Assessment *with Revised Project Cost and Revised Capital Structure*
Project IRR	18.7% (Pre IDC) & 12.83% (Post IDC)
Average DSCR	1.36
Minimum DSCR	1.22

Comparison Matrix of Broad Benchmark Viability Parameters as per Appendix to Part B of RBI "Master Circular - Prudential norms on Income Recognition, Asset Classification and Provisioning pertaining to Advances dated July 1, 2014" Vis-a-Vis the parameters obtained based on the revised Financial Model are given below:

Table: 6.9

Sl. No.	Broad Viability Parameters as per RBI Master Circular dated July 1, 2014	Parameters as per Financial Model	LE - Remarks
i.	Return on capital employed should be at least equivalent to 5 year Government security yield plus 2 per cent.	Average ROCE (25 Years) = 11.01%	5 year Government security yield plus 2 per cent = (7.791+2)%=9.791% as on 12.03.2015 (Source: http://in.investing.com/rates-bonds/india-5-year-bond-yield)
ii.	The debt service coverage ratio should be greater than 1.25 within the 8 years period in which the unit should become viable for infrastructure projects and on year to year basis the ratio should be above 1. The normal debt service coverage ratio for 15 years repayment period should be around 1.33 for infrastructure projects.	Average DSCR (Loan Repayment Tenure)=1.42 Average DSCR (8 years)=1.27 Average DSCR (15 years)=1.38	✓ The average debt service coverage ratio for 15 years repayment period is above 1.33
iii.	The benchmark gap between internal rate of return and cost of capital should be at least 1 per cent.	Post IDC IRR = 12.52% WACC = 11.87%	✓ WACC is based Capital Employed as on COD. ✓ The Cost of Debt is considered at 13.25% and 13.75% on original term loans and debt component cost overrun funding respectively. ✓ RoE as 15.5% post tax ✓ The Gap is below 1%.
iv	Operating and cash break even points should be worked out and they should be comparable with the industry norms.	Average Operating break-even point = 61.31% Average cash breakeven point =47.36%	
v.	Trends of the company based on historical data and future projections should be comparable with the industry. Thus	Average EBITDA margin over 25 years is 34%	✓ Over average EBITDA margin of various Power Generating Company *Source –Annual Report of NTPC, Tata Power, Adani Power for last 3 years as available in public domain

Sl. No.	Broad Viability Parameters as per RBI Master Circular dated July 1, 2014	Parameters as per Financial Model	LE - Remarks
	behaviour of past and future EBIDTA should be studied and compared with industry average.		✓ Lenders may also review average EBITDA margin with respect to Industry
vi	Loan life ratio (LLR), as defined below should be 1.4, which would give a cushion of 40% to the amount of loan to be serviced. LLR= [Present value of total available cash flow (ACF) during the loan life period (including interest and principal)]/[Maximum amount of loan]	1.48	✓ In calculating Loan Life Ration (i.e. to calculate PV of ACF), discounting rate is taken as 10% which is above benchmark ROCE i.e. 9.791%.

6.5 Conclusion:

LII Remarks/Observations on various financial indicators are given above at various clauses. From the above analysis, LE found that the Project is Techno-Economically Viable, subject to observations made above by LE.

However, the Financial Indicators are subject to:

1) Approval of Revised Project Cost is from Punjab State Electricity Regulatory Commission (PSERC).

2) Amendment of PPA with respect to revised Project Cost and Revised Project Schedule.

7 SWOT ANALYSIS

7.1 SWOT Analysis

Strength:

- ✓ Parent company GVK Power and Infrastructure Limited is one of the leading player in the power industry. GVK has expanded itself slowly from gas/naphtha based Power Plant, Thermal (coal based) and Hydro Power Projects across the country. Besides over 900 MW operational power plants, it has over 5000 MW projects under various stages of construction and development.

- ✓ The Company has already entered into a PPA with PSEB on May 26, 2009 for sale of entire electricity generated for the period of 25 years.

- ✓ The site is strategically located with respect to following

  - The site is readily accessible by Road,
  - The Existing Railway stations (Goindwal Sahib) is nearby to the Plant (about 1 Km south),
  - Availability of water from river Beas and
  - Availability of PSEB grid at close proximity for start-up and construction power.

- ✓ As of now Oil synchronisation has been completed for Unit 1 on 06.07.2013 and for Unit 2 on 04.03.2014 and are ready for coal firing. All other systems are also in place.

Weakness:

- ✓ The project is already delayed by 33 months with respect to facility agreement and it could not declare the DCCO.

- ✓ Initially, the Project was allocated Tokisud Coal Block which has now lost after de-allocation and it could not be successful in recent coal blocks auction.

  Project Company has intimated that the company has already got coal from SLM for 6 months amounting to 1.20 million tonnes. Out of this, WCL has already alloted 5,00,000 tonnes and Project Company to take the delivery of the same once Working Capital is in place. Further, Project Company in the process of applying for further linkage on a permanent basis which would happen in 6 months time.

- ✓ As far as start up, commissioning & snycronisation is concerned we have 150,000 tons allotted; out of this we have taken delivery of 75,000 tones and the same is lying at Barkhakana station waiting to be transported to the Plant. This will happen no sooner the Railway siding is notified.

- ✓ As informed by the Project Company, Company is facing severe cash flow challenges due to delay in sanction/disbursement of funds. However, it may be noted that besides the disbursement of funds by the lenders, achievement of milestones shall also equally depend upon the promoters' bringing in their portion of equity.

- ✓ So far company was not able to meet timelines stipulated as per initial proposal and it has faced challenges which resulted in delays at all the stages of the project

Opportunities:

- ✓ India is still an energy deficient market and the growth of the economy will create additional demand for energy. The demand for electricity is ever growing from both the urban and rural segment, along with industrial segment.
- ✓ India has huge coal reserves and coal based power projects has long way to go
- ✓ Huge capital investment is required which increases barriers to entry thus leading to less competition in the industry

Threats:

- ✓ Power Sector in the country is heavily dependent on the Government Policies and guidelines
- ✓ Recent policy changes relating to coal allocation in the country as well as there have been continuous efforts from Government for promoting renewable energy sources.
- ✓ Revised Project Cost and Tariff is subjected to approval from PSERC.
- ✓ Existing PPA with PSEB dated May 26, 2009 needs to be amended due to revision in COD and Project Cost.
- ✓ Uncertainty for long term coal linkage.
- ✓ Exchange rate risk for purchasing imported coal

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4TH PROJECT COST OVERRUN REPORT

Our ref.: **Document No.** LII-H.501024-G-00109-004 R1
TS:Imputation : Project No. H.501024

RESTRICTED

Client: **IDBI Bank**

Project: **2x270MW Coal Based Thermal Power Project of GVK Power (Goindwal Sahib) Pvt. Ltd at Tarn Taran district; Punjab**

Subject: **Submission of 4th Project Cost Overrun Report**

Comments:

Revision No.	Date	Prepared / Revision By	Description
00	14.06.2016	KGR	Issued for approval
01	20.06.2016	KGR	Issued for approvel

REV.	YY/MM/DD	STAT.	WRITTEN	VERIFIED	APPROVED	VALIDATED
01	20/06/17	Final	KGR	UJR	UJR	UJR
00	16/06/14	Final	KGR	UJR	UJR	UJR

2x270 MW coal based Thermal power project of M/s GVK Power (Goindwal Sahib) Pvt. Ltd. in Tarn Taran District in Punjab

4th Project Cost Overrun Review report

TABLE OF CONTENTS

1. INTRODUCTION

1.1. Background

GVK Power (Goindwal Sahib) Limited (GVKPGSL), herein referred to as the Project Company, has set up a 2x270 MW coal fired Thermal Power Project in Tarn Taran District of Punjab, pursuant to an Implementation Agreement with Government of Punjab dated 25th August 2000.

Lahmeyer International (India) Pvt. Ltd. has been appointed as Lender's Engineer (henceforth referred to as LE), on behalf of IDBI Bank Ltd. vide letter dated 26th December 2009.

1.2. Definitions

Project	:	2x270 MW Coal Based Thermal Power Project
Lead Lender	:	IDBI Bank Ltd.
Project Company/ Owner	:	GVK Power (Goindwal Sahib) Limited (GVKPGSL)
Power Purchaser	:	Punjab State Power Corporation Limited – PSPCL (formerly PSEB)
Fuel Supplier	:	Western Coalfields Limited
Lender's Engineer (LE)	:	Lahmeyer International (India) Pvt. Ltd. (LII)

1.3. Scope of Services

The original estimated Project cost during Due Diligence stage of the aforesaid project was INR 3200 crore. Project Company provided 1st revised project cost of INR 3746.07 crore in May 2013. Further Project Company submitted 2nd revision to project cost in September 2013 and the Project Cost was revised to INR 4005 Crore.

However, due to the unavailability of coal and further delay in Project Commissioning Date, Project Company proposed 3rd Revision in Project Cost in February 2015 and hence the Project Cost was revised to INR 4573.00 Crores.

Under the present scope; Project Company has proposed 4th Revised Project Cost of INR 4795 Crore. The present scope of services includes analysing 4th revision to increase in Project Cost Overrun of different line items based on documents submitted by the Project Company.

1.4. Basis of Report

This proposed 4th Revised Cost Overrun Review Report has been prepared on the basis of review of the project documents provided by the Project Company.

1.5. Disclaimer

LE has made no search of any public records nor independently validated the information provided by Project Company with any external source, and save for the Reviewed Documents mentioned above, LE has not examined any other documents relating to the matters of the Project Company for the purpose of this Report.

LE's findings are strictly limited to the matters stated herein and are not to be read as extending by implication to any other matter. It is given as on the date of writing this Report solely for the benefit of the Lenders and may not be disclosed to or relied upon by anyone else without LE's prior consent, provided that, this opinion may be disclosed to the auditors or any professional advisors of any of the Addressees or to any regulatory authority (as may be required by such regulatory authority) or otherwise pursuant to a court order or legal process

2. PROJECT DESCRIPTION

2.1 Project Information

The Project consist of two (2) nos. of Steam Turbine Generator (STG) sets of 270 MW and two (2) nos. of Pulverized Coal Fired Steam Generators and associated balance of plant.

The consumptive water required for the Project is being drawn from Beas River, which is at a distance of 900 mts from the plant boundary.

Domestic Coal is the main fuel for the project. Project Company is looking for various alternatives for Fuel Supply, after the de – allocation of the Project Coal Mines. Coal Transportation Agreement has been entered into with East Central Railway for transporting required coal from the coal block to the Project Site.

Project Company has entered into Power Purchase Agreement (PPA) with Punjab State Electricity Board (now PSPCL) for sale of total installed capacity (540 MW) minus the auxiliary power consumption. Evacuation of power from the proposed Project is being done through 220 kV level. As per the PPA, the Procurer (PSPCL) is responsible for the evacuation of power from the Plant switchyard bus bar and build the transmission facility till the nearest STU substation.

Project Company has executed the entire plant through three (3) separate packages viz BTG, BOP and Non – EPC works, on turnkey basis. Project Company has awarded Boiler, Turbine and Generator (BTG) to M/s BHEL, Balance of Plant (BOP) Package to M/s Punj Lloyd and Non – EPC works to M/s GVK Projects and Technical Services Ltd. Project Company has signed the O&M contract with GVK Power & Infrastructure Limited (GVKPIL) to carry out operation & maintenance of plant.

Project Company was allocated with Tokisud North sub – block as the captive mine for the Project. However, with the Supreme Court Order dated 24th September, 2014 the mine was de – allocated. Project Company has signed a MoU with M/s. IMR Metallurgical Resources AG Limited, agreement dated 21st November, 2015, for supply of 2.4 mtpa of imported coal from South Africa (Glencore Mines) for Plant operation purpose, for a period of 2 years from the 1st shipment. Project Company has also applied for firm coal linkage to Ministry of Coal (MOC), Ministry of Power (MOP) and Central Electricity Authority (CEA) vide letters dated 16th March, 2015 along with the necessary documents. For the Plant testing and commissioning activities CIL had sanctioned 1,50,000 tonnes of coal.

The notification of private railway siding constructed by the Project Company served through Khadur Sahib Railway also got delayed by three months after making payment of the fixed charges on 3rd July, 2015 as Railways revisited plan for renewal of CRS approval. As informed by the Project Company; the notification was received on 06.10.2015.

Due to the delay in coal supply arrangement and official railway station notification of Khadur Sahib Railway Junction (private railway siding constructed by the Project Company) the Project Commissioning date got delayed. The revised Commissioning Date for the Project was 31st

January, 2016. However, as per PSPCL (the Procurer) the approved Unit #1 Commissioning Date is from 6th April, 2016 and Unit #2 from 16th April, 2016. Project Company had submitted a letter to Punjab State Power Corporation Limited (PSPCL) intimating the expected commissioning schedule. Further, PSPCL had agreed and requested for schedule of power generation for injection of power during commissioning of the plants.

2.2 PROJECT PROGRESS VS SCHEDULE

As per the BTG Package Contract with BHEL, the Commissioning Date of first unit was envisaged as 33 months (18.07.2012) from the Zero date (19.10.2009) and Commissioning Date for unit – II was after 36 months i.e. (18.10.2012) from zero date. As per the Financial Documents, the Project Commissioning dates are scheduled as 36 months (01.02.2013). As per the Power Purchase Agreement, the Project Commissioning dates are scheduled as 36 months (21.05.2013) for Unit – 1 from the date of financial closure and 6 months after commissioning of Unit – 1 (21.11.2013) for Unit 2.

Due to the delay in coal supply arrangement and official railway station notification of Khadur Sahib Railway Junction (private railway siding constructed by the Project Company) the Project Commissioning Date got delayed. The revised Commissioning Date for the Project was 31st January, 2016. However, Unit #1 Commissioning/ Performance Test was commenced from 0900 hrs on 29th March, 2016 and was completed at 0900 hrs on 1st April, 2016 and similarly Unit #2 Commissioning/ Performance Test commenced at 1718 hrs of 11th April, 2016 and completed on 1718 hrs of 14th April, 2016. As per PSPCL the approved Unit #1 Commissioning Date is from 6th April, 2016 and Unit #2 from 16th April, 2016.

The Project Company has filed petition with PSERC on the matters of time extension of Commissioning Date under force majeure events and change in law. The subject matter has been referred to Arbitration Tribunal and the first meeting of the Arbitration tribunal constituted By PSERC for the subject matter was held on 2nd November, 2015. The preliminary and initial introduction and brief case particulars were discussed. To facilitate in the matter, the arbitration tribunal directed to file a complete compilation of pleadings by 4th December, 2015 which includes replies, rejoinders or counter claims if any, which was submitted by the Project Company. The second hearing took place on 15th December, 2015, where PSPCL sought time to make their further submissions on the issue and the Arbitration Tribunal posted the next hearing on 04.02.16. The 4th hearing was held on 14th and 15th of April, 2016, where the Project Company made its submissions and 5th hearing is posted for 10th and 11th May, 2016

As observed from the site visit, LE opines that all the BTG and BOP works are complete, both the Units are commissioned. However, due to delay in Railway Notification, de – allocation of coal blocks and non availability of firm coal supply arrangements, the Plant commission activities got delayed resulting to delay in meeting the scheduled Commissioning Date of 1st November, 2015.

3. REVISED PROJECT COST BREAKUP

Project Company has proposed the 4th Cost Overrun for 2x270 MW coal fired Thermal Power Project. LE's observation on the same has been discussed in the following paragraph

3.1. Revised Project Cost Break up

The original estimated Project cost during Due Diligence stage of the aforesaid project was INR 3200 crore. Project Company provided Revised project cost of INR 3746.07 crore in May 2013, for which a Project Cost Overrun report **(Ref: - LII-GELE09054-L-00108-004 R1)** was submitted by LE to Lenders in May 2013.

Further Project Company submitted 2nd revision to revised project cost in September 2013 and the Project Cost was revised to INR 4005 Crore. Project Company proposed 3rd Revision in Project Cost of INR 4573.00 Crores.

Project Company has proposed 4th Revision to Project Cost and the Revised Cost has been estimated as INR 4795 Crore. The detailed Break up of Original cost and Revised cost has been tabulated below in Table 4.1:

Table 4.1

Particulars	Original	Cost Overrun – 3rd Revision	Proposed Fourth revision of Project Cost	Difference
Land	176.25	182	182	-
Plant & Machinery				
-BTG	1,213.39	1,193	1,193	-
-Balance of Plant (BoP)	955.00	992	992	-
-Spares	39.65	71	71	-
Non EPC	135.00	354	354	-
Sub-total (Hard Cost)	**2,519**	**2,792**	**2,792**	**-**
Pre operative expenses	142.21	337.48	347	9.52
IDC	387.44	1,308.01	1,520	211.99
Contingency	92.94	28	28	-
Margin money for WC	58.12	108	108	-
Sub-total (Soft Cost)	**680.71**	**1,781.49**	**2,003**	**221.51**
Total	**3,200**	**4,573.49**	**4,795**	**221.51**

LE noted that in the Proposed 4th Cost Overrun; there is no change in hard cost of the Project. The increase in Project Cost is mainly on account of Cost Overrun related IDC and Pre-operative expenses.

LE observation on the 4th Proposed Project Cost estimate with reference to approved 3rd Project Cost Overrun has been given below:

3.2. Interest During Construction (Increase of INR 211 .99Crores)

In the proposed 4th Revised Project Cost estimate; Interest During Construction (IDC) has increased from INR 1308.01 Crore to INR 1520 Crore (i.e. an increase of INR 211.99 Crore). As informed by the Project Company the change in IDC is due to delay in COD from 1.11.2015 to 30.04.2016.

Project Company has submitted Revised Financial Model for proposed Cost Overrun depicting the IDC Calculation of 1520 Crore.

Lenders may like to review the calculation & impact of IDC on Project Cost.

3.3. Pre Operative Expenses (Increase of INR 9.52 Crore)

In the Proposed 4th Cost Overrun Report; Pre operative Expenses have increased from INR 337.48 Crore to INR 347 Crore. There is an increase of 9.52 Crore in the Pre Operative Expenses;

The increase in preoperative expenses of Rs.9.52 Cr consists of

- Increase in salaries, wages and administration expenses
- Increase in Finance Charges which consists of Upfront Fee, Syndication Fee, etc.

The comparative increase of Pre operative Expenses as per 3rd Cost Overrun and proposed 4th Cost Overrun as provided by project Company has been tabulated below in Table 4.2:

Table 4.2

Particulars	Original Approved Project Cost	Revised Cost (as per 3rd Cost overrun)	Proposed Revised Cost estimates as per 4th Cost Overrun	Change in Pre operative Expenses from 3rd Cost Overrun to 4th Cost Overrun
Salaries, wages, admin	50.0	177.0	183.3	6.3
Start-up fuel (net of infirm power)	15.0	79.0	79.0	
Power & water for construction	12.0	24.0	24.0	
Insurance	11.4	11.6	11.6	
Owners Engineer	7.5	12.1	12.1	
Operators mobilisation & training	5.0	5.0	5.0	

R&R Expenses	5.0	-	-	
Payment to GPIL (1% of Loan)	24.0	-	-	
LLC/LIE/LIA/upfront fee/syndication fee	13.1	28.8	32.42	3.62
Total	**143.1**	**337.5**	**347.4**	**9.92**

LE noted that increase of INR 9.52 Crore has been proposed as increase in Pre Operative expenses. However Project Company has provided a Break up of INR 9.92 Crore Increase in the Pre operative expenses.

LE observation on the increase in Pre Operative Expenses of INR 9.92 Crore has been discussed below:

3.3.1 Salary, Wages & Administration

Salaries, Wages and Administration Charges have increased from INR 177 Crore to INR 183.30 Crore. There is an increase of INR 6.3 Crore on Salaries, Wages and Administration Charges.

The comparative Breakup of salaries, wages and administration expense as per 3rd Cost Overrun and Proposed 4th Revised cost has been indicated below in Table 4.3:

Table 4.3

Particulars	As per 3rd Project Cost Overrun Report till 31.10.15	As per 4th Proposed Project Cost Overrun	Increase / Decrease in expenses
Salaries & Allowances:	85.47	96.41	10.94
Estabishment Expenses	41.07	46.16	5.09
Travelling & Conveyance	16.36	17.38	1.02
Misc Expenses incl. site expenses	9.77	8.62	-1.15
Other manpower expenses (Royal / Nisa)	9.36	4.01	-5.35
Deposit with PSPCL	2.11	1.61	-0.50
Margin Money against BG	2.75	3.05	0.30
Misc Fixed Assets, Fire Tenders, Dozers, etc	23.75	21.10	-2.65
TOTAL	**190.64**	**198.34**	**7.70**
Less: Interest / Dividends / Other Income (net of taxes)	13.64	15.04	-1.40
Salaries , Wages & Admin	**177.00**	**183.30**	**6.30**

➢ Salaries & Wages :

Salaries & Wages have increased from INR 85.47 Crores in 3rd Cost Overrun to INR 96.41 Crore in proposed 4th Cost Overrun Report (Increase of INR 10.94 Crore). The Breakup of Salaries and wages has been given below IN Table 4.4:

Table 4.4

Salaries & Allowances	As per 3rd Project Cost Overrun Report till 31.10.15	As per 4th Proposed Project Cost Overrun	Increase / Decrease in expenses
Salaries & Allowances	48.66	54.30	5.64
Remuneration to Directors	3.97	3.89	-0.08
GVK Technical *	26.30	28.58	2.28
O & M - Operations #	5.01	7.26	2.25
O & M – Maintenance	1.52	2.38	0.86
Total	**85.47**	**96.41**	**10.94**

* As informed by the Project Company; Payments to GVK Technical amounting to Rs.28.58 Cr as proposed in 4th cost overrun report pertains to outsourced manpower of GVK Technical Services Pvt. Ltd. engaged for the project.

As informed by Project Company; O & M Operations expenses of Rs.7.26 Cr pertains to outsourced manpower engaged through contracts of (a) O & M manpower contractor (Simar) and b) coal handling manpower (OSM).

An Auditor Certificate stating that an amount of INR 94.79 Crores has been utilised by project Company till 31.03.2016 for Salary & Allowances has been submitted.

➢ Establishment Expenses

Establishment expenses have increased from INR 41.07 Crore to INR 46.16 Crore (Increase of 5.09 INR Crore). The Breakup of establishment expenses has been given below in Table 4.5:

Table 4.5

Establishment Expenses:	As per 3rd Project Cost Overrun Report	As per 4th Proposed Project Cost Overrun	Increase / Decrease in expenses
Rent	6.34	6.47	0.13
Rental Deposits	0.37	0.00	-0.37
Other Advances	0.01	0.00	-0.01
Repairs & Maintt - Buildings	2.28	2.55	0.27
Vehicles / other assets Maintenance	3.26	3.86	0.60
Legal & Professional Charges	10.51	13.16	2.65
Security Charges - (Swift / Royal)	8.51	8.53	0.02
Electricity Charges	5.33	5.53	0.20

Advertisement Expenses	0.67	0.57	-0.10
Communication Costs	1.58	1.86	0.28
Printing & Stationery	0.52	0.60	0.08
Rates & Taxes	1.65	2.33	0.68
Audit Fee	0.03	0.04	0.01
Ash Handling Contracts - KP Engineering & Globus Engineers		0.66	0.66
		0.00	0.00
	41.07	**46.16**	**5.09**

An Auditor Certificate stating that an amount of INR 180.15 Crores has been utilised by project Company for Salaries, Wages & Administration Expenses has been submitted.

3.3.2 Increase in Finance Charges

As per Proposed 4th Cost Overrun; Finance Charges have increased from INR 28.80 crores to INR 32.42 Crores (Increase of INR 3.62 crores).

The Breakup of Finance Charges as envisaged in proposed 4th cost overrun has been depicted below in Table 4.6:

Table 4.6

Particulars	Value In INR Crore
Finance Charges incurred up to 31 March 2016 (Fees, Charges, Commissioning etc.)	**30.99**
Further estimates after March 2016	
(a) Processing Fee @ 0.25% on Working Capital Limits and 4th Cost Overrun Debts	1.33
(b) Others	0.10
Total (a+b)	**1.43**
GRAND TOTAL	**32.42**

An Auditor Certificate stating that an amount of INR 30.99 Crore has been spent on Finance Charges till 31.3.2016 has been submitted by Project Company.

LE noted that due to delay in Project commissioning activities, pre operative expenses have gone up to INR 347.4 Crores

ANNEXURE P-13 (Colly.)

O/C

IN THE COURT OF SHRI JAGIR SINGH P.C.S., SUB DIVIIONAL MAGISTRATE -CUM- LAND ACQUISITION COLLECTOR KHADOOR SAHIB, DISTT. TARN TARAN.

AWARD

The Government of Punjab has accorded sanction for the acquisition of land measuring 1014 Acres, 02 kanals, 11 Marlas in the villages Alampur, Hansawala, , Hothian, Pindian and Verowal Tehsil Khadoor Sahib Distt Tarn Taran for 2X300 M.W. Thermal Power Project Goindwal Sahib Distt Tarn Taran.

No Objection Certificate

Various Departments viz Country and Town Planning, PUDA, Forest, Fire Brigade, Agriculture, Water Suply And Sanitation, Canal etc. have issued no objection certificate for acquisition of land measuring 1014 Acre, 02 Kanals, 11Marlas for setting up 2 x 300 M.W. Tharmal Plant at Village Goindwal Sahib Tehsil Khadur Sahib Distt. Tarn Taran.

Specifications

Sr. No 1	Alampur (H.B No. 333)	Khadur Sahib	Tarn Taran	Khasra No.	Area K -- M	Classification Of land
1				77	4--15	Common Passage
2				78	3--6	Common Passage
3				66/23	2 --10	Chahi
4				66/24	5 -- 9	Chahi
5				66/25	3 --7	Chahi
6				67/21	1 --1	Chahi
7				68/11	6--0	Chahi
8				68/12	3--16	Chahi
9				68/13	0--15	Chahi
10				68/18	2--2	Chahi
11				68/19	8--0	Chahi
12				68/20	7--11	Chahi
13				68/21	8--0	Chahi
14				68/22	8--0	Chahi
15				68/23	0--14	Chahi
16				69/01	7 --12	Chahi
17				69/02	7--3	Chahi
18				69/03	3--11	Chahi
19				69/04	0--4	Chahi
20				69/06	2--2	Chahi
21				69/07	6--18	Chahi
22				69/08	8--0	Chahi
23				69/09/01	4--0	Chahi
24				69/09/02	4--0	Chahi
25				69/10	7--12	Chahi
26				69/11	7--12	Chahi

27				69/12	8--0	Chahi
28				69/13	8--0	Chahi
29				69/14/01	4--0	Chahi
30				69/14/2	4--0	Chahi
31				69/15/01	4--0	Chahi
32				69/15/02	3--18	Chahi
33				69/16	7--11	Chahi
34				69/17	7--11	Chahi
35				69/18/01	5--11	Chahi
36				69/18/02	2--0	Chahi
37				69/19/01	4--0	Chahi
38				69/19/02	2--19	Chahi
39				69/19/03	0--9	Chahi
40				69/19/04	0--4	Chahi
41				69/20	7--12	Chahi
42				69/21/01	4--0	Chahi
43				69/21/02	3--12	Chahi
44				69/22	8--0	Chahi
45				69/23	8--0	Chahi
46				69/24	7--16	Chahi
47				69/25/01	6--16	Chahi
48				69/25/2	1--4	Chahi
49				70/03	2 --16	Chahi
50				70/04	8 --0	Chahi
51				70/05	8--0	Chahi
52				70/06/01	2--12	Chahi
53				70/06/02	2--8	Chahi
54				70/06/03	4--0	Chahi
55				70/07	8--0	Chahi
56				70/08	0--19	Chahi
57				70/13	1--1	Chahi
58				70/14	8--0	Chahi
59				70/15	8--0	Chahi
60				70/16	8--0	Chahi
61				70/17	8--0	Chahi
62				70/18	4--18	Chahi
63				70/22	1--6	Chahi
64				70/23	7--18	Chahi
65				70/24/01	4--0	Chahi
66				70/24/02	2--12	Chahi
67				70/24/03	1--8	Chahi
68				70/25	8--0	Chahi
69				71/02	5--11	Chahi
70				71/03	8--0	Chahi
71				71/04	8--0	Chahi
72				71/05	8--0	Chahi
73				71/6/1	4--0	Chahi
74				71/6/2	4--0	Chahi
75				71/7/1	4--0	Chahi
76				71/7/2	4--0	Chahi
77				71/8/1	0--18	Chahi
78				71/8/2/1	3--2	Chahi
79				71/8/2/2	4--0	Chahi
80				71/9/1	4--18	Chahi
81				71/9/2	3--2	Chahi
82				71/10	1--7	Chahi
83				71/12	3--16	Chahi
84				71/13	8--0	Chahi
85				71/14	8--0	Chahi

86				71/15/01	2--4	Chahi
87				71/15/02	5--16	Chahi
88				71/16	8--0	Chahi
89				71/17/01	4--0	Chahi
90				71/17/02	4--0	Chahi
91				71/18/1	2--12	Chahi
92				71/18/2/1	1--0	Chahi
93				71/18/2/2	1--4	Chahi
94				71/23	0--9	Chahi
95				71/24/1	5--19	Chahi
96				71/24/2	1--8	Chahi
97				71/25	8--0	Chahi
98				72/1	7--12	Chahi
99				72/2/1	1--16	Chahi
100				72/2/2	6--4	Chahi
101				72/3	8--0	Chahi
102				72/4/1	6--0	Chahi
103				72/4/2	1--19	Chahi
104				72/5/1	1--14	Chahi
105				72/5/2	5--17	Chahi
106				72/6/1	3--10	Chahi
107				72/6/2/1	3--10	Chahi
108				72/6/2/2	1--0	Chahi
109				72/7/1	1--0	Chahi
110				72/7/2	7--0	Chahi
111				72/8/1	2--18	Chahi
112				72/8/2	5--2	Chahi
113				72/9	8--0	Chahi
114				72/10	7--12	Chahi
115				72/11	7--12	Chahi
116				72/12	8--0	Chahi
117				72/13	8--0	Chahi
118				72/14	8--0	Chahi
119				72/15	8--0	Chahi
120				72/16	8--0	Chahi
121				72/17	8--0	Chahi
122				72/18	8--0	Chahi
123				72/19	8--0	Chahi
124				72/20/1	1--12	Chahi
125				72/20/2	6--0	Chahi
126				72/21/2	0--8	Chahi
127				72/21/1/1	6--0	Chahi
128				72/21/1/2	1--4	Chahi
129				72/22	8--0	Chahi
130				72/23	8--0	Chahi
131				72/24	08--00	Chahi
132				72/25	8--0	Chahi
133				73/01/1	3--16	Chahi
134				73/01/2	4--0	Chahi
135				73/2	7--4	Chahi
136				73/9	5--12	Chahi
137				73/10	8--0	Chahi
138				73/11	8--0	Chahi
139				73/12	4--0	Chahi
140				73/19	2--4	Chahi
141				73/20	8--0	Chahi
142				73/21	7--18	Chahi
143				73/22	0--7	Chahi
144				74/1/1	0--8	Chahi

145				74/1/2	5--12	Chahi
146				74/10	3--12	Chahi
147				74/11	1--8	Chahi
148				75/1	7--12	Chahi
149				75/2	8--0	Chahi
150				75/3	8--0	Chahi
151				75/4	8--0	Chahi
152				75/5	8--0	Chahi
153				75/6	8--0	Chahi
154				75/7	8--0	Chahi
155				75/8	8--0	Chahi
156				75/9	7--18	Chahi
157				75/10	5--14	Chahi
158				75/12	0--13	Chahi
159				75/13	0--13	Chahi
160				75/14	7--10	Chahi
161				75/15	8--0	Chahi
162				75/16	2--19	Chahi
163				75/17	0--9	Chahi
164				76/4	1--19	Chahi
165				76/5	7--14	Chahi
166				76/6	1--12	Chahi
				Total	**104A--04K--11M**	
2	**Hansawala (H.B. No. 337)**	**Khadur Sahib**	**Tarn Taran**	**Khasra No**	**Area K- M**	
1				94	3--6	Common Passage
2				188	0--9	Common Passage
3				195	1--12	Common Passage
4				200	1--3	Common Passage
5				100 Min	22--12	Common Passage
6				102 Min	2--4	Common Passage
7				103 Min	18--0	Natural Drain
8				15/1	3--0	Chahi
9				173/01	0--7	Common Passage
10				32/02/1	4--0	Chahi
11				32/02/2	4--0	Chahi
12				32/03/1	4--0	Chahi
13				32/03/2	4--0	Chahi
14				32/04	08--0	Chahi
15				32/05	8--0	Chahi
16				32/06/1	4--0	Chahi
17				32/06/2	4--0	Chahi
18				32/07	8--0	Chahi
19				32/08	8--0	Chahi
20				32/09min	6--8	Chahi
21				32/09min	1--12	Chahi
22				32/13	5--11	Chahi
23				32/14	6--13	Chahi
24				32/15	6--13	Chahi
25				32/16/1	7--0	Chahi
26				32/16/2	0--12	Chahi
27				32/16/3	0--8	Chahi
28				32/17/1	4--14	Chahi
29				32/17/2	3--6	Chahi

30				32/18/1	0--1	Chahi
31				32/18/2	0--1	Chahi
32				32/18/3	7--2	Chahi
33				32/23/1	3--10	Chahi
34				32/23/2	3--6	Chahi
35				32/24/1	5--0	Chahi
36				32/24/2	3--0	Chahi
37				32/25/1	0--14	Chahi
38				32/25/2	6--12	Chahi
39				32/25/3	0--14	Chahi
40				32/26	0--9	Well
41				33/02	8--0	Chahi
42				33/03/1	4--0	Chahi
43				33/03/2	4--0	Chahi
44				33/04/1	6--0	Chahi
45				33/04/2	2--0	Chahi
46				33/05	7--8	Chahi
47				33/06	7--8	Chahi
48				33/07/1	2--0	Chahi
49				33/7/2/1	4--0	Chahi
50				33/07/2/2	2--0	Chahi
51				33/08/1	4--0	Chahi
52				33/08/2	4--0	Chahi
53				33/09	8--0	Chahi
54				33/12/1	3--2	Chahi
55				33/12/2	4--0	Chahi
56				33/13/1	6--0	Chahi
57				33/13/2	2--0	Chahi
58				33/14/1	1--0	Chahi
59				33/14/2	7--0	Chahi
60				33/15	7--8	Chahi
61				33/16	8--0	Chahi
62				33/17	8--0	Chahi
63				33/18	8--0	Chahi
64				33/19/1	6--8	Chahi
65				33/19/2	1--12	Chahi
66				33/22	8--0	Chahi
67				33/23	8--0	Chahi
68				33/24	8--0	Chahi
69				33/25/1	5--11	Chahi
70				33/25/2	2--9	Chahi
71				33/26	0--12	Well
72				40/01	8--13	Chahi
73				40/02	7--2	Chahi
74				40/03	6--9	Chahi
75				40/04	5--3	Chahi
76				40/05	4--9	Chahi
77				40/06	8--0	Chahi
78				40/07	8--0	Chahi
79				40/08	8--0	Chahi
80				40/09	7--8	Chahi
81				40/10/1	7--11	Chahi
82				40/10/2	0--9	Chahi
83				40/11	7--12	Chahi
84				40/12/1	4--12	Chahi
85				40/12/2	2--16	Chahi

86				40/13/1	6--0	Chahi
87				40/13/2	2--0	Chahi
88				40/14	8--0	Chahi
89				40/15/1/1	3--11	Chahi
90				40/15/1/2	1--9	Chahi
91				40/15/2	3--0	Chahi
92				40/16	8--0	Chahi
93				40/17	8--0	Chahi
94				40/18	8--0	Chahi
95				40/19	7--8	Chahi
96				40/20/1	6--9	Chahi
97				40/20/2	1--3	Chahi
98				40/21	7--12	Chahi
99				40/22	6--16	Chahi
100				40/23	7--7	Chahi
101				40/24	7--7	Chahi
102				40/25	7--7	Chahi
103				41/01	4--0	Chahi
104				41/02	3--11	Chahi
105				41/03	3--2	Chahi
106				41/04	2--10	Chahi
107				41/05	2--4	Chahi
108				41/06	8--0	Chahi
109				41/07/1	4--12	Chahi
110				41/07/2	3--8	Chahi
111				41/08	8--0	Chahi
112				41/09	8--0	Chahi
113				41/10	8--0	Chahi
114				41/11	8--0	Chahi
115				41/12	8--0	Chahi
116				41/13/1	4--0	Chahi
117				41/13/2	4--0	Chahi
118				41/14/1	3--8	Chahi
119				41/14/2	4--12	Chahi
120				41/15	8--0	Chahi
121				41/16	8--0	Chahi
122				41/17/1	4--10	Chahi
123				41/17/2	3--10	Chahi
124				41/18	8--0	Chahi
125				41/19	8--0	Chahi
126				41/20	8--0	Chahi
127				41/21	8--0	Chahi
128				41/22	8--0	Chahi
129				41/23	8--0	Chahi
130				41/24/1	3--10	Chahi
131				41/24/2	4--10	Chahi
132				41/25	8--0	Chahi
133				42/06	5--9	Chahi
134				42/07	6--9	Chahi
135				42/08	7--7	Chahi
136				42/09	7--14	Chahi
137				42/11/3	1--9	Chahi
138				42/12	7--4	Chahi
139				42/13	8--0	Chahi
140				42/14	8--0	Chahi
141				42/15	8--0	Chahi
142				42/16	8--0	Chahi

143				42/17	8--0	Chahi
144				42/18/1	0--16	Chahi
145				42/18/2	7--4	Chahi
146				42/19	8--0	Chahi
147				42/20	8--0	Chahi
148				42/21	8--0	Chahi
149				42/22/1	3--16	Chahi
150				42/22/2	3--8	Chahi
151				42/23	8--0	Chahi
152				42/24	8--0	Chahi
153				42/25	8--0	Chahi
154				43/10	2--11	Chahi
155				43/11/1	4--0	Chahi
156				43/11/2	4--0	Chahi
157				43/12	8--0	Chahi
158				43/13	5--7	Chahi
159				43/14	2--11	Chahi
160				43/17	8--0	Chahi
161				43/18	8--0	Chahi
162				43/19/1	2--13	Chahi
163				43/19/2	5--7	Chahi
164				43/20/1	5--7	Chahi
165				43/20/2	2--13	Chahi
166				43/21/1	4--0	Chahi
167				43/21/2/1	2--13	Chahi
168				43/21/2/2	1--7	Chahi
169				43/22	8--0	Chahi
170				43/23	8--0	Chahi
171				43/24	8--0	Chahi
172				51/01	8--0	Chahi
173				51/02	8--0	Chahi
174				51/03	8--0	Chahi
175				51/04	8--0	Chahi
176				51/07	8--0	Chahi
177				51/08/1	6--0	Chahi
178				51/08/2	2--0	Chahi
179				51/09	8--0	Chahi
180				51/10	8--0	Chahi
181				51/11/1	2--0	Chahi
182				51/11/2/1	2--0	Chahi
183				51/11/2/2	4--0	Chahi
184				51/12/1	2--0	Chahi
185				51/12/2	6--0	Chahi
186				51/13/1	4--0	Chahi
187				51/13/2	4--0	Chahi
188				51/14	8--0	Chahi
189				51/17	8--0	Chahi
190				51/18/1	4--0	Chahi
191				51/18/2	4--0	Chahi
192				51/19/1	6--0	Chahi
193				51/19/2	2--0	Chahi
194				51/20	8--0	Chahi
195				51/21	8--0	Chahi
196				51/22	8--0	Chahi
197				51/23	8--0	Chahi
198				51/24	8--0	Chahi

199				52/02	8--0	Chahi
200				52/03	8--0	Chahi
201				52/04	8--0	Chahi
202				52/07	8--0	Chahi
203				52/08/1	6--16	Chahi
204				53/08/2	1--4	Chahi
205				52/09	8--0	Chahi
206				52/12	6--7	Chahi
207				52/13	6--13	Chahi
208				52/14	6--13	Chahi
209				52/17	8--0	Chahi
210				52/18	8--0	Chahi
211				52/19	7--12	Chahi
212				52/22	7--12	Chahi
213				52/23	8--0	Chahi
214				52/24	8--0	Chahi
215				53/01	8--0	Chahi
216				53/02/1	4--0	Chahi
217				53/02/2	3--4	Chahi
218				53/03	8--0	Chahi
219				53/04/1	5--0	Chahi
220				53/04/2	3--0	Chahi
221				53/05	8--0	Chahi
222				53/06	8--0	Chahi
223				53/09	6--12	Chahi
224				53/10	8--0	Chahi
225				53/11	8--0	Chahi
226				53/12	7--4	Chahi
227				53/13	8--0	Common Passage
228				53/14	8--0	Chahi
229				53/15	8--0	Chahi
230				53/16	8--0	Chahi
231				53/17	7--12	Chahi
232				53/26	0--12	Well
233				54/04	7--18	Chahi
234				54/05	8--0	Chahi
235				54/06	8--0	Chahi
236				54/07	8--0	Chahi
237				54/13	8--0	Chahi
238				54/14	8--0	Chahi
239				54/15/2	3--0	Chahi
240				54/15/2	2--0	Chahi
241				54/17/2	5--01	Chahi
242				54/19/1	3--8	Chahi
243				54/19/2	4--0	Chahi
244				54/20	8--0	Chahi
245				54/21/1	3--19	Chahi
246				54/21/2	3--12	Chahi
247				54/22/1/1	5--0	Chahi
248				54/22/1/2	2--0	Chahi
249				54/22/2	0--8	Chahi
250				54/23	8--0	Chahi
251				54/24	8--0	Chahi
252				55/01/1	1--8	Chahi
253				55/01/2	3--19	Chahi
254				55/01/3/1	2--0	Chahi

255				55/01/3/2	0--5	Chahi
256				55/07	8--0	Chahi
257				55/08/1	2--0	Chahi
268				55/08/2	6--0	Chahi
259				55/09	8--0	Chahi
260				55/10/1/1	0--4	Chahi
261				55/10/1/2	6--0	Chahi
262				55/10/2	0--1	Chahi
263				55/10/3	0--1	Chahi
264				55/10/4	1--6	Chahi
265				55/11	6--13	Chahi
266				55/12	6--13	Chahi
267				55/13	6--13	Chahi
268				55/14	6--7	Chahi
269				55/15	4--0	Chahi
270				55/16/2	4--16	Chahi
271				55/17/1	6--11	Chahi
272				55/17/2	0--18	Chahi
273				55/18/1	4--0	Chahi
274				55/18/2	4--0	Chahi
275				55/19	8--0	Chahi
276				55/20	8--0	Chahi
277				55/22/1	5--4	Chahi
278				55/22/2/1	1--8	Chahi
279				55/22/2/2	1--8	Chahi
280				55/23/1	4--0	Chahi
281				55/23/2	4--0	Chahi
282				55/24/1	5--7	Chahi
283				55/24/2	2--13	Chahi
284				55/26	0--9	Well
285				55/2min	0--19	Chahi
286				55/2min	7--0	Chahi
287				55/3min	1--0	Chahi
288				55/3min	6--7	Chahi
289				55/4min	1--0	Chahi
290				55/4min	6--7	Chahi
291				56/03/1	3--6	Chahi
292				56/13/2	3--3	Chahi
293				88/02	11--4	Common Passage
294				96 Min	4--0	Common Passage
				Total	**200A--00K--19M**	
3	**Hothian (H.B. No. 335)**	**Khadur Sahib**	**Tarn Taran**	**Khasra No**	**Area K -- M**	
1				658	8--0	Chahi
2				659	7--12	Chahi
3				667	7--04	Chahi
4				668	7--11	Chahi
5				670	8--0	Chahi
6				671	8--0	Chahi
7				678	8--0	Chahi
8				679	8--0	Chahi
9				680	8--0	Chahi
10				681	8--0	Chahi
11				682	8--0	Chahi

12				683	8--0	Chahi
13				693	8--0	Chahi
14				694	8--0	Chahi
15				695	8--0	Chahi
16				696	8--0	Chahi
17				697	8--0	Chahi
18				698	8--0	Chahi
19				774	7--7	Chahi
20				775	6--0	Chahi
21				776	7--12	Chahi
22				777	8--0	Chahi
23				778	8--0	Chahi
24				779	7--12	Chahi
25				780	7--12	Chahi
26				781	8--0	Chahi
27				782	2--11	Chahi
28				785	7--11	Chahi
29				786	8--0	Chahi
30				787	9--11	Chahi
31				788	5--0	Chahi
32				789	5--18	Chah
33				790	8--0	Chahi
34				791	8--0	Chahi
35				792	8--0	Chahi
36				793	2--2	Chahi
37				795	8--0	Chahi
38				796	1--16	Chahi
39				797	5--16	Chahi
40				798	5--16	Chahi
41				799	1--6	Chahi
42				800	1--16	Chahi
43				801	8--0	Chahi
44				802	6--7	Chahi
45				803	8--9	Chahi
46				804	7--5	Chahi
47				805	0--11	Chahi
48				806	1--3	Chahi
49				807	5--7	Chahi
50				808	7--8	Chahi
51				809	4--0	Chahi
52				810	4--0	Chahi
53				811	8--0	Chahi
54				812	2--13	Chahi
55				813	5--7	Chahi
56				814	8--0	Chahi
57				815	8--0	Chahi
58				816	8--0	Chahi
59				817	8--0	Chahi
60				818	8--0	Chahi
61				819	7--8	Chahi
62				820	7--8	Chahi
63				821	8--0	Chahi
64				822	8--0	Chahi
65				823	8--0	Chahi
66				824	8--0	Chahi
67				826	8--0	Chahi
68				827	8--0	Chahi
69				828	8--0	Chahi
70				829	8--0	Chahi

71				830	6--16	Chahi
72				831	7--7	Chahi
73				832	7--7	Chahi
74				833	7--7	Chahi
75				835	3--7	Well
76				836	8--0	Chahi
77				837	0--12	Chahi
78				838	7--12	Chahi
79				839	8--0	Chahi
80				840	7--12	Chahi
81				841	2--4	Chahi
82				842	6--0	Chahi
83				843	8--0	Chahi
84				844	4--0	Chahi
85				845	3--12	Chahi
86				846	8--0	Chahi
87				847	7--6	Chahi
88				848	0--10	Chahi
89				849	8--0	Chahi
90				850	8--0	Chahi
91				851	8--0	Chahi
92				852	8--0	Chahi
93				853	7--12	Chahi
94				854	0--18	Chahi
95				855	0--8	Chahi
96				856	6--13	Chahi
97				857	8--0	Chahi
98				858	2--15	Chahi
99				859	0--8	Chahi
100				860	4--9	Chahi
101				861	8--0	Chahi
102				862	8--0	Chahi
103				863	8--0	Chahi
104				864	8--0	Chahi
105				865	8--0	Chahi
106				866	8--0	Chahi
107				867	7--12	Chahi
108				868	8--0	Chahi
109				869	8--0	Chahi
110				870	0--10	Chahi
111				871	7--6	Chahi
112				872	8--0	Chahi
113				873	8--0	Chahi
114				874	8--0	Chahi
115				875	8--0	Chahi
116				876	6--0	Chahi
117				877	8--0	Chahi
118				879	8--0	Chahi
119				880	8--0	Chahi
120				881	0--16	Chahi
121				882	7--4	Chahi
122				893	3--12	Chahi
123				894	8--0	Chahi
124				895	9--16	Chahi
125				896	3--2	Chahi
126				897	8--0	Chahi
127				898	8--0	Chahi
128				899	4--5	Chahi
129				901	4--0	Chahi

130				902	4--0	Chahi
131				903	4--2	Chahi
132				904	8--0	Chahi
133				905	1--11	Chahi
134				906	5--14	Chahi
135				907	8--0	Chahi
136				908	8--0	Chahi
137				909	8--0	Chahi
138				910	8--0	Chahi
139				911	8--0	Chahi
140				912	2--14	Chahi
141				913	7--6	Chahi
142				914	8--0	Chahi
143				915	8--0	Chahi
144				916	6--13	Chahi
145				917	0--18	Chahi
146				918	8--0	Chahi
147				919	8--0	Chahi
148				920	8--0	Chahi
149				921	4--0	Chahi
150				922	4--0	Chahi
151				923	4--11	Chahi
152				924	3--18	Chahi
153				925	8--0	Chahi
154				926	8--0	Chahi
155				927	8--0	Chahi
156				928	8--0	Chahi
157				929	8--0	Chahi
158				930	8--0	Chahi
159				931	8--0	Chahi
160				932	0--10	Chahi
161				933	7--10	Chahi
162				934	8--0	Chahi
163				935	8--0	Chahi
164				936	8--0	Chahi
165				937	3--0	Chahi
166				938	8--6	Chahi
167				939	8--0	Chahi
168				940	8--0	Chahi
169				941	6--0	Chahi
170				942	6--0	Chahi
171				943	2--0	Chahi
172				945	7--11	Chahi
173				946	7--11	Chahi
174				947	8--0	Chahi
175				948	8--0	Chahi
176				949	8--0	Chahi
177				952	8--0	Chahi
178				953	2--13	Chahi
179				954	5--7	Chahi
180				955	6--0	Chahi
181				956	6--6	Chahi
182				957	8--0	Chahi
183				958	8--0	Chahi
184				959	7--4	Chahi
185				960	0--16	Chahi
186				961	8--0	Chahi
187				962	8--0	Chahi
188				963	8--0	Chahi

189				964	8--0	Chahi
190				965	8--0	Chahi
191				966	8--0	Chahi
192				967	1--0	Chahi
193				968	6--8	Chahi
194				969	0--12	Chahi
195				970	8--0	Chahi
196				971	8--0	Chahi
197				972	8--0	Chahi
198				973	0--8	Chahi
199				974	7--12	Chahi
200				975	8--0	Chahi
201				976	6--0	Chahi
202				977	2--0	Chahi
203				978	8--00	Chahi
204				979	9--11	Chahi
205				980	7--4	Chahi
206				981	4--2	Chahi
207				982	11--5	Chahi
208				983	7--7	Chahi
209				984	8--0	Chahi
210				985	8--0	Chahi
211				986	2--11	Chahi
212				987	4--7	Chahi
213				988	8--0	Chahi
214				989	8--0	Chahi
215				990	7--7	Chahi
216				991	7--7	Chahi
217				992	8--0	Chahi
218				993	8--0	Chahi
219				994	6--4	Chahi
220				995	7--13	Chahi
221				996	8--0	Chahi
222				997	8--0	Chahi
223				998	7--7	Chahi
224				999	0--19	Chahi
225				1000	6--19	Chahi
226				1001	7--12	Chahi
227				1002	3--8	Chahi
228				1003	0--10	Chahi
229				1004	3--19	Chahi
230				1005	6--5	Chahi
231				1006	2--4	Chahi
232				1007	9--4	Chahi
233				1008	8--0	Chahi
234				1009	8--0	Chahi
235				1010	6--13	Chahi
236				1010	0--14	Chahi
237				1011	7--7	Chahi
238				1012	8--0	Chahi
239				1013	8--0	Chahi
240				1014	8--0	Chahi
241				1015	2--0	Chahi
242				1016	2--0	Chahi
243				1017	8--0	Chahi
244				1018	8--0	Chahi
245				1019	4--0	Chahi
246				1020	4--0	Chahi
247				1021	5--10	Chahi

248				1022	1--17	Chahi
249				1023	7--7	Chahi
250				1024	7--6	Chahi
251				1025	0--15	Chahi
252				1026	8--0	Chahi
253				1027	8--0	Chahi
254				1028	3--18	Chahi
255				1029	7--2	Chahi
256				1030	8--0	Chahi
257				1031	8--0	Chahi
258				1032	8--0	Chahi
259				1033	7--7	Chahi
260				1034	6--19	Chahi
261				1035	1--3	Chahi
262				1036	4--12	Chahi
263				1037	2--15	Chahi
264				1038	7--0	Chahi
265				1039	4--16	Chahi
266				1040	1--13	Chahi
267				1041	3--2	Chahi
268				1042	8--0	Chahi
269				1043	8--0	Chahi
270				1044	8--0	Chahi
271				1045	7--12	Chahi
272				1046	7--12	Chahi
273				1047	8--0	Chahi
274				1048	8--0	Chahi
275				1049	8--0	Chahi
276				1050	4--2	Chahi
277				1051	5--08	Chahi
278				1052	8--0	Chahi
279				1053	8--0	Chahi
280				1054	8--0	Chahi
281				1055	8--0	Chahi
282				1056	8--0	Chahi
283				1057	2--13	Chahi
284				1058	6--0	Chahi
285				1060	8--0	Chahi
286				1061	7--18	Chahi
287				1062	1--10	Chahi
288				1063	4--8	Chahi
289				1064	8--18	Chahi
290				1059min	1--2	Chahi
291				1059min	6--18	Chahi
292				784/01	0--6	Chahi
293				784/02	6--14	Chahi
294				794/01	3--9	Chahi
295				794/02	0--16	Chahi
296				799/01	0--11	Well
297				804/01	0--4	Well
298				825/01	0--13	Chahi
299				825/02/1	5--0	Chahi
300				825/02/2	2--7	Chahi
301				834/01	2--4	Chahi
302				834/02	5--3	Chahi
303				878 Min	4--0	Chahi
304				878 Min	4--0	Chahi
305				883/01	0--15	Chahi
306				883/03	0--8	Chahi

307				884/01	1--0	Chahi
308				884/04	0--3	Chahi
309				900 Min	4--0	Chahi
310				900 Min	4--0	Chahi
311				944/01	1--17	Chahi
312				944/02	7--11	Chahi
313				950/01	4--0	Chahi
314				951/01	4--0	Chahi
315				951/02	4--0	Chahi
				Total	**240A-4K-01M**	
4	**Pindian**	**Khadur Sahib**	**Tarn Taran**	**Khas ra**	**Area**	
	(H.B. No. 336)			**No**	**K -- M**	
1				37/19	2--13	Chahi
2				37/20	6--16	Chahi
3				37/21/1	0--13	Chahi
4				37/21/2	6--0	Chahi
5				37/21/3	1--7	Chahi
6				37/22	8--0	Chahi
7				37/23	7--0	Chahi
8				37/24	4--2	Chahi
9				37/25	1--9	Chahi
10				38/01	8--0	Chahi
11				38/02	8--0	Chahi
12				38/03	8--0	Chahi
13				38/04	8--0	Chahi
14				38/05/1	4--0	Chahi
15				38/05/2	4--0	Chahi
16				38/06	8--0	Chahi
17				38/07	8--0	Chahi
18				38/08/2	6--5	Chahi
19				38/09	7--11	Chahi
20				38/10	7--11	Chahi
21				38/11	8--0	Chahi
22				38/12	8--0	Chahi
23				38/13	7--12	Chahi
24				38/14	8--0	Chahi
25				38/15	8--0	Chahi
26				38/16	8--0	Chahi
27				38/17	8--0	Chahi
28				38/18	7--12	Chahi
29				38/19	8--0	Chahi
30				38/20/1	1--8	Chahi
31				38/20/2	6--12	Chahi
32				38/21/1	1--8	Chahi
33				38/21/2	6--12	Chahi
34				38/22	8--0	Chahi
35				38/23	7--12	Chahi
36				38/24	8--0	Chahi
37				38/25	8--0	Chahi
38				38/26	0--16	Well
39				39/01	7--7	Chahi
40				39/02	7--7	Chahi
41				39/03/2	4--0	Chahi
42				39/04	7--7	Chahi
43				39/05	7--7	Chahi
44				39/06	8--0	Chahi

45				39/07	8--0	Chahi
46				39/08/1	0--13	Chahi
47				39/08/2	7--7	Chahi
48				39/9/1/1	5--11	Chahi
49				39/9/1/2	2--4	Chahi
50				39/10	8--0	Chahi
51				39/11	8--0	Chahi
52				39/12	8--0	Chahi
53				39/13/1	1--7	Chahi
54				39/13/2/1	6--13	Chahi
55				39/14/1	4--0	Chahi
56				39/14/2	4--0	Chahi
57				39/15	8--0	Chahi
58				39/16/1	2--0	Chahi
59				39/16/2	6--0	Chahi
60				39/17/1	1--0	Chahi
61				39/17/2	7--0	Chahi
62				39/18	8--0	Chahi
63				39/19/1	4--0	Chahi
64				39/19/2	4--0	Chahi
65				39/20/1	2--18	Chahi
66				39/20/2	5--2	Chahi
67				39/21/1	6--8	Chahi
68				39/21/2	0--19	Chahi
69				39/22	7--5	Chahi
70				39/23	8--0	Chahi
71				39/24	8--0	Chahi
72				39/25	8--0	Chahi
73				39/26	1--2	Well
74				39/3/1	3--2	Chahi
75				40/03	1--11	Chahi
76				40/04	2--16	Chahi
77				40/05	3--11	Chahi
78				41/01	4--0	Chahi
79				41/02	4--9	Chahi
80				41/03/1	4--0	Chahi
81				41/03/2	0--18	Chahi
82				41/04	5--7	Chahi
83				41/05	5--16	Chahi
84				42/01	7--7	Chahi
85				42/02	6--19	Chahi
86				42/03	7--7	Chahi
87				42/04/1	1--7	Chahi
88				42/04/2	6--0	Chahi
89				42/05	7--7	Chahi
90				42/06	8--0	Chahi
91				42/07	8--0	Chahi
92				42/08	8--0	Chahi
93				42/09	7--12	Chahi
94				42/10	8--0	Chahi
95				42/11	8--0	Chahi
96				42/12	8--0	Chahi
97				42/13	8--0	Chahi
98				42/14	8--0	Chahi
99				42/15	8--0	Chahi
100				42/16	8--0	Chahi
101				42/17/1	0--8	Chahi
102				42/17/2	7--12	Chahi
103				42/18	8--0	Chahi

104				42/19/1	5--13	Chahi
105				42/19/2	1--10	Chahi
106				42/19/3	0--13	Chahi
107				42/20	8--0	Chahi
108				42/21	8--0	Chahi
109				42/22	8--0	Chahi
110				42/23	8--0	Chahi
111				42/24/1	5--7	Chahi
112				42/24/2	2--13	Chahi
113				42/25/2	3--13	Chahi
114				42/25/2	4--7	Chahi
115				43/01	6--11	Chahi
116				43/02	3--11	Chahi
117				43/06	3--4	Chahi
118				43/07	5--16	Chahi
119				43/08/1	2--5	Chahi
120				43/08/2	6--6	Chahi
121				43/09	8--0	Chahi
122				43/10	8--0	Chahi
123				43/11	8--0	Chahi
124				43/12	8--0	Chahi
125				43/13	8--0	Chahi
126				43/14	8--0	Chahi
127				43/15/1	2--0	Chahi
128				43/15/2	6--0	Chahi
129				43/16	8--0	Chahi
130				43/17	8--0	Chahi
131				43/18/1	4--0	Chahi
132				43/18/2	4--0	Chahi
133				43/19/1	4--0	Chahi
134				43/19/2	4--0	Chahi
135				43/20/1	5--2	Chahi
136				43/20/2	2--18	Chahi
137				43/21/1	1--4	Chahi
138				43/21/2	6--16	Chahi
139				43/22	8--0	Chahi
140				43/23	6--13	Chahi
141				43/24	8--0	Chahi
142				43/25	8--0	Chahi
143				43/26	0--16	Well
144				44/10	1--4	Chahi
145				44/11	8--0	Chahi
146				44/12	8--0	Chahi
147				44/13	8--0	Chahi
148				44/14	4--13	Chahi
149				44/15	3--2	Chahi
150				44/16	8--0	Chahi
151				44/17	8--0	Chahi
152				44/18	6--4	Chahi
153				44/19	8--0	Chahi
154				44/20	8--0	Chahi
155				44/21/1	1--0	Chahi
156				44/21/2	7--0	Chahi
157				44/22	8--0	Chahi
158				44/23	8--0	Chahi
159				44/24	8--0	Chahi
160				44/25	8--0	Chahi
161				45/01	7--7	Chahi
162				45/02	7--7	Chahi

163				45/03/1	4--18	Chahi
164				45/03/2	2--9	Chahi
165				45/04	7--7	Chahi
166				45/05	7--7	Chahi
167				45/06	8--0	Chahi
168				45/07	8--0	Chahi
169				45/08	8--0	Chahi
170				45/09	8--0	Chahi
171				45/10	8--08	Chahi
172				45/11	8--0	Chahi
173				45/12	8--0	Chahi
174				45/13	8--0	Chahi
175				45/14/1	4--0	Chahi
176				45/14/2	4--0	Chahi
177				45/15/1	7--7	Chahi
178				45/15/2	0--13	Chahi
179				45/16	8--0	Chahi
180				45/17	8--0	Chahi
181				45/18	8--0	Chahi
182				45/19/1	1--11	Chahi
183				45/19/2	6--9	Chahi
184				45/20/1	1--11	Chahi
185				45/20/2	6--9	Chahi
186				45/21/1	4--7	Chahi
187				45/21/2	3--13	Chahi
188				45/22/1	4--7	Chahi
189				45/22/2	3--13	Chahi
190				45/23	8--0	Chahi
191				45/24	8--0	Chahi
192				45/25/1	7--4	Chahi
193				45/25/2	0--16	Chahi
194				46/01	6--9	Chahi
195				46/02/1	0--18	Chahi
196				46/02/2	6--11	Chahi
197				46/03	8--11	Chahi
198				46/04	8--0	Chahi
199				46/05/1	4--0	Chahi
200				46/05/2	4--0	Chahi
201				46/06/1	1--14	Chahi
202				46/06/2	1--3	Chahi
203				46/07	1--9	Chahi
204				47/01	6--19	Chahi
205				47/02	7--7	Chahi
206				47/03	7--7	Chahi
207				47/04/1	1--7	Chahi
208				47/04/2	6--0	Chahi
209				47/07	8--0	Chahi
210				47/08	8--0	Chahi
211				47/09/1	0--12	Chahi
212				47/09/2	7--8	Chahi
213				47/10/1	1--6	Chahi
214				47/10/2	6--6	Chahi
215				47/11	7--12	Chahi
216				47/12/1	6--18	Chahi
217				47/12/2	1--2	Chahi
218				47/13	8--0	Chahi
219				47/14	8--0	Chahi
220				47/17	8--0	Chahi
221				47/18	8--0	Chahi

222				47/19	8--0	Chahi
223				47/20	7--12	Chahi
224				47/21	7--12	Chahi
225				47/22	8--0	Chahi
226				47/23	8--0	Chahi
227				47/24	8--0	Chahi
228				48/11	1--8	Chahi
229				48/18	1--8	Chahi
230				48/19	5--11	Chahi
231				48/20	8--0	Chahi
232				48/21/1	7--12	Chahi
233				48/21/2	0--8	Chahi
234				48/22	8--0	Chahi
235				48/23	7--18	Chahi
236				48/24/1	2--12	Chahi
237				48/24/2	2--11	Chahi
238				48/25	1--6	Chahi
239				50/01	8--0	Chahi
240				50/02	8--0	Chahi
241				50/03	8--0	Chahi
242				50/04	8--0	Chahi
243				50/07	8--0	Chahi
244				50/08	8--0	Chahi
245				50/09	8--0	Chahi
246				50/10	5--7	Chahi
247				50/13	2--18	Chahi
248				50/14/1	4--0	Chahi
249				50/14/2	1--8	Chahi
				Total	**180A -5K-5M**	
5	**Verowal H.B. 332**	**Khadur Sahib**	**Tarn Taran**	**Khasra No**	**Area K - M**	
1				190	12--16	Common Passage
2				303	0--17	Common Passage
3				304	8--11	Common Passage
4				305	0--16	Common Passage
5				109/11	7--12	Chahi
6				109/12	8--0	Chahi
7				109/13	8--0	Chahi
8				109/14	8--0	Chahi
9				109/15	8--0	Chahi
10				109/16	8--0	Chahi
11				109/17	8--0	Chahi
12				109/18	8--0	Chahi
13				109/19/1	4--8	Chahi
14				109/19/2	3--12	Chahi
15				109/20	7--12	Chahi
16				109/21	7--12	Chahi
17				109/22	8--0	Chahi
18				109/23	8--0	Chahi
19				109/24	8--0	Chahi
20				109/25	8--0	Chahi
21				110/11	8--0	Chahi
22				110/12/1	1--12	Chahi
23				110/12/2	6--8	Chahi
24				110/13/1	4--0	Chahi
25				110/13/3/1	2--02	Chahi
26				110/13/3/2	1--0	Chahi
27				110/14	8--0	Chahi

28				110/15	7–4	Chahi
29				110/16	7–11	Chahi
30				110/17/1	6–9	Chahi
31				110/17/2	1–2	Chahi
32				110/18/1	5–6	Chahi
33				110/18/2	2–0	Chahi
34,				110/19	8–0	Chahi
35				110/20	8–0	Chahi
36				110/21	8–0	Chahi
37				110/22	8–0	Chahi
38				110/23	8–0	Chahi
39				110/24	8–0	Chahi
40				110/25	8–0	Chahi
41				110/26	0–16	Well
42				111/11	8–0	Chahi
43				111/12/1	2–0	Chahi
44				111/12/2	4–0	Chahi
45				111/13	8–0	Chahi
46				111/14	8–0	Chahi
47				111/15	8–0	Chahi
48				111/16	8–0	Chahi
49				111/17	8–0	Chahi
50				111/18	8–0	Chahi
51				111/19	7–8	Chahi
52				111/20/1	0–10	Chahi
53				111/20/2	6–0	Chahi
54				111/21/1	1–16	Chahi
55				111/21/1	4–0	Chahi
56				111/22	8–0	Chahi
57				111/23	7–4	Chahi
58				111/24	8–0	Chahi
59				111/25	8–0	Chahi
60				111/26	0–16	Chahi
61				112/11/1	1–4	Chahi
62				112/11/2	6–11	Chahi
63				112/12	8–0	Chahi
64				112/13	8–0	Chahi
65				112/14	8–0	Chahi
66				112/15	8–0	Chahi
67				112/16	8–0	Chahi
68				112/17	8–0	Chahi
69				112/18	8–0	Chahi
70				112/19	8–0	Chahi
71				112/20	8–0	Chahi
72				112/21	7–11	Chahi
73				112/22	6–15	Chahi
74				112/23	7–11	Chahi
75				112/24	7–11	Chahi
76				112/25	7–11	Chahi
77				112/26	0–16	Chahi
78				113/11/1	5–0	Chahi
79				113/11/2	3–0	Chahi
80				113/12/1	1–3	Chahi
81				113/12/1/1	2–13	Chahi
82				113/12/2	4–4	Chahi
83				113/13	8–0	Chahi
84				113/14	8–0	Chahi
85				113/15	8–0	Chahi
86				113/16	8–0	Chahi

146				118/14	6–5	Chahi
147				118/15	0–4	Chahi
148				118/17 min	1–6	Chahi
149				118/18/1	1–04	Chahi
150				118/18/2	6–16	Chahi
151				118/19	7–12	Chahi
152				118/20	7–4	Chahi
153				118/21	8–0	Chahi
154				118/22	7–12	Chahi
155				118/23	8–0	Chahi
156				118/24	7–18	Chahi
157				118/26	0–16	Well
158				118/27	0–16	Well
159				119/01/1	3–0	Chahi
160				119/01/2	5–0	Chahi
161				119/02	8–0	Chahi
162				119/03/1	6–3	Chahi
163				119/03/2	1–17	Chahi
164				119/04	8–0	Chahi
165				119/05	8–0	Chahi
166				119/06	8–0	Chahi
167				119/07	8–0	Chahi
168				119/08	8–0	Chahi
169				119/09/1	1–12	Chahi
170				119/09/2	6–8	Chahi
171				119/10	8–0	Chahi
172				119/11	2–16	Chahi
173				119/12	6–11	Chahi
174				119/13	7–16	Chahi
175				119/14/1	2–8	Chahi
[illegible]				119/14/2	5–12	Chahi
[illegible]				119/15	8–0	Chahi
178				119/16	7–15	Chahi
179				119/17	3–16	Chahi
[illegible]				119/18	0–3	Chahi
				119/25	1–3	Chahi
				120/01	6–1	Chahi
183				120/02	7–11	Chahi
184				120/03	8–0	Chahi
[illegible]				120/04	8–0	Chahi
[illegible]				120/05	8–0	Chahi
[illegible]				120/06	8–0	Chahi
188				120/07	8–0	Chahi
189				120/08	8–0	Chahi
				120/09	8–0	Chahi
				120/10	6–8	Chahi
192				120/11	6–8	Chahi
193				120/12	8–0	Chahi
[illegible]				120/13	7–4	Chahi
				120/14/1	4–16	Chahi
[illegible]				120/14/2	3–4	Chahi
197				120/15	8–0	Chahi
198				120/16	8–0	Chahi
				120/17	8–0	Chahi
				120/18	8–0	Chahi
[illegible]				120/19	8–0	Chahi
202				120/20	8–0	Chahi
[illegible]				120/21	4–12	Chahi
[illegible]				120/22	7–11	Chahi

205				120/23	8--0	Chahi
206				120/24	8--0	Chahi
207				120/25/1	4--9	Chahi
208				120/25/2	3--11	Chahi
209				120/26	0--16	Well
210				121/01	8--0	Chahi
211				121/02	8--0	Chahi
212				121/03	7--4	Chahi
213				121/04	8--0	Chahi
214				121/05	8--0	Chahi
215				121/06	8--0	Chahi
216				121/07	8--0	Chahi
217				121/08	8--0	Chahi
218				121/08/1	0--0	Chahi
219				121/09	8--0	Chahi
220				121/10	8--0	Chahi
221				121/11	8--0	Chahi
222				121/12	8--0	Chahi
223				121/13	8--0	Chahi
224				121/14	8--0	Chahi
225				121/15	8--0	Chahi
226				121/16	8--0	Chahi
227				121/17/1	2--13	Chahi
228				121/17/2	5--7	Chahi
229				121/18	8--0	Chahi
230				121/19	8--0	Chahi
231				121/20	8--0	Chahi
232				121/21	8--0	Chahi
233				121/22	8--0	Chahi
234				121/23	8--0	Chahi
				121/24/1	1--0	Chahi
				121/24/2	7--0	
237				121/25/1	2--0	Chahi
238				121/25/2	6--0	Chahi
239				121/26	0--16	Well
[illegible]				122/01	7--12	Chahi
241				122/02	8--0	Chahi
242				122/03	8--0	Chahi
243				122/04	8--0	Chahi
244				122/05	8--0	Chahi
245				122/06	8--0	Chahi
246				122/07/1	4--12	Chahi
247				122/07/2	3--8	Chahi
248				122/08	8--0	Chahi
				122/09	8--0	Chahi
				122/10	8--0	Chahi
251				122/11	7--12	Chahi
252				122/12	8--0	Chahi
253				122/13	8--0	Chahi
[illegible]				122/14	8--0	Chahi
255				122/15/1	2--0	Chahi
256				122/15/2	6--0	Chahi
257				122/16	8--0	Chahi
				122/17	8--0	Chahi
				122/18	8--0	Chahi
260				122/19	8--0	Chahi
261				122/20	7--12	Chahi
262				122/21	7--12	Chahi
263				122/22	8--0	Chahi

264				122/23	8--0	Chahi
265				122/24	8--0	Chahi
266				122/25	8--0	Chahi
267				134/01	7--12	Chahi
268				134/02	8--0	Chahi
269				134/03	8--0	Chahi
270				134/05	8--0	Chahi
271				134/06	8--0	Chahi
272				134/07	8--0	Chahi
273				134/08	8--0	Chahi
274				134/09	8--0	Chahi
275				134/10	8--0	Chahi
276				134/11	7--12	Chahi
277				134/12	8--0	Chahi
278				134/13	8--0	Chahi
279				134/14	8--0	Chahi
280				134/15	8--0	Chahi
281				134/16	8--0	Chahi
282				134/17	8--0	Chahi
283				134/18	8--0	Chahi
284				134/19	8--0	Chahi
285				134/20	7--12	Chahi
286				134/21	0--0	Chahi
287				134/21	7--12	Chahi
288				134/22	8--0	Chahi
289				134/23	8--0	Chahi
290				134/24	8--0	Chahi
291				134/25	8--0	Chahi
292				134/4/1	4--0	Chahi
293				134/4/2	4--0	Chahi
294				135/01	8--0	Chahi
295				135/02	8--0	Chahi
296				135/03	8--0	Chahi
297				135/4/2	0--9	Chahi
298				135/5/2	0--9	Chahi
299				135/06	8--0	Chahi
300				135/07	8--0	Chahi
301				135/08	8--0	Chahi
302				135/09	8--0	Chahi
303				135/10	8--0	Chahi
304				135/11	8--0	Chahi
305				135/12	8--0	Chahi
306				135/13	8--0	Chahi
307				135/14	8--0	Chahi
308				135/15	8--0	Chahi
309				135/16	8--0	Chahi
310				135/17	8--0	Chahi
311				135/18	8--0	Chahi
312				135/19	8--0	Chahi
313				135/20	8--0	Chahi
314				135/21	8--0	Chahi
315				135/22	8--0	Chahi
316				135/23	8--0	Chahi
317				135/24	8--0	Chahi
318				135/25	8--0	Chahi
319				135/4/1	7--11	Chahi
320				135/5/1	7--11	Chahi
321				136/01	0--1	Chahi
322				136/02	2--0	Chahi

323				**136/03**	**5--2**	Chahi
324				**136/04**	**8--0**	Chahi
325				**136/05**	**8--0**	Chahi
326				**136/06**	**8--0**	Chahi
327				**136/07**	**7--16**	Chahi
328				**136/13**	**0--12**	Chahi
329				**136/14**	**8--0**	Chahi
330				**136/15**	**8--0**	Chahi
331				**136/16**	**8--0**	Chahi
332				**136/17**	**8--0**	Chahi
333				**136/18**	**2--2**	Chahi
334				**136/23**	**3--18**	Chahi
335				**136/24**	**8--0**	Chahi
336				**136/25**	**8--0**	Chahi
337				**137/03**	**5--12**	Chahi
338				**137/04**	**8--0**	Chahi
339				**137/05**	**8--0**	Chahi
340				**137/07**	**8--0**	Chahi
341				**137/08**	**7--8**	Chahi
342				**137/12**	**1--10**	Chahi
343				**137/13**	**8--0**	Chahi
344				**137/14/1**	**1--12**	Chahi
345				**137/14/2**	**6--8**	Chahi
346				**137/17**	**8--0**	Chahi
347				**137/18**	**8--0**	Chahi
348				**137/19**	**3--14**	Chahi
349				**137/22**	**6--0**	Chahi
350				**137/23**	**8--0**	Chahi
351				**137/24/1**	**2--0**	Chahi
352				**137/24/2**	**2--8**	Chahi
353				**137/24/3**	**3--12**	Chahi
354				**138/01**	**8--0**	Chahi
355				**138/02**	**8--0**	Chahi
356				**138/03**	**8--0**	Chahi
357				**138/04**	**8--0**	Chahi
358				**138/05**	**8--0**	Chahi
359				**139/01**	**7--12**	Chahi
360				**139/02**	**8--0**	Chahi
361				**139/03**	**8--0**	Chahi
362				**139/04**	**8--0**	Chahi
[illegible]				**139/05**	**8--0**	Chahi
364				**302/01**	**6--8**	Common Passage
				Total	**288A-3K-15M**	
				Grand Total	**1014Acres-02Kanals-11Marlas**	

Total Area 1014Acres-02Kanals-11Marlas

All the Khasra Nos. Area of land mentioned in the draft award have been thoroughly checked and after checking some clerical and typographically mistakes were detected. The same have been corrected and after correction the area of land comes to 1014 Acres, 02 Kanals, 11 Marlas. The compensation have been calculated accordingly.

Notification Under Section 4

The Govt. of Punjab, Electricity Departmentvide No. 10/268/06/ T ; 6/ 19072-76 dated 11-7-2007 which was published in Govt. of Punjab Gazzette, has issued Notification under section 4 of the Land Acquisition Act 1894 in respect of land measuring 1014 Acres, 02 Kanals, 11 Marlas situated in Villages Alampur, Hansawala, Hothian, Pindian and Verowal. Tehsil Khadur Sahib Distt. Tarn Taran.

This Notification was also published in daily Newspapers The Tribune dated 3-8-2007 and the Daily Ajit Jalandhar dated 2-8-2007. In response to this notification,objections were invited u/s 5 A of the land acquisition act. The following interested people filed objections under section 5-A of Land Acquisition Act 1894.

1. Bachan Singh s/o Tarlok Singh r/o VPO Pindian
2. Jagdish Singh s/o Pal Singh ,,
3. Rajinder Kaur w/o Tarsem Singh ,,
4. Mukhtar Singh s/o Jaswant Singh r/o VPO Alampur
5. Ranjit Singh s/o Pritam Singh r/o VPO Hansawala
6. Surjit Singh s/o Janmeja Singh r/o Pindian
7. Amrik Singh s/o Surta Singh r/o Verowal Bawian
8. Ranjit Singh s/o Naranjan Singh r/o VPO Hothian
9. Gurnam Singh s/o Ranjit Singh r/o Sohian Kalan Teh. & Distt. Amritsar
10. Hajari Lal s/o Kundan Singh r/o VPO Verowal Bawian
11. Gopal Singh s/o Gurbax Singh r/o VPO Hothian
12. Surjan Singh, Arjan Singh ss/o Jawala Singh r/o VPO Hothian
13. Ajit Singh s/o Dalip Ssingh r/o VPO Muglani

The detail of objection under section 5-A of the Land Acquisition Act 1894 as under:-

1. Jagdish Singh S/o Pal Singh ,Rajinder Kaur W/o Tarsem Singh r/o Pindia.	
Objected that their khasra no. 50/5(8-0) is not being acquired for the proposed Tharmal Plant .Either this Khasra no. be acquired or a suitable passage may be provided for so that they may have access for its cultivation.	The Govt. has not proposed to acquire this Khasra No. for the proposal Tharmal Power Plant as notified under section 4 of Land Aqcuition Act so a suitable passage can be provided under rules.
2 Bachan Singh S/o Tarlok Singh r/o Pindian.	
Objected that their Land in Khasra No 47/5(8-00) 47/6(8-0) ,49/1(5-10),49/2(2-10),49/9(3-14),49/10(8-00) is not being acquired whereas 48/24/2(2-11),and 48/25(1-16)is only being acquired .So either the above said remaining area may also be acquired for the proposed Tharmal Plant or a suitable passage be provided for the cultivation of that area.	The land owned by applicant measuring (3-17) is being acquired and (35-14)of his Land is not being acquired .The passage for the land not being acquired can be provided under Rules.
3(a) Mukhtar Singh S/o Jaswant Singh r/o Alampur.	
Objected that Govt. has no right to ruin the small farmers as they have had to toil hard to make this barren land cultivable & fertile *spending a huge amount of money*. If the Govt. must acquire land for such big projects,it may acquire on inferior or less fertile land. (b) The Town of Shri Goindwal Sahib is situated near land being acquired for the Tharmal Power Plant .The poisonous gases and other obnoxious substances will pollute the whole area specially the town of Shri Goindwal Sahib and Sh.Gurdwara Baoli Sahib situated in the town will be worst effected.This beautiful and holyshrine in town which is also called "Sikhi Da Dhura" the centre of Sikhism will get ruined by the pollution caused by coil based Tharmal Power Plant.	(a)It is not true that the land being acquired is very much fertile. The land in surrounding areas is much more fertile. More over the land being acquired is about 6 ft. or more low lying in depth than the land of surrounding villages.However this land has been selected for the proposed Tharmal Power Plant after thoughtful consideration and inspection by experts.The Govt is going to pay handsome compensation to the land owned.As for as the question of causing air & water and other kinds of pollution is concerned.Tharmal Power Plant can only be commissioned if it abides by the conditions of N.O.C. issued by Punjab Pollution Control Board.If the Tharmal Power Plant authorities do not abide by the Pollution control terms and conditions under various acts and rule for the pollution control,the same can be shut down by the Punjab Pollution Control Board. As the Tharmal Power Plant authorities are going to take every step to avoid pollution,there is no question of any adverse affect to the Town of Sh.Goindwal Sahib, .The Gurdwara Sahib situated there and the other surronding areas and population.
(c)That this land is only source of income for the family of applicant agriculture. The rates of	There is no question of depriving him of means of livlihood after acquisition of land of applicant. He

farm land have become skyhigh & is not even available @ Rs 40 Lac/Acre. They are living in a joint family and acquisition of land will seprate him of this joint family leaving him high & dry. He shall not be able to run his family and earn livlihood by purchasing a new piece of land and he shall be subjected to untold economic burden and misery.	shall be provided a suitable and handsome compentation per Acre of his land. He shall be able to by a suitable agriculture land and other sources of income with the comlentation being provided by the Govt.
4. Ranjit Singh S/o Pritam Singh r/o Hansawala **5. Surjit Singh S/o Janmeja Singh r/o Pindia.** **6. Amrik Singh S/o Surta Singh r/o Vairowal Bawian.** **7. Ranjit Singh S/o Niranjan Singh r/o Hothian..** **8. Gurnam Singh S/o Ranjit Singh r/o Sohian Kalan Teh. and District Amritsar.**	The comments on the objection of these applicants is as per explanation and comments in the above said paras a,b&c of applicant no. 3
(a) Objected that 56 Kanal of his land situated in village Vairowal is being acquired for the project Tharmal Plant.The land is near river Beas ,is very fertile & ground water fit for irrigation is available at the depth 20 ft. only costing peanuts for it. (b) This land is very much valuases.The compensation being given by the Govt is so less and meagre.Previously also ,the Govt. had acquired his urban property mearsing 112 sq.yards,where 15 commercial shops were built.This property was acquired in 1988 for Galyara project for beautification of sorroundings of Sh. Harmandir Sahib Amritsar.At that time his family and sources of income had been ruined.Now he is left with these 7 Acres of land which earned tread and butter of his family.Morever his mother has emotional attachment for this land . Her psychy and peace of mind which is badly bruised with the news of land acquisition can never be re-stored by any size of compensation how soever bigger or higher it may be.	The Govt has selected this land for acquisition after getting N.O.C from various departments. As the land is near natural source of water i.e. river Beas, it is most suitable for setting up a Tharmal Plant which required round the year supply of water for its month functioning .The compensation being given by the Govt.will be suitable and handsome.The District Price Fixation Commette members are elected nomenees of people i.e. M.L.A,and M.P. of the area ,Chairman ,Panchyat Samitte and Sarpanchas of the villages besides Deputy Commissioner of the District & S.D.M and other revenue officers of the District..The rates of compensation will be fixed by thoughtful consideration and consensus of the commetee.Although this office has no record of land acquired for the Galyara Project, Even then it is considered that the properties acquired for the Galyara Project were suitabe Compensationes and the owners were provided built up shops for their livlihood. The applicant will be enabled to earn this livelihood in a respectable and decent manner as Govt is going to provide him suitable compensation under the rule.
(9) Hazari Lal S/o Kundan Lal Village Vairowal. Objected that a very small peace of land is being acquired for the project. Either whole chunk of the land be acquired or may not be acquired at all. Morover one of his family	The suitable passage for the land left outside the project can be provided under rules. As for the provision of job or arrangment. As far as

members be provided job in the proposed. Tharmal Plant and suitable arrangement for his accomodation be also made.	provision of suitable accomodation is concerned, the Tharmal Plant Authoitics will decide about it as per Direction and Guidlines of Govt.
(10) Gopal Singh S/o Gurbakhash Singh Village Hothian. Objected that they are five brothers and co-sharers in 81-5 of land . Out of this land 51-08 is being acquired and 29-17 is not being acquired.They shall not be able to able to cultivate 29- 17 of land in five shares,as this will be a very small peace of land for agriculture phosphere. So their land is measuring 29-17, which is being left out of acqusition may also be acquired.	The proposed land applicant measuring 29-17 cannot be acquired,as it does not fit into the main site plan of Tharmal Power Project. A suitable passage for the cultivation of this land can be provided under rules.
(11) Ajit Singh S/o Dalip Singh Village Muglani. Objected and stated that rates for his land is being acquired may be given as per market rates prevailing in the area. One of his family members be given a join in Tharmal Power Plant and suitable drainage and passage for the remaining land may please be provided	The compensation will be given as fixed by the Govt under rules. Passage can be provided to the land left out of the project. The job to the family member will be given as per the direction of the Govt.

These objections have been decided on merit and were rejected wide Punjab Govt. letter No. 10/268/2006- ਊ ਸ (6)/28958 dated 30-10-07.

<u>Notification Under Section 6</u>

Notification Under Section 6 of the land Acquisition Act 1894 was issued by Secretary Govt. of Punjab Department of Electricityvide their endst.No.10/268/2006-T ; 6/842-44 dated 16-1-2008 Published in the Punjab Gazette dated 16-1-2008 in respect of land situated in villages Alampur, Hansawala, Hothian, Pindian and Verowal. Tehsil Khadur Sahib Distt. Tarn Taran. It was also published in the daily newspaper The Tribune dated 21-1-2008 and daily Ajit Jalandhar dated 19 -1-2008

Notice Under Section 9 of the Land Acquisition Act.

The notice under section 9 of the Act ibid were issued to the land owners vide this ofiice No. SDA/LAC/2191-95 dated 22-1-2008 of the Villages Alampur, Hansawala, Hothian, Pindian and Verowal. Tehsil Khadur Sahib Distt. Tarn Taran.

The land owners came present in Govt. Elementary School Pindian(thecentralplacefor all five villages) on 7-2-2008 as mentioned in the notice under section 9. As the rates were decided in consulstation and negutiation with the landowners, all landowners stated that they are fully satisfied by the rates i.e. 16,15,000/- per Acre all inclisuve except orchards, as approved by the Punjab Govt. vide letter No. 10/268/2006-T; 6/973 dated 17-1-2008. No other objection regarding rates of land were put forward by the landowners.

Measurement of Land

The measurement of the land under acquisition has already been detailed in the following paras which is 1014 Acres 02 Kanals 11 Marlas as per Notification under section 6 of the Land Acquisition Act.

Approval of the Market Rates

The District Level Price Fixation Commitee held a final meeting under the Chairmanship of Deputy Commissioner Tarn Taran for fixing the rates/Acre for the land being acquired for the Thermal Power Project. It was also attended by S..D.M., Khadur Sahib,M.L.A., Khadur Sahib,M..P., Tarn Taran , Chairman Panchyat Samiti, Sarpanches of the villages where land being acquired is situated. It was decided unanimously and with the consent of land owners that a lumpsum rate Rs. 16,15,000/- per acre be fixed and no solatium,intrest or compensation for the structures,tubewells ,trees and other fixtures to the land will be claimed by land owners .Only land owners who have planted orchards, will be provided compensation for the orchards.

The price of land were approved by the Punjab Govt. Department of Electricity (Energy Branch)vide their letter No. 10/268/2006- T ; 6/973 dated 17-1-2008. The rate are as under :-

Sr. No.	Name of the Village	Rate per Acre (in Rs.)
1.	Alampur	16,15,000/-
2.	Hansawala	16,15,000/-
3.	Hothian	16,15,000/-

4.	Pindian	16,15,000/-
5.	Verowal	16,15,000/-

Assesment of Orchards

The Deputy Director Horticulture, Tarn Taran has assessed the value of the orchards standing on the land acquired for 2 x 300 M.W. Tharmal Plant at Village Goindwal Sahib Tehsil Khadur Sahib Distt. Tarn Taran, as under :-

Sr. No.	Name of Village	Name of the owner	No./Khasra	Area	Value
1.	Alampur	Dalbir Kaur W/o Kartar Singh ½ share Jagir Singh, Shamsher Singh sons/o Kartar Singh S/o Inder Singh ½ share	69/2 3 9/2	7-3 3-11 4-0 14-14	245607/- For Sr. No. 1,2 & 3)
2.	Alampur	Kartar Singh S/o Inder Singh ½ Jagir Singh, Shamsher Singh sons/o Kartar Singh S/o Inder Singh ½ share	69/4 6 7 8 9/1	0-4 2-2 6-18 8-0 4-0 21-4	
3.	Alampur	Buta Singh, Makhan Singh Sons/o Nand Singh S/o Sarup Singh Equal Share	75/1 76/5	7-12 3-0 10-12	
4.	Pindian	Surjit Singh S/o Janmeja Singh S/o Jagat Singh	39/5 /6 40/5 42/1 /10 41/1	6-7 8-0 3-0 4-0 4-0 2-0 27-7	1360638/- (For Sr. No. 4 & 5)
5.	Pindian	Sandeep Singh – Mandeep Singh S/o Surjit Singh S/o Janmeja Singh Equal Share	42/11 //20 //21 39//15 //16 //25	4-0 4-0 4-0 8-0 8-0 8-0 36-0	

Mode of Payment

The Payment of land/Orchards will be made to their right owners and share as entered in tehsil statement placed on the file which is based on the ownership column of the jamabandi for the year 2005-06 and mutation decided in their favour. In case of dispute under section 30 and 31 Of the act ibid, the compensation amount will be sent to the court till they come to any amicable settlement to the dispute decided by the competent court. In case, any portion of the land under acquisition has been mortgaged, to the extent mortgaged, money and balance, if any will be paid to the mortgagee unless otherwise agreed upon. Detail of apportionment will reveal in the Award statement/ Kabal-ul-Wasul in respect of land/Orchards situated in the acquired land as attached with with the acquisition file.

Price of Award

The Price of land/orchards etc. on the acquisition of land Villages Alampur, Hansawala, Hothian, Pindian and Verowal. Tehsil Khadur Sahib Distt. Tarn Taran as under :-

Village : Alampur H.B. No. 333

1.	Price of land measuring 104 Acres 04 Kanals 11 Marlas	16,88,78,531-25
2.	Orchards	2,45,607-00
	Total	**16,91,24,139-25**

Village : Hansawala H.B. No. 337

1.	Price of land measuring 200 Acres 00 Kanals 19 Marlas	32,31,91,781-25
2.	Orchards	Nil
	Total	**32,31,91,781-25**

Village : Hothian H.B. No. 335

1.	Price of land measuring 240 Acres 04 Kanals 01 Marlas	38,84,17,593-75
2.	Orchards	Nil
	Total	**38,84,17,593-75**

Village : Pindian H.B. No. 336

1.	Price of land measuring 180 Acres 05 Kanal 05 Marlas	29,17,59,843-75
2.	Orchards	13,60,638-00
	Total	**29,31,20,481-75**

Village : Verowal H.B. No. 332

1.	Price of land measuring 288 Acres 03 Kanal 15 Marlas	46,58,77,031-25
2.	Orchards	Nil
	Total	46,58,77,031-25

Expenses of Court Fees

The acquisition Department will have to pay all kinds of expenses of cases under section 18,30 and 31 of the land Acquisition Act. The civil suits/execution etc. arising due to announcement of this award from the lower court upto the supreme court and also be responsible to deal with these cases in various courts, where the proceedings are to be prepared accordingly.

Amount required : 10,00,000/-

Village wise Total

Sr. No.	Name of Village	Price of land	Orchards	Total Amount
1.	Alampur,	16,88,78,531-25	2,45,607-	16,91,24,199-25
2.	Hansawala,	32,31,91,781-25	Nil	32,3191,781-25
3.	Hothian,	38,84,17,593-75	Nil	38,84,17,593-75
4.	Pindian	29,17,59,843-75	13,60,638/-	29,31,20,481-75
5.	Verowal.	46,58,77,031-25	Nil	46,58,77,031-25
	Expanses of court fee and misc./expenses			10,00,000-00
	Grand Total			**164,07,31,026-25**

(One Hundred Sixty four Crores, seven Lacs, thirty one thousand, twenty six and twenty five paise only)

The intimation will be sent to the parties under section 12(1) of the land Acquisition Act 1894 after announcement of award.

Sd/-

(Jagir Singh PCS)
Sub Divisional Magistrate-cum-
Land Acquisition Collector,
Khadur Sahib, Distt. Tarn Taran

No. SDA/LAC/ **Dated :**

A copy is forwarded to the :-

1. Financial Commissioner, Revenue, Chandigarh.
2. Secretary Power, Govt. of Punjab, Chandigarh.
3. Director Land Acquisition, Punjab, Chandigarh.
4. Commissioner, Jalandhar Division, Jalandhar.
5. Deputy Commissioner, Tarn Taran.
6. Tehsildar, Khadur Sahib for Necessary action (He is advised to instruct all the Patwaries to make mutation of acquired Land in the favour of G.V.K., Power (Goindwal Sahib) Limited, 2 x 300 M.W. Tehsil Khadur Sahib, Distt. Tarn Taran.

Sd/-

(Jagir Singh PCS)
Sub Divisional Magistrate-cum-
Land Acquisition Collector,

Certified Copy

Sub-Divisional Magistrate
Khadoor Sahib

12/8/08

From,

Sub Divisional Magistrate –
Cum - Land Acquisition Collector
Khadur Sahib.

To,

Managing Director,
GVK Power (Goindwal Sahib) Limited,

No/SDA/LAC/ 1632 **Date:-** 15/7/11

Subject: - **Regarding Handing Over the Possession of Land Acquired for Railway And Water Pipe Line Corridor for 2X270 MW Thermal Plant at Goindwal Sahib – Reg.**

It's requested that award for the land measuring 37 Acre 7 Kanal 18 Marla has already been announced on 15/7/2011 at 10:00 AM at SDM Office Khadur Sahib District Tarn Taran and the award money received from your company is to be disbursed among the land owners. The possession of land has already been taken by the State Government and same is to be transferred to GVK Power (Goindwal Sahib) Limited.So you are requested to take the possession of the acquired land measuring 37 Acre 7 Kanal 18 Marla immediately.

Sub Divisional Magistrate –
Cum - Land Acquisition Collector
Khadur Sahib.

From,

Sub Divisional Magistrate –
Cum – Land Acquisition Collector,
Khadur Sahib.

To,

Secretary Power
Government of Punjab (Energy Branch)
Chandigarh.

No/SDA/LAC: - 1631-33 **Date: - 15/7/2011**

Subject: - **Award Announce for Railway And Water Pipe Line Corridor land of 2X270 MW Thermal Power Project Goindwal Sahib - Reg**

With reference to above, Award has been announced today i.e. 15/07/2011 to acquire land for Railway line and water pipe line corridor of Thermal Power Project Goindwal Sahib in presence of All Farmers, Tehsildar/kanungo/patwari's in the office of Sub Divisional magistrate, khadoor Sahib. This is for your information please.

Sub Divisional Magistrate –
Cum – Land Acquisition Collector,
Khadur Sahib.

Memo No: - SDA/LAC/1631-33 **Date: - 15/07/2011**

Copy To:-

1. Sent to Honorable Deputy Commissioner, Tarn Taran
2. Sent to Tehsildar, Kahdoor Sahib.

Sub Divisional Magistrate –
Cum – Land Acquisition Collector,
Khadur Sahib.

ਵਲੋ

ਉਪ ਮੰਡਲ ਮੈਜਿਸਟਰੇਟ-ਕਮ-
ਲੈਂਡ ਐਕੁਜੀਸ਼ਨ ਕੁਲੈਕਟਰ,
ਖਡੂਰ ਸਾਹਿਬ।

ਸੇਵਾ ਵਿਖੇ

ਸਕੱਤਰ ਪਾਵਰ,
ਪੰਜਾਬ ਸਰਕਾਰ, (ਊਰਜਾ ਸ਼ਾਖਾ)
ਚੰਡੀਗੜ੍ਹ।

ਨੰ.ਐਸ.ਡੀ.ਏ/ਐਲ.ਏ.ਸੀ/ 1631-33 ਮਿਤੀ: 15/7/11

ਵਿਸ਼ਾ:- **2x270** ਮੈਗਾਵਾਟ ਥਰਮਲ ਪਾਵਰ ਪ੍ਰੋਜੈਕਟ ਗੋਇੰਦਵਾਲ ਸਾਹਿਬ ਵਲੋ ਰੇਲਵੇ ਲਾਇਨ ਅਤੇ ਵਾਟਰ ਪਾਇਪ ਲਾਇਨ ਲਈ ਐਕਵਾਇਰ ਕੀਤੀ ਜਾਣ ਵਾਲੀ ਜਮੀਨ ਦਾ ਅਵਾਰਡ ਘੋਸ਼ਿਤ ਕਰਨ ਸਬੰਧੀ।

ਉਪਰੋਕਤ ਵਿਸ਼ੇ ਦੇ ਸਬੰਧ ਵਿਚ ਥਰਮਲ ਪਾਵਰ ਪ੍ਰੋਜੈਕਟ ਗੋਇੰਦਵਾਲ ਸਾਹਿਬ ਵਲੋ ਰੇਲਵੇ ਲਾਇਨ ਅਤੇ ਵਾਟਰ ਪਾਇਪ ਲਾਇਨ ਲਈ ਐਕਵਾਇਰ ਕੀਤੀ ਜਾਣ ਵਾਲੀ ਜਮੀਨ ਦਾ ਅਵਾਰਡ ਮਿਤੀ 15/7/2011 ਨੂੰ ਸਮੂਹ ਜਿੰਮੀਦਾਰਾ ਅਤੇ ਤਹਿਸੀਲਦਾਰ/ਕਾਨੂੰਗੋ/ਪਟਵਾਰੀਆ ਦੀ ਹਾਜਰੀ ਵਿਚ **ਐਸ.ਡੀ.ਐਮ ਦਫਤਰ** ਖਡੂਰ ਸਾਹਿਬ ਵਿਖੇ ਘੋਸ਼ਿਤ ਕੀਤਾ ਗਿਆ। ਇਹ ਆਪ ਜੀ ਨੂੰ ਸੂਚਨਾ ਹਿੱਤ ਭੇਜਿਆ ਜਾਂਦਾ ਹੈ ਜੀ।

ਉਪ ਮੰਡਲ ਮੈਜਿਸਟਰੇਟ-ਕਮ-
ਲੈਂਡ ਐਕੁਜੀਸ਼ਨ ਕੁਲੈਕਟਰ,
ਖਡੂਰ ਸਾਹਿਬ

ਪਿੱਠ ਅੰਕਣ ਨੰ.ਐਸ.ਡੀ.ਏ/ਐਲ.ਏ.ਸੀ/ 1631-33 ਮਿਤੀ: 15/7/11

ਇਸ ਦਾ ਇਕ ਉਤਾਰਾ:

1. ਮਾਨਯੋਗ ਡਿਪਟੀ ਕਮਿਸ਼ਨਰ ਤਰਨ ਤਾਰਨ ਜੀ ਨੂੰ ਸੂਚਨਾ ਹਿੱਤ ਭੇਜਿਆ ਜਾਂਦਾ ਹੈ ਜੀ।
2. ਤਹਿਸੀਲਦਾਰ, ਖਡੂਰ ਸਾਹਿਬ ਨੂੰ ਸੂਚਨਾ ਹਿੱਤ ਭੇਜਿਆ ਜਾਂਦਾ ਹੈ।

ਉਪ ਮੰਡਲ ਮੈਜਿਸਟਰੇਟ-ਕਮ-
ਲੈਂਡ ਐਕੁਜੀਸ਼ਨ ਕੁਲੈਕਟਰ,
ਖਡੂਰ ਸਾਹਿਬ।

IN THE COURT OF SH. KULDI P SINGH CHANDI PCS, SUB DIVISIONAL MAGISTRATE-CUM-LAND ACQUISITION COLLECTOR, KHADUR SAHIB, TARN TARAN.

AWARD No. 1/2011/LAC **Dated: 15/7/2011**

The Government of Punjab has accorded saction for the acquisition of land measuring situated in Village Khadur Sahib (18 Acre 6 Kanal 17 Marla), Hansawala (1 Acre 3 Kanal 4 Marla), Hothian (12 Acre 3 Kanal 17 Marla) and Biharipur (5 Acre 2 Kanal 0 Marla), Tehsil Khadur Sahib Distt Tarn Taran, for specification below is required to be taken by State Govt. for the Public Purpose of Railway Corridor and River Water Pipe Line namely for the Construction of 2x270 MW coal based Thermal Power Project at Village Goindwal Sahib, Tehsil Khadur Sahib, Distt Tarn Taran of Punjab State. The Specification as under:-

Specification

Sr. No	Village	Tehsil	Distt	Khasra No.	Area		Classification of Land
					Kanaal	Marla	
1	**Khadur Sahib H.B No. 129**	**Khadur Sahib**	**Tarn Taran**				
1				137/18	0	1	Nehri
2				17	2	1	Nehri
3				17	0	5	Nehri
4				16	0	4	Nehri
5				15	3	9	Nehri
6				14	4	11	Nehri
7				14	0	19	Nehri
8				13	2	1	Nehri
9				8	0	1	Nehri
10				7	5	13	Nehri
11				6	3	6	Nehri
12				6	1	13	Nehri
13				5	6	3	Nehri
14				5	0	3	Nehri
15				4	1	1	Nehri
16				138/1	4	5	Nehri
17				10	1	2	Nehri
18				103/16	0	3	Nehri
19				25	3	15	Nehri
20				102/5	0	4	Nehri
21				4	4	4	Nehri
22				102/4	0	9	Nehri
23				3	6	8	Nehri
24				3	0	1	Nehri
25				2	0	10	Nehri
26				7	0	18	Nehri

27				8	2	12	Nehri
28				8	2	10	Nehri
29				9	4	15	Nehri
30				11	1	16	Nehri
31				12	5	10	Nehri
32				12	0	9	Nehri
33				13	3	19	Nehri
34				13	0	1	Nehri
35				18	0	11	Nehri
36				19	1	17	Nehri
37				19	0	19	Nehri
38				20	6	4	Nehri
39				21	1	13	Nehri
40				22	2	15	Nehri
41				97/25	0	5	Nehri
42				24	2	19	Nehri
43				24	0	14	Nehri
44				18	0	1	Nehri
45				23	2	14	Nehri
46				194/5	0	14	Nehri
47				192/25	2	7	Nehri
48				192/24	4	4	Nehri
49				192/23	3	5	Nehri
50				192/18	1	3	Nehri
51				192/22	0	5	Nehri
52				192/19	4	7	Nehri
53				192/20	2	2	Nehri
54				192/11	2	13	Nehri
55				191/15	3	15	Nehri
56				191/6	1	2	Nehri
57				191/14	0	3	Nehri
58				191/7	4	9	Nehri
59				191/4	0	10	Nehri
60				191/8	0	10	Nehri
61				191/3	4	9	Nehri
62				191/2	0	14	Nehri
63				174/23	0	6	Nehri
64				22	4	5	Nehri
65				19	2	8	Nehri
66				20	1	11	Nehri
67				12	0	5	Nehri
68				11	3	9	Nehri
69				10	3	13	Nehri
70				1	2	9	Nehri
71				2	0	5	Nehri
		G Total	Area	18 Acre	6 Kanal	17 Marla	Nehri

2	Hansawala H.B No. 337						
1				52/15	0	18	Chahi
2				49/11	0	18	Chahi
3				12	0	18	Chahi
4				13	0	16	Chahi
5				103	0	14	Chahi
6				14	0	5	Chahi
7				15/1	0	9	Chahi
8				49/15-2	0	9	Chahi
9				48/11	0	18	Chahi
10				48/12	0	18	Chahi
11				48/13	0	18	Chahi
12				48/14	0	18	Chahi
13				48/15	0	18	Chahi
14				47/11	0	18	Chahi
15				47/12	0	9	Chahi
		G Total	Area	1 Acre	3 Kanal	4 Marla	Chahi
3	Hothian H.B No. 335						
1				8	0	10	Nehri
2				68	0	1	Nehri
3				69	0	19	Nehri
4				70	3	3	Nehri
5				73	1	19	Nehri
6				75	2	2	Nehri
7				76	3	5	Nehri
8				77	0	16	Nehri
9				82	0	1	Nehri
10				83	1	18	Nehri
11				84	2	3	Nehri
12				85	4	1	Nehri
13				95	4	1	Nehri
14				96	3	11	Nehri
15				122	0	10	Nehri
16				123	0	12	Nehri
17				124	0	13	Nehri
18				125	3	14	Nehri
19				126	4	3	Nehri
20				127	3	14	Nehri
21				128	1	1	Nehri
22				129	1	1	Nehri
23				130	0	14	Nehri
24				131	1	6	Nehri
25				132	0	1	Nehri
26				133	0	7	Nehri

				296	4	0	Nehri
27				301	4	1	Nehri
28				305	4	1	Nehri
29				313	0	2	Nehri
30				314	4	0	Nehri
31				331	0	1	Nehri
32				332	0	15	Nehri
33				334	1	18	Nehri
34				339	3	2	Nehri
35				340	1	0	Nehri
36				341	2	3	Nehri
37				342	3	7	Nehri
38				343	2	8	Nehri
39				642	0	17	Nehri
40				643	3	5	Nehri
41				644	3	17	Nehri
42				645	0	16	Nehri
43				647	1	6	Nehri
44				648	5	10	Nehri
45				649	1	9	Nehri
46				656	0	9	Nehri
47				657	5	4	Nehri
48		G Total	Area	12 Acre	3 Kanal	17 Marla	Nehri
4	Biharipur H.B No. 334						
				241	1	13	Chahi
1				251	0	3	Chahi
2				259	4	1	Chahi
3				270	1	0	Chahi
4				271	3	0	Chahi
5				272	4	0	Chahi
6				273	3	18	Chahi
7				677	0	8	Chahi
8				678	1	6	Chahi
9				679	2	4	Chahi
10				680	3	2	Chahi
11				681	0	19	Chahi
12				685	1	17	Chahi
13				686	2	15	Chahi
14				689	3	13	Chahi
15				690	4	1	Chahi
16				691	3	4	Chahi
17				693	0	16	Chahi
18		G Total	Area	5 Acre	2 Kanal	0 Marla	Chahi

1.2 Total Area Village wise:

Sr No.	Name of Villages	Acre	Kanal	Marla
1	Khadur Sahib	18	6	17
2	Hansawala	1	3	4
3	Hothian	12	3	17
4	Biharipur	5	2	0
	G Total	37	7	18

2. Notification Under Section-4

The Government of Punjab, Electricity Deptt. No. 10/268/2006-PB.6/ 2250 Dated 29/7/2010 which was published in Govt. of Punjab Gazette, has issued Notification under section 4 of the Land Acquisition Act 1894 in respect of land measuring 37 Acres 7 Kanal 18 Marla situated in Villages Khadur Sahib, Hansawala, Hothian and Biharipur Tehsil Khadur Sahib Distt Tarn Taran.

As per requirement of provisions of under section 4 of Land Acquisition Act, 1894 Notification was also published in daily two newspapers in Punjab Kesri and The Tribune on Dated 28 Oct 2010. In response to this Notification, objections were invited U/s 5A of the Land Acquisition Act 1894. Some interested people filed their objections under section 5-A of Land Acquisition Act 1894.

These objections have been decided on merit and were rejected vide Punjab Govt. letter No.10/268/2006-PB-6/ 1576 Dated: 28/4/2011.

3. Notification Under Section 6

Notification Under Section 6 of the Land Acquisition Act 1894 was issued by Secretary Govt. of Punjab Department of Power vide letter No. 10/268/2006-PB-6/ 1591 Dated: 29 April 2011 Published in the Punjab Gazette dated 29/4/2011 in respect of Land situated in villages Khadur Sahib, Hansawala, Hothian and Biharipur Tehsil Khadur Sahib Distt Tarn Taran. It was also published in daily two newspapers in English The Tribune on dated: 2 May 2011 and in Ajit newspaper dated: 30 April 2011.

4. Notice Under Section 9

The Notice under Section 9 of the Act ibid was issued to the land owners and interested persons calling upon them to submit their claims/objection vide this office letter no. SDA/LAC/1439-41 Dated: 6/6/2011 of the Villages Khadur Sahib, Hansawala, Hothian, Biharipur Tehsil Khadur Sahib Distt Tarn Taran.

Thereafter if any person has any objection regarding Land Acquisition may appear on or before 23/6/2011 at SDM Office Khadur Sahib on 11:00 AM. In pursuance of this notice the following land owners/interested persons were present at the spot and filed their objections:

Sr. No.	Name of the Objectors	Objection	Remarks
1	Harpinder Singh S/o Joginder Singh R/o Hothian	1.Objected that in his land there are existing an orchard of peer trees and a tubewell and situated his residential accommodation and as also place kept for burial of elders. 2. That he wants railway crossing for his agricultural equipments and crossing of water under the railway line for cultivation the land. 3. Moreover one of his family members be provided job in the proposed. 4.That rates of his land Govt given is very low he wants 1.5 Crore per acre.	1.These objections have already decided by Land Acquisifion Collector after the notification of U/s 4 vide his office letter No.SDA/LAC/1186 Dt. 1/4/2011. 2.That for crossing of water under the railway line for cultivation the land has already written to Govt by Land Acquisition Collector. Hence the objection has decided. 3. The job to the family member will be given as per the direction of the Govt. So, this objection is rejected. 4.The rates of compensation has fixed by thoughtful consideration and consensus of the Committee (DLPFC) So, this objection is rejected.
2	Harnam Singh S/o Kartar Singh R/o Khadur Sahib.	1. Objected that he wants railway crossing for his agricultural equipments and passage of water under the railway line for cultivation the land.	1. That for crossing of water under the railway line for cultivation the land has already written to Govt by Land Acquisition Collector. Hence the objection has decided.
3	Arjun Singh & other 25 persons R/o Hothian	1. Objected that they wants railway crossing for his agricultural equipments and passage of water under the railway line for cultivation the land.	1. That for crossing of water under the railway line for cultivation the land has already written to Govt by Land Acquisition Collector. Hence the objection has decided. 2. The job to the family member

		2. Moreover one of his family members be provided job in the proposed.	will be given as per the direction of the Govt. So, this objection is rejected.
		3. That rates of his land Govt given is very low he wants 1.5 Crore per acre.	3. The rates of compensation has fixed by thoughtful consideration and consensus of the Committee (DLPFC) So, this objection is rejected.
4	Kuldip Singh & other 3 persons R/o Biharipur	1. Objected that place kept for burial of elders.	1. These objections have already decided by Land Acquisition Collector after the notification of U/s 4 vide his office letter No.SDA/LAC/1186 Dt. 1/4/2011.
		2. That they wants railway crossing for his agricultural equipments and passage of water under the railway line for cultivation the land.	2. That for crossing of water under the railway line for cultivation the land has already written to Govt by Land Acquisition Collector. Hence this objection has decided.
		3. Moreover one of his family members be provided job in the proposed.	3. The job to the family member will be given as per the direction of the Govt. So, this objection is rejected.
		4. That rates of his land Govt given is very low he wants 1.5 Crore per acre.	4. The rates of compensation has fixed by thoughtful consideration and consensus of the Committee (DLPFC) So, this objection is rejected.
5	Jasbir Singh & Other 16 persons R/o Khadur Sahib	1. Objected that they wants railway crossing for his agricultural equipments and passage of water under the railway line for cultivation the land.	1. That for crossing of water under the railway line for cultivation the land has already written to Govt by Land Acquisition Collector. Hence this objection has decided.
		2. That they Wants meeting of District Level Price Fixation Committee for the Fixing of Land price in the presence of farmers. That rate of their land given is very low, it should be 40 Lac per acre.	2. The rates of compensation has fixed by thoughtful consideration and consensus only by the Committee (DLPFC) So, this objection is rejected.

So, all the objections have been decided or rejected on merit as mentioned above.

5. Measurement of Land

The measurement of the land under acquisition has already been detailed in the following paras :

Sr No.	Name of Villages	Acre	Kanal	Marla
1	Khadur Sahib	18	6	17
2	Hansawala	1	3	4
3	Hothian .	12	3	17
4	Biharipur	5	2	0
	G Total	**37**	**7**	**18**

6. Approval of the Market Rates

The District Level Price Fixation Committee held a final meeting under the chairmanship of Deputy Commissioner Tarn Taran for fixing the rates on dated: 18/6/2010 at Tarn Taran for the land being acquired for the Thermal Power Project. It was decided unanimously and with the Villages consent of land owners that a approx rate as following below table. These rates are duly approved by Punjab Govt vide letter no. 10/268/06-PB/6- 4146 Dated: 30/12/2010.

Sr. No.	Name of the Villages	Price of Land/Acre (Rs.)
1	Khadur Sahib	25,00,000/-
2	Hansawala	20,00,000/-
3	Hothian	20,00,000/-
4	Biharipur	20,00,000/-

7. Cost of Land

As such the total cost of land measuring 37 Acre 7 Kanal 18 Marla's is following below table:

Sr. No.	Name of the Villages	Price of Land	Total
1	Khadur Sahib	25,00,000/-	4,71,40,625/-
2	Hansawala	20,00,000/-	28,00,000/-
3	Hothian	20,00,000/-	2,49,62,500/-
4	Biharipur	20,00,000/-	1,05,00,000/-
	Total		**8,54,03,125/-**

8. Solatium @ 30%

Under Section 23(2) of the Land Acquisition Act 1894 the land owner is also entitled to get 30% as solatium of cost of land. The cost of land as worked out is 8,54,03,125/-. The Solatium @ 30% of land cost which comes to Rs. 2,56,20,937/-.

9. Additional Compensation U/s 23(1-A)

The last date of publication of the notification U/s of the Act ibid is 29/7/2010. The additional compensation U/s23 (1-A) of the ibid is calculated @12% per annum is to be given for 11 Months and 15 days i.e. 29/7/2010 to 15/7/2011 (351 days) which comes Rs. 98,55,286 /-.

10. Cost of Award

The total compensation of land is worked out as under:-

Sr No.	Particular	Total Cost of land	Solatium @ 30%	Interest @ 12%	Grand Total
1	Compensation of Land 37 Acre 7 Kanal 18 Marla's	8,54,03,125/-	2,56,20,937/-	98,55,286/-	**12,08,79,348/-**

11. Miscellaneous Expenditure:

The Acquiring department will have to pay kinds of expenses of cases under section 18 and 30/31 etc of Land Acquisition Act 1894. Civil Suit/execution arising out due to the announcement of this award from the Lower Court to Supreme Court and also to be responible to deal with these cases in various Courts, where the proceeding are to be prepare accordingly and also expenses of traveling, refreshment, stationary and sitting arrangement for public at the time of announcement the Award and Disbursement the compensation to land owners. The amount required Approx Rs.1,00,000/-

12. Payment of Compensation

The Compensation calculated above shall be payable to the persons interested subject to any other party, which may be entitled to this compensation. The persons receiving the payment will be under obligation to honour any decision/direction of competent authority/Court.

13. Total Cost of Award

Sr. No.	Particular	Total Amount
1	Total cost of land	8,54,03,125/-
2	Solatium 30%	2,56,20,937/-
3	Interest 12% (351 days)	98,55,286/-
4	Mis Exp (as in para no.11)	1,00,000/-
	Grand Total	**12,09,79,348/-**

The intimation will be sent to the parties U/s 12(1) of the Land Acquisition Act 1894 after announcement of Award.

(Kuldip Singh Chandi PCS)
Sub Divisional Magistrate-cum-
Land Acquisition Collector,
Khadur Sahib.

No. SDA/LAC/ **Dated:**

A Copy is forwarded to the:

1. Financial Commissioner Revenue, Chandigarh.
2. Secretary Power Govt of Punjab Chandigarh.
3. Director Land Acquisition Punjab Chandigarh.
4. Commissioner Jalandhar Division, Jalandhar.
5. Deputy Commissioner, Tarn Taran.
6. Tehsildar Khadur Sahib for necessary action & Advised to instruct all the Patwaries to make mutation of acquired Land in the favour of 2*270 MW GVK Power Goindwal Sahib Ltd. Tehsil Khadur Sahib Distt. Tarn Taran.

(Kuldip Singh Chandi PCS)
Sub Divisional Magistrate-cum-
Land Acquisition Collector,
Khadur Sahib.

ANNEXURE P-14 (Colly.)

GVK

To,

Date: - 8th June, 2012

Sub Divisional Magistrate Cum
Land Acquisition Collector,
Khadur Sahib.

Subject: - **Submission of Demand Draft of Rs. 1,34,79,159/- At Par With Khadur Sahib Consideration – Reg .**

Reference: - **Your Letter No: - LAC: - 39, Dated: - 6th June, 2012.**

Sir,

With reference to your letter we are submitting a DD in favor of SDM – Cum – Land Acquisition Collector Khadur Sahib for an amount of **Rs.1,34,79,159/- (One Core Thirty Four Lacs Seventy Nine Thousand One Hundred Fifty Nine Only)** for the railway and water pipe line corridor land of Hansawala, Hothian and Biharipur Tehsil District Tarn Taran Punjab, at par with Khadur Sahib consideration amount.

The DD No 004561 , Date: - 8/6/2012 __, from HDFC Bank Tarn Taran is being submitted along with this letter.

You may kindly take necessary action for transferring and handing over the possessioning of land to GVK Power (Goindwal Sahib) Limited.

Thanking You,

Warm regards

for GVK Power Goindwal Sahib Limited

08/06/12
(Arun Kumar Mishra)
Vice President

GVK Power (Goindwal Sahib) Ltd
Paigah House, 156-159, Sardar Patel Road
Secunderabad 500 003
Andhra Pradesh, India

T +91 40 2790 2663/64 F +91 40 2790 2665
www.gvk.com

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VALID FOR 3 MONTHS FROM THE DATE OF ISSUE

Ref. No. 142812003724

D D M M Y Y Y Y
08/06/2012

Pay
अदा करे ~~SDM CUM LAND ACQUISITION COLLECTOR KHADOOR SAHIB~~ Or Order
या उनके आदेश पर

Rupees
रुपये ONE CRORE THIRTY FOUR LAC SEVENTY NINE THOUSAND ONE HUNDRED FIFTY NINE ONLY.

₹ *1,34,79,159.00

HDFC BANK LTD.

For HDFC BANK LTD.

B11457 68155

AUTHORISED SIGNATORIES

Please sign above

Railway Rd,Nr Bajwa Press, Tarn Taran
Tarn Taran - 143401

SESHAASAI(C) / CTS-2010

MC FV.

⑈004561⑈ 143240402⑆ 999991⑈ 12

GVK

To,
Sub Divisional Magistrate – Cum –
Land Acquisition Collector,
Khadur Sahib.

Date: - 25th October, 2012

Subject: - Submission of Demand Draft of Rs. 60,000 balance payment – Reg.

Reference: - Your Letter No: - LAC: - 61, Dated: - 21st August, 2012.

Sir,

With reference to your letter we are submitting a DD in favor of SDM – Cum – Land Acquisition Collector Khadur Sahib for an amount of **Rs. 60,000/- (Sixty Thousand Only)** for the railway and water pipe line corridor land of Hansawala, Hothian and Biharipur Tehsil– District – Tarn Taran – Punjab, balance amount. The DD No **004810**, Date: - **05/10/2012**, from HDFC Bank Tarn Taran is being submitted along with this letter. You may kindly take necessary action for transferring and handing over the processioning of land to GVK Power (Goindwal Sahib) Limited.

Thanking You,

Warm regards,

for GVK Power Goindwal Sahib Limited

25/10/12

(Arun Kumar Mishra)
Vice President

56
25/10/12

25/10/12

GVK Power (Goindwal Sahib) Ltd
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Secunderabad 500 003
Andhra Pradesh, India

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ANNEXURE P-15 (Colly.)

GVK

GVK POWER (GOINDWAL SAHIB) LIMITED

<u>WORK ORDER</u>

W.O.No. GVK-GS/TCE/2007/053
Date : September 28, 2007

To
M/s.TCE Consulting Engineers Limited,
Sheriff Centre, 73/1 St.Marks Road,
<u>BANGALORE 560 001</u>

Kind Attn : Mr.Mohan Murty, Chief Commercial Manager

Sir,

Sub : **2X270 MW Goindwal Sahib Coal Fired Thermal Power Project – Consulting Engineering Services for Post EPC Services – Work Order**

Ref : 1) TCE letter No.TCE.900/0707/DB/111/02/1 dated: 21.08.2007
2) TCE Letter No.TCE.900/0708/DB/111/03/1 dated: 19.09.2007
3) Discussions with TCE

With reference to the above correspondence and discussions we had with "TCE Consulting Engineers Limited (TCE), we are pleased to release the Work Order for **Consulting Engineering Services for Post EPC Services** on TCE for the 2x270 MW capacity Coal Fired Thermal Power Project at Goindwal Sahib Village, Tarn Taran District, Punjab with the following terms and conditions. **<u>THIS WORK ORDER ON TCE WILL COME INTO EFFECT UPON OWNER ISSUING THE "NOTICE TO PROCEED' AND ACCEPTED BY TCE.</u>**

(1) **Scope of Services**

(a) **Package – 1: Boiler Turbine Generator (BTG)** :
TCE's scope of services under Package-1 will be as per Annexure-1.

(b) **Package -2 : Balance of Plant (BOP)**
TCE's scope of services under Package-2 will be as per Annexure-1.

(c) **Other scope of services** :
- TCE's scope of services under 'Other Scope of Services' will be as per Annexure-2

(d) Inspection and Expediting Services:
- Witness Shop Performance Testing of major equipment
- Submission of Inspection Report
- Expediting the supplies of EPC contractors

These services shall be undertaken with GPGSL's written authorization and the compensation for performing above activities would be @ Rs.5000 per man-day or part thereof.

GVK

(e) Filed Advisory Services covering Supervision of Construction, Erection, Start up, Testing and commissioning:

TCE's scope of services under Field Advisory Services will be as per Annexure-3.

The compensation payable for field advisory services shall be on man-month basis as given below :

Sl.No.	Category	Man-Month Rate (in Rs.)
1	Construction Manager (with 15-20 years experience)	2,20,000/-
2.	Sr. Construction Engineer (with 8 – 15 years experience)	1,60,000/-
3.	Commissioning Engineer (with 8 – 15 years experience)	2,00,000/-
4	Supervisor (Diploma holders or engineers with experience upto 8 years)	1,00,000/-

To above man-month rates **includes** other costs for providing the facilities like residential accommodation, local transport between place of residence and site office, withdrawal expenses of TCE staff, Site office maintenance etc.

(f) Site Facilities:
The following site facilities will be provided by GPGSL free of cost:

- Furnished site office with standard facilities such as telephone, fax, potable water, electricity and sanitation
- Guest house accommodation (if available) for visiting TCE Engineers.

(2) PRICE

For Post EPC Review Engineering Services, lumpsum fee payble to TCE shall be	**Rs.6,65,00,000/- (Rupees six crore sixty five lakh only)**

The lumpsum price of Rs.6,65,00,000/- is subject to issue of NTP on TCE and "Notice to Proceed" being issued by 31.03.2008

TCE fee would be Rs.7,50,00,000/- (Rupees seven crore fifty lakhs only) in case the above milestone is not achieved by 31.03.2008 but by 30.06.2008.

(3) TCE's Inputs

(a) TCE shall furnish a preliminary list of deliverables and schedule

(b) TCE's internal quality procedure shall be furnished to ensure the quality of deliverables is reviewed and checked to ensure satisfactory output.

(c) Communication procedure and periodic review mechanism of the Contract shall be mutually discussed and finalized.

GVK

(4) OUTSTATION VISITS

The above lumpsum compensation does not provide for any expenses that would be incurred on travel to be undertaken by TCE personnel on domestic outstation visits from their normal place of work (Bangalore). All expenses incurred on such visits including air(economy class) / rail / bus fare as applicable, car / taxi hire charges, lodging (GPGSL approved hotels only) and boarding costs and miscellaneous incidental expenses shall be reimbursed extra at actuals by GVK Power (Goindwal Sahib) Limited (GPGSL).

On outstation visits, TCE can raise monthly bills based on the expenses incurred by TCE during the previous month.

(5) TERMS OF PAYMENT

The terms of payment for the compensation shall be as follows:

a) 10% of the lumpsum compensation shall be paid as advance with Letter of Work Order.

b) Balance 90% of the lumpsum compensation shall be payable in monthly installments pro-rata to the percentage progress of work completed by TCE in the preceding month and reflected in the monthly progress reports to be submitted by TCE to GPGSL. The mode for computing the percentage progress could be mutually discussed and agreed to, while preparing the progress report. Alternatively the balance payment will be based on mile stones achieved by TCE according to the agreed schedule between TCE and GPGSL.

For Inspection and Expediting Services

For the man-month rated Field Advisory Services, payments shall be made based on monthly invoices raised for the previous month

Reimbursable Expenses

The monthly bills would be raised based on the expenses incurred by TCE during the previous month. All the invoices raised shall be payable within 30 days after the submission of invoices.

(6) TAXES AND DUTIES

The lumpsum compensation quoted by TCE on this assignment is **exclusive** of the service tax presently being levied by the Government of India, which shall be payable extra at the prevailing rate of 12.36% of the amount, invoiced. In case, there is an increase in the rate of service tax or if any fresh taxes, duties and imposts are levied in future by any Government in India then the same shall be payable extra by GPGSL

Since TCE would be rendering purely technical consultancy services, which are not in the nature of the services of a contractor, Works Contract Tax is not applicable to TCE and hence deduction on this account shall not be made

(7) VALIDITY

All the man-month and also charges for the consulting engineers services mentioned in para 1(e) and 2 will be firm and valid till 31.09.2011 without any escalation

GVK

We are sending this revised Work Order in duplicate, and request you to return the duplicate copy to us duly vetted by your authorized signatory on behalf of TCE Consulting Engineers Limited as a token of acceptance of the revised Work Order.

Yours Sincerely,
for **GVK Power (Goindwal Sahib) Limited.**

Som Bhupal
Director

Subject to our clarifications furnished in our letter no TCE 9000/0708/DB/111/05/0 dated 16/10/2007
Accepted
for **TCE Consulting Engineers Limited**

AUTHORISED SIGNATORY

TCE Consulting Engineers Ltd. Bangalore

GVK

ANNEXURE – 1

CONSULTING ENGINEERING SERVICES FOR POST EPC SERVICES

SCOPE FOR PACKAGE-1 & PACKAGE-2

The scope of the Owner's Engineer services under Review of Design and Engineering of Package-1 BTG and Package-2 BOP EPC Contractors work is as given below

1.0 **REVIEW OF DESIGN AND ENGINEERING OF EPC CONTRACTORS WORK**

1.1 Review of Design and Engineering documents for various systems, equipment and structures as per details furnished in Appendix – "A1" enclosed. The scope shall cover review of critical design criteria, engineering designs, detailed design drawings and documents listed below to check conformity with technical specifications and contractual requirements, adherence to applicable codes and standards, operational and safety aspects, statutory requirements, reliability and ease of maintenance and prudent utility practices :

(a) Concepts for all major systems.
(b) Specifications of all important / major plant and equipment, electrical items, C&I items and civil works.
(c) Equipment layout drawings.
(d) General arrangement drawings.
(e) Electrical Equipment Layout Drawings
(f) 220 kV Switchyard Drawings
(g) Electrical Protection Schemes
(h) Flow diagrams and P&I diagrams.
(i) Plant and equipment erection drawings.
(j) Piping and cabling layouts
(k) Motor list and related protection schemes.
(l) Electrical single line diagrams, Specifications and drawings.
(m) Instrumentation and control system configuration, control, protection and measurement system drawings, panel layout drawings including DCS control systems and panels.
(n) Civil/Structural drawings.
(o) Design calculations of critical systems, structures and foundations.
(p) Testing and Commissioning Procedures.
(q) Performance Test Procedures.
(r) Reliability Run & Test Procedures.

1.2 **Quality Assurance:**

(a) Approval of major Sub-Contractors / Sub-Vendors proposed by the BTG and BOP EPC Contractors.

(b) Review of BTG and BOP EPC Contractors' and his Sub-Contractor's Quality Plans including Customer Hold and Witness points for inspection.

(c) Review of manufacturers' test/inspection reports and test certifications.

1.3 **Project Monitoring Services:**

(a) Review of Planning, Scheduling and Monitoring of BTG and BOP EPC Contractors activities.

(b) Review of Planning, Scheduling and Monitoring of Non-EPC works.

(c) Preparation, revision and monitoring of Overall Project Schedule' based on agreed Project schedules of BTG and BOP Packages.

(d) Technical assistance to GPGSL in resolving design engineering related problems including Non-EPC scope.

1.4 Review of O&M Manuals submitted by the BTG and BOP EPC Contractors.

1.5 Review of List of Mandatory Spares.

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APPENDIX - "A1"

The Documents / drawings that need to be reviewed by the Owner's Engineer shall include but not be limited to the following details of BTG and BOP EPC Contractors design and Engineering Work:

A) MECHANICAL:

1.0 Review of EPC design documents.

1.1 Following is an indicative list of General Arrangement Drawings:
(a) Plot Plan
(b) Turbine Hall
(c) Boiler Area
(d) Water Treatment Plant.
(e) Cooling Water Pump House and Cooling Tower
(f) Air Conditioning and Ventilation System
(g) Turbine Hall EOT Crane
(h) Instrument and Chemical Laboratories.
(i) Emergency Diesel Generator
(j) Raw Water Pump House
(k) Fire Water Pump House
(l) Effluent Treatment Plant.
(m) ESP
(n) Ash Handling System
(o) Fuel Forwarding System
(p) Coal Handling System
(q) Railway siding.

1.2 Following is an indicative list of Flow Diagrams for Systems:
(a) Main and Auxiliary Steam System
(b) Feed Water System
(c) Condensate System
(d) Boiler
(e) Main Cooling Water Systems and Cooling Tower
(f) Auxiliary Cooling Water System
(g) Closed Circuit Cooling Water System
(h) Water Treatment System & Effluent Treatment System
(i) Raw Water System
(j) Service and Potable Water System
(k) Fire Protection System
(l) Compressed Air System
(m) Lubricating Oil and Control Oil System
(n) Air Conditioning and Ventilation Systems
(o) Exhaust System
(p) Intra-Site Communication System
(q) Effluent System.
(r) Coal Handling Systems flow diagram
(s) Dry Ash system
(t) Wet Ash system

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1.3 Following is an indicative list of Piping Layout and Isometric Drawings:
(a) Composite Piping Layout in Turbine Hall
(b) Composite Layout of Piping on Racks
(c) Main Steam System
(d) Feed Water System
(e) Condensate System
(f) Wet Ash System
(g) Main and Auxiliary Cooling Water Systems
(h) Service and Potable Water Systems
(i) Fire Protection Systems
(j) Plant/Instrument Air Systems
(k) Raw Water System & Effluent Treatment and Disposal System.

1.4 Review of Piping System including flexibility / stress analysis of Critical Piping, Valves, Specialties, Calculations of Line Sizing, Strength, Surge / Impact Analysis etc.

B) CONTROL & INSTRUMENTATION

1.0 Review of Control System Configuration / philosophy.
2.0 Review of Specification /Data Sheets
3.0 Review of Main Control Room Layout.
4.0 Following is an indicative list of types of drawings:
(a) P&I Diagrams
(b) Instrument Lists and Data Sheets
(c) Control Schemes
(d) Logic Diagrams
(e) Loop Schematics.
(f) Typical Instrument Hook-up Drawings.
(g) Control Room Layouts.
(h) Panel Layouts.
(i) Design Calculations for Flow Elements, Temperature Elements and Control Valves.
(j) Wiring Diagrams including Control Wiring Diagrams.
(k) Power Supply Schemes.
(l) Automation and Operation of the units through CRT Keyboard.

C) ELECTRICAL:

1.0 Following is an indicative list of Equipment for which Specifications, Data Sheets/ Drawings are to be reviewed by the Owner's Engineer:

(a) Generator Transformers
(b) Unit Auxiliary Transformers
(c) Other HT/LT Transformers
(d) 220 kV Switchyard.
(e) Isolated Phase Busducts.
(f) Generator Relay & Control Panel.

(g) Generator Circuit Breaker and Other Breakers.
(h) DC System including UPS system
(i) Transmission line protection and bus bar protection.
(j) Current & Voltage Transformers (CVT)
(k) Wave Traps and coupling capacities.

2.0 Review of the Switchyard Layout.

3.0 Review of Single Line Diagrams and sizing of major equipment shown in single line diagrams.

4.0 Following is an indicative list of General Arrangement drawings to be reviewed by the Owner's Engineer:
(a) Transformer Yard Layout
(b) Switchgear Layout in Station Building and Ancillary Buildings.
(c) Earthing Layout Drawings for Switchyard.
(d) Diesel Generator for Emergency Loads including its Auto start features.

5.0 Following is a list of Block Interlock Diagrams to be Reviewed by the Owner's Engineer:
(a) Switchyard
(b) Generator Protection
(c) HV Switchgear and protection
(d) LV Switchgear and protection
(e) Transformer Protection

6.0 Review Relay Settings and Co-ordination

7.0 Review Cable routing, Lighting, Earthing and Lightning Protection Diagrams (typical drawings only will be reviewed).

D) CIVIL:
Review Design Criteria, Structural Design and Drawings for Buildings/Structures. Following is an indicative list of Building/Structures covered under the Scope:

1.0 Turbine Hall Building.
2.0 Steam Turbine Generator Foundation and Pedestal.
3.0 Boiler Feed Pump and all major equipment Foundations.
4.0 Mill Foundations / Boiler Foundation
5.0 Chimney
6.0 ESP foundation
7.0 ESP Control Room
8.0 CHP foundations
9.0 Compressor Foundation
10.0 Plant Raw Water / Fire Water Pump House
11.0 Water Treatment Plant.
12.0 Chemical Laboratory and Instrument Laboratory.
13.0 Cooling Tower Structure
14.0 Cooling Water Pumphouse and Forebay
15.0 Transformer Yard and Foundations
16.0 Switchyard Structures and Foundation

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17.0 Pipe Racks and Cable Trenches.
18.0 Storm Water Drains and rain water harvesting system.
19.0 Roads
20.0 Buildings
21.0 Pipe supports
22.0 Waste Water Treatment
23.0 Finishing Works
24.0 Switchyard and Control Buildings
25.0 Common Control / Switchgear Buildings.

TCE Consulting Engineers Ltd * Bangalore *

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ANNEXURE – 2

CONSULTING ENGINEERING SERVICES

OTHER SCOPE OF SERVICES

Other scope of services includes but not limited to;

- Plant system engineering and Layout planning
- Preparation of site grading plan and drawings
- Owner's Engineer's role during project construction for review and approval of the drawings submitted by the BTG and BOP EPC contractors and progress review
- Attending and coordinating meetings with BHEL and BOP EPC contractors
- Preparation of project schedule and monitoring
- Deputation of TCE engineers to site as Owner's Engineer

TCE Consulting Engineers Ltd. Bangalore

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ANNEXURE - 3

1.0 **FIELD ADVISORY SERVICES COVERING SUPERVISION OF CONSTRUCTION, ERECTION, TESTING AND COMMISSIONING**

Following is a outline of Scope of Services in respect of Construction Supervision, Start-Up and Commissioning Works:

1.1 Co-ordinating site activities with consultant's design offices and site staff of EPC Contractors, Non-EPC Contractors and GPGSL and Office of GPGSL at Head Quarters.

1.2 Supervision of Civil/Structural Works and Erection, Testing and Commissioning of Mechanical, Electrical and Control & Instrumentation Equipment / Systems to ensure compliance with approved specifications and construction drawings/approved procedures.

1.3 **Scheduling & Planning**

(a) Review and approval of Construction Schedules, Erection Procedures of all Contractors, Monitoring Site Activities with respect to the latest approved schedules, identifying likely delays and necessary correction measures.

(b) Review adequacy of all Contractors' resources for adequacy of manpower and availability of special tools/equipment for site work.

(c) Review all Contractors' work plans for ensuing week/month.
(d) Review monthly Construction Progress Reports of all Contractors covering current Construction Status, deviations from approved schedules and recommend remedial measures to be initiated.

(e) Organize and attend weekly/monthly progress review meetings.

1.4 **Quality Control:**

Owner's Engineer shall be responsible to ensure total quality of workmanship for a safe, reliable and operable power plant and shall advise GPGSL if there are any major deviations / problems as regards the following:

(a) Technical field problems encountered at Site
(b) Quality Control Aspects of site work
(c) Corrective actions to be taken in case of works not in-line with approved designs/specifications.
(d) Procedure for Quality Control.

1.5 Compliance to Approved documents for Testing, Commissioning and Performance Testing.

1.6 Preparation of Defect List / Punch List and Ensuring that it is attended to by the Contractor.

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1.7 Witness Performance Guarantee Tests at Site and review the reports submitted by EPC Contractors, and furnish comments and recommendations for acceptance by GPGSL.

1.8 Preparation of Site Safety Plan including an emergency site plan. Ensuring that the Site Safety Plan is implemented at site through audits, meetings with Contractors, etc.

1.9 Preparation of Site Coordination procedures including security systems such as issue of Gate Passes for restricted access, formats for entry or removal of material /equipment from site and ensuring that the procedures are implemented at Site.

TCE Consulting Engineers Ltd. Bangalore

GVK

GVK POWER (GOINDWAL SAHIB) LIMITED

WORK ORDER

W.O.No. GVK-GS/TCE/2007/052
Date : September 28, 2007

To
M/s.TCE Consulting Engineers Limited,
Sheriff Centre, 73/1 St.Marks Road,
BANGALORE 560 001

Kind Attn : Mr.Mohan Murty, Chief Commercial Manager

Sub : **2X270 MW Goindwal Sahib Coal Fired Thermal Power Project – Consulting Engineering Services for Pre EPC Services – Work Order**

Ref :
1) Work Order No.GVK-GS/TCE/2007/01 DT.29th January 2007
2) TCE letter No.TCE.900/0707/DB/111/02/1 dated: 21.08.2007
3) TCE Letter No.TCE.900/0708/DB/111/03/1 dated: 19.09.2007
4) Discussions with TCE

With reference to the above correspondence and discussions we had with "TCE Consulting Engineers Limited (TCE), we are pleased to amend and release this Work Order for **Consulting Engineering Services for Pre EPC Services** on TCE for the 2x270 MW capacity Coal Fired Thermal Power Project at Goindwal Sahib Village, Tarn Taran District, Punjab with the following terms and conditions :

(1) Scope of Services

(a) **Package – 1: Boiler Turbine Generator (BTG)**
TCE's scope of services under Package-1 will be as per Annexure-1.

(b) **Package -2 : Balance of Plant (BOP)**
For Package-2, TCE's scope of services will include assistance in finalizing the scope of services taking into account Package-1 terminal points, contract technical specifications and review of EPC proposal of the Package-2 BOP Contractor and till placement of Order on the selected BOP Contractor. Detailed TCE's scope of services under Package-2 will be as per Annexure-1.

(c) **Packages for Non-EPC Civil works**
TCE's scope of services under Packages for Non-EPC Civil Works will be as per Annexure-2.

(d) **Other scope of services** :
- TCE's scope of services under 'Other Scope of Services' will be as per Annexure-3

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(2) **PRICE**

1	For Pre EPC services covering BTG and BOP packages upto placement of order on the selected vendor(s) including cost of man-effort for services related to visit of TCE Engineers to China and updating of DPR for 2x300 MW and then to 2 x 270 MW, lumpsum fee payble to TCE shall be	Rs.1,86,50,000/- (Rupees one crore eighty six lakh fifty thousand only)
2.	For Engineering services related to Non-EPC works, lumpsum fee payable to TCE shall be	Rs.1,73,50,000/- (Rupees one crore seventy three lakh fifty thousand only)
	Total lumpsum price	**Rs.3,60,00,000/- (Rupees three crore sixty lakhs only**

(3) **TCE's Inputs**

(a) TCE shall furnish a preliminary list of deliverables and schedule

(b) TCE's internal quality procedure shall be furnished to ensure the quality of deliverables is reviewed and checked to ensure satisfactory output.

(c) Communication procedure and periodic review mechanism of the Contract shall be mutually discussed and finalized.

(4) **OUTSTATION VISITS**

The above lumpsum compensation does not provide for any expenses that would be incurred on travel to be undertaken by TCE personnel on domestic outstation visits from their normal place of work (Bangalore). All expenses incurred on such visits including air(economy class) / rail / bus fare as applicable, car / taxi hire charges, lodging (GPGSL approved hotels only) and boarding costs and miscellaneous incidental expenses shall be reimbursed extra at actuals by GVK Power (Goindwal Sahib) Limited (GPGSL).

On outstation visits, TCE can raise monthly bills based on the expenses incurred by TCE during the previous month.

(5) **TERMS OF PAYMENT**

The terms of payment for the compensation shall be as follows:

a) 10% of the lumpsum compensation shall be paid as advance with Letter of Work Order.

b) Balance 80% of the lumpsum compensation shall be payable in monthly installments pro-rata to the percentage progress of work completed by TCE in the preceding month and reflected in the monthly progress reports to be submitted by TCE to GPGSL. The mode for computing the percentage progress could be mutually discussed and agreed to, while preparing the progress report. Alternatively the balance payment will be based on mile stones achieved by TCE according to the agreed schedule between TCE and GPGSL.

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c) Final 10% shall be released within 30 days of achieving Commercial Operation Date of both Units.

Reimbursable Expenses
The monthly bills would be raised based on the expenses incurred by TCE during the previous month. All the invoices raised shall be payable within 30 days after the submission of invoices.

(6) TAXES AND DUTIES

The lumpsum compensation quoted by TCE on this assignment is **exclusive** of the service tax presently being levied by the Government of India, which shall be payable extra at the prevailing rate of 12.36% of the amount, invoiced. In case, there is an increase in the rate of service tax or if any fresh taxes, duties and imposts are levied in future by any Government in India then the same shall be payable extra by GPGSL

Since TCE would be rendering purely technical consultancy services, which are not in the nature of the services of a contractor, Works Contract Tax is not applicable to TCE and hence deduction on this account shall not be made

(7) VALIDITY

(a) All the charges for the consulting engineers services mentioned in para 2 will be firm and valid till 31.09.2011 without any escalation.

(b) This Work Order shall remain valid till the complete scope of works are completed to the satisfaction of the M/s.GVK Power (Goindwal Sahib) Ltd.

We are sending this revised Work Order in duplicate, and request you to return the duplicate copy to us duly vetted by your authorized signatory on behalf of TCE Consulting Engineers Limited as a token of acceptance of the revised Work Order.

Yours Sincerely,
for **GVK Power (Goindwal Sahib) Limited.**

Som Bhupal
Director

Subject to our clarifications furnished in our letter no: TCE 900/0708/MB/11/c dated 16.10.2007

Accepted
for TCE **Consulting Engineers Limited**

Mohan Murthy

AUTHORISED SIGNATORY

TCE Consulting Engineers Ltd.

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ANNEXURE – 1

CONSULTING ENGINEERING SERVICES FOR PRE-EPC SERVICES

SCOPE FOR PACKAGE-1 & PACKAGE-2

The scope of the Owner's Engineer services under Review of Design and Engineering of Package-1 BTG and Package-2 BOP EPC Contractors work is as given below

1.0 **REVIEW OF DESIGN AND ENGINEERING OF EPC CONTRACTORS WORK**
For Packages 1 & 2, TCE's scope of services will include assistance in finalizing the scope of services taking terminal points, contract technical specifications and review of design engineering proposals of the Package-1 BTG Contractor & Package-2 BOP Contractor and till placement of Order on the selected Contractors for respective packages. Detailed TCE's scope of is furnished below :

1.1 Review of Design and Engineering documents for various systems, equipment and structures. The scope shall cover review of design criteria, engineering designs, detailed design drawings and documents submitted by Package-1 & Package 2 Contractors for respective packages to check conformity with technical specifications and contractual requirements, adherence to applicable codes and standards, operational and safety aspects, statutory requirements, reliability and ease of maintenance and prudent utility practices :

(a) Concepts for all major systems.
(b) Specifications of all important / major plant and equipment, electrical items, C&I items and civil works.
(c) Equipment layout drawings.
(d) General arrangement drawings.
(e) Electrical Equipment Layout Drawings
(f) 220 kV Switchyard Drawings
(g) Electrical Protection Schemes
(h) Flow diagrams and P&I diagrams.
(i) Plant and equipment erection drawings.
(j) Piping and cabling layouts
(k) Motor list and related protection schemes.
(l) Electrical single line diagrams, Specifications and drawings.
(m) Instrumentation and control system configuration, control, protection and measurement system drawings, panel layout drawings including DCS control systems and panels.
(n) Civil/Structural drawings.
(o) Design calculations of critical systems, structures and foundations.
(p) Testing and Commissioning Procedures.
(q) Performance Test Procedures.
(r) Reliability Run & Test Procedures.

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ANNEXURE – 2

CONSULTING ENGINEERING SERVICES

SCOPE FOR NON-EPC WORKS

The scope of services under Design and Engineering of Non- EPC works is as given below

2.0 DESIGN AND ENGINEERING FOR NON-EPC WORKS

2.1 To carry out design and engineering for Systems/Equipment forming a part of the Non-EPC works as per details furnished below.

2.2 Following are the details of Non-EPC Equipment / Systems for which preparation of detail design and engineering is required:

PACKAGE – I

(a) Approach Roads, Internal Roads, Culverts, Drainage, Levelling and Grading not covered under EPC Contractor's scope.
(b) Raw Water Supply System including River Water Pump House, Intake Structure Pumps, Pipeline, Handling Equipment and Electricals
(c) Levelling and Grading
(d) Sewage /Effluent / Oil Water Disposal
(e) Storm Water Drains including Rain Water harvesting system integrating with EPC Contractor's scope.

PACKAGE – II

(a) Administration Building.
(b) Canteen Building
(c) Fire Station Building
(d) Workshop Building & equipment
(e) Stores Building
(f) Security Gate House
(g) Covered Parking Areas
(h) Area Lighting of Plant areas not under EPC Contract scope
(i) Fencing, Boundary Wall, Gates.
(j) Air Conditioning & Ventilation System
(k) Hoists & lifts.

GVK

ANNEXURE – 3

CONSULTING ENGINEERING SERVICES

OTHER SCOPE OF SERVICES

Other scope of services includes but not limited to;

- Plant system engineering and Layout planning
- Carrying out required basic and preliminary equipment design engineering for the systems, structures and facilities covered in BOP packages and preparation of specifications for BOP package
- Revision of DPR prepared by TCE earlier to incorporate Unit sizes and updated project cost estimates
- Assistance to GPGSL in discussions with the Punjab State Electricity Regulatory Commission in respect of tariff on norms and technical details.
- Preparation and review of material specifications for BTG and BOP packages
- Preparation of site grading plan and drawings
- Design of storm water drainage during construction
- Design of Construction power and water schemes
- Ashpond design and submission of construction drawings
- Raw water intake pipeline alignment and design of intake system
- Attending and coordinating meetings with BHEL and BOP EPC contractors
- Preparation of project schedule.
- Deputation of TCE engineers to site as Owner's Engineer

TCE Consulting Engineers Ltd.

ANNEXURE P-16 (Colly.)

TARIFF FILING FORMS (THERMAL) FOR DETERMINATION OF TARIFF

PART-I

Annexure-I

Checklist of Forms and other information/ documents for tariff filing for Thermal Stations

Form No.	Title of Tariff Filing Forms (Thermal)	Tick
FORM- 1	Summary Sheet	
Form-1(I)	Statement showing claimed capital cost	
Form-1(II)	Statement showing Return on Equity	
FORM-2	Plant Characteristics	
FORM-3	Normative parameters considered for tariff computations	
FORM- 4	Details of Foreign loans	NA
FORM- 4A	Details of Foreign Equity	NA
FORM-5	Abstract of Admitted Capital Cost for the existing Projects	NA
FORM-5A	Abstract of Capital Cost Estimates and Schedule of Commissioning for the New projects	
FORM-5B	Break-up of Capital Cost for Coal/Lignite based projects	
FORM-5C	Break-up of Capital Cost for Gas/Liquid fuel based Projects	NA
FORM-5D	Break-up of Construction/Supply/Service packages	
FORM-5E	Details of variables , parameters , optional package etc. for New Project	
FORM-5Ei	In case there is cost over run	
FORM-5Eii	In case there is time over run	
FORM-5F	In case there is claim of additional RoE	NA
FORM- 6	Financial Package upto COD	
FORM- 7	Details of Project Specific Loans	
FORM- 8	Details of Allocation of corporate loans to various projects	NA

FORM – 9A	Statement of Additional Capitalisation after COD	NA
FORM – 9B	Statement of Additional Capitalisation during fag end of the Project	NA
FORM – 9Bi	Details of Assets De-capitalised during the period	NA
FORM – 9C	Statement showing reconciliation of ACE claimed with the capital additions as per books	NA
FORM – 9D	Statement showing items/assets/works claimed under Exclusions	NA
FORM – 9E	Statement of Capital Cost	
FORM – 9F	Statement of Capital Woks in Progress	
FORM- 10	Financing of Additional Capitalisation	
FORM- 11	Calculation of Depreciation	
FORM- 12	Statement of Depreciation	
FORM- 13	Calculation of Weighted Average Rate of Interest on Actual Loans	
FORM- 13 A	Calculation of Interest on Normative Loan	
FORM- 13 B	Calculation of Interest on Working Capital	
FORM- 13 C	Other Income as on COD	NA
FORM- 13 D	Incidental Expenditure during Construction up to Scheduled COD and up to Actual COD	
FORM- 13 E	Expenditure under different packages up to Scheduled COD and up to Actual COD	
FORM- 14	Draw Down Schedule for Calculation of IDC & Financing Charges	
FORM- 14A	Actual cash expenditure	
FORM- 15	Details/Information to be Submitted in respect of Fuel for Computation of Energy Charges1	
FORM- 16	Details/Information to be Submitted in respect of Limestone for Computation of Energy Charge Rate	NA
FORM-17	Details/Information to be Submitted in respect of Capital Spares	
FORM-18	Liability Flow Statement	NA
Other Information / Documents		**Tick**
Sl. No.	**Information/Document**	
1	Certificate of incorporation, Certificate for Commencement of Business, Memorandum of Association, & Articles of Association (For New Station setup by a company making tariff application for the first time to CERC)	

2	A. Station wise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & annexures on COD of the Station for the new station & for the relevant years. B. Station wise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & annexures for the existing station for relevant years.	
3	Copies of relevant loan Agreements	
4	Copies of the approval of Competent Authority for the Capital Cost and Financial package.	
5	Copies of the Equity participation agreements and necessary approval for the foreign equity.	
6	Copies of the BPSA/PPA with the beneficiaries, if any	
7	Detailed note giving reasons of cost and time over run, if applicable. List of supporting documents to be submitted: a. Detailed Project Report b. CPM Analysis c. PERT Chart and Bar Chart d. Justification for cost and time Overrun	
8	Generating Company shall submit copy of Cost Audit Report along with cost accounting records, cost details, statements, schedules etc. for the Generating Unit wise /stage wise/ Station wise/ and subsequently consolidated at Company level as submitted to the Govt. of India for first two years i.e. 2014-15 and 2015-16 at the time of mid-term true-up in 2016-17 and for balance period of tariff period 2014-19 at the time of final true-up in 2019-20. In case of initial tariff filing the latest available Cost Audit Report should be furnished.	
9	Any other relevant information, (Please specify)	
10	Reconciliation with Balance sheet of any actual additional capitalization and amongst stages of a generating station	

Note1: Electronic copy of the petition (in words format) and detailed calculation as per these formats (in excel format) and any other information submitted shall also be furnished in the form of CD/Floppy disc.

PART -1
FORM-1

Summary Sheet

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

Sl. No.	Particulars	Unit	05.04.2016 to 15.04.2016	16.04.2016 to 31.03.2017	2017-18	2018-19				
1	2			6	7	8				
1.1	Depreciation	Rs Lakh	13,569	21,022	21,022	21,022				
1.2	Interest on Loan	Rs Lakh	44,976	43,634	40,919	38,146				
1.3	Return on Equity1	Rs Lakh	6,579	19,257	19,257	19,257				
1.4	Interest on Working Capital	Rs Lakh	4,674	7,718	7,794	8,077				
1.5	O & M Expenses	Rs Lakh	7,290	14,580	15,499	16,475				
1.7	Compensation Allowance (If applicable)	Rs Lakh	NA	NA	NA	NA				
1.8	Special allowance (If applicable)	Rs Lakh	NA	NA	NA	NA				
	Total	**Rs Lakh**	**77,087**	**1,06,212**	**1,04,491**	**1,02,978**	**4.477**	**3.084**	**3.015**	**2.814**
2.1	Landed Fuel Cost (Domestic : coal/gas/RLNG/liquid)	Rs/Tonne	5,248	5,248	5,248	5,248				
	(%) of Fuel Quantity by Heat Value	(%)	100%	100%	100%	100%				
2.2	Landed Fuel Cost (Imported Coal)	Rs/Tonne	NA	NA	NA	NA				
	(%) of Fuel Quantity by Heat Value	(%)	0%	0%	0%	0%				
2.3	Secondary fuel oil cost	Rs/Unit	0.01	0.01	0.01	0.01				
	Energy Charge Rate ex-bus (Paise/kWh) 2A, 2B, 2C, 2D									
	- On Domenstic Coal usage	**Paise/kWh**	**414.28**	**331.82**	**338.40**	**338.40**	**4.14**	**3.32**	**3.38**	**3.38**
	- On Imported Coal usage	Paise/kWh	NA	NA	NA	NA				
	- Domestic plus Imported Coal usage (GCV based Fuel Mix)	Paise/kWh	NA	NA	NA	NA				
							8.62	**6.40**	**6.40**	**6.20**

Note:
1: Details of calculations, considering equity as per regulation, to be furnished.
2A: If multifuel is used simultaneously, give 2 in respect of every fuel individually.
2B: The rate of energy charge shall be computed for open cycle operation and combined cycle operation separately in case of gas/liquid fuel fired plants.
2C: The total energy charge shall be worked out based on ex-bus energy scheduled to be sent out.
2D: The Energy Charge rate for the month shall be based on fuel cost(s) and GCV(s) for the month as per Regulation 30 (6)

Energy Chage Calculation

	Domestic Coal	Unit	05.04.2016 to 15.04.2016	16.04.2016 to 31.03.2017	2017-18	2018-19
1	Gross station heat rate	kCal/kWh	2321	2321	2321	2321
2	Specific Fuel oil Consumption	ml/kWh	0.5	0.5	0.5	0.5
3	Landed price of secondary fuel	Rs./ml	0.02	0.02	0.02	0.02
4	CV of Secondary Fuel	kCal/ml	10.27	10.11	9.91	9.91
5	Heat contribution of Coal	kCal/kWh	2316	2316	2316	2316
6	CV of Primary Fuel	kCal/kg	3789	4420	3960	3960
7	Specific Coal consumption	kg/kWh	0.61	0.52	0.58	0.58
8	Landed price of primary fuel	Rs/kg	6.15	5.74	5.25	5.25
9	Auxiliary Consumption	%	9.0%	9.0%	9.0%	9.0%
10	Total Energy Charge	Rs./kWh	4.143	3.318	3.384	3.384

Form-1(I) –Statement showing claimed capital cost: **(INR Lakhs)**

Sl. No.	Particulars	2014-15	05.04.2016 to 15.04.2016	16.04.2016 to 31.03.2017	2017-18	2018-19
1	2	3	4	5	6	7
	Opening Capital Cost		3,74,508	4,38,866	4,38,866	4,38,866
	Add: Addition during the year / period		0	0	0	0
	Less: Decapitalisation during the year / period					
	Less: Reversal during the year / period					
	Add: Discharges during the year / period					
	Closing Capital Cost		**3,74,508**	**4,38,866**	**4,38,866**	**4,38,866**
	Average Capital Cost		**3,74,508**	**4,38,866**	**4,38,866**	**4,38,866**

Form-1(II) –Statement showing Return on Equity:

Sl. No.	Particulars	2014-15	05.04.2016 to 15.04.2016	16.04.2016 to 31.03.2017	2017-18	2018-19
1	2	3	4	5	6	7
	Opening Equity		33,394	97,752	97,752	97,752
	Add: Increase due to addition during the year / period		-	-	-	-
	Less: Decrease due to de-capitalisation during the year / period		-	-	-	-
	Less: Decrease due to reversal during the year / period		-	-	-	-
	Add: Increase due to discharges during the year / period		-	-	-	-
	Closing Equity		**33,394**	**97,752**	**97,752**	**97,752**
	Average Equity		**33,394**	**97,752**	**97,752**	**97,752**
	Rate of ROE		19.70%	19.70%	19.70%	19.70%
	Return on Equity		**6,579**	**19,257**	**19,257**	**19,257**

PART -1
FORM-2

Plant Characteristics

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

Unit(s)/Block(s)/Parameters	Unit-I	Unit-II
Installed Capacity (MW)	270	270
Schedule COD as per Investment Approval	20.05.2013	20.11.2013
Actual COD / Date of Taken Over (as applicable)	05.04.2016	15.04.2016
Pit Head or Non Pit Head	Non Pit Head	Non Pit Head
Name of the Boiler Manufacture	BHEL	BHEL
Name of Turbine Generator Manufacture	BHEL	BHEL
Main Steams Pressure at Turbine inlet (kg/cm^2) abs[1].	**150**	**150**
Main Steam Temperature at Turbine inlet (^0C) [1]	**537**	**537**
Reheat Steam Pressure at Turbine inlet (kg/cm^2) [1].	**38.2**	**38.2**
Reheat Steam Temperature at Turbine inlet (^0C) [1]	**537**	**537**
Main Steam flow at Turbine inlet under MCR condition (tons /hr) [2]	**823.81**	**823.81**
Main Steam flow at Turbine inlet under VWO condition (tons /hr) [2]	**865**	**865**

Unit Gross electrical output under MCR /Rated condition (MW) [2]	**270**	**270**
Unit Gross electrical output under VWO condition (MW) [2]	**283.642**	**283.642**
Guaranteed Design Gross Turbine Cycle Heat Rate (kCal/kWh) [3]	**1943**	**1943**
Conditions on which design turbine cycle heat rate guaranteed	**CW.Temperature 33oC**	**CW.Temperature 33oC**
% MCR	105	105
% Makeup Water Consumption		
Design Capacity of Make up Water System	33000	33000
Design Capacity of Inlet Cooling System	32300	32300
Design Cooling Water Temperature (oC)	33	33
Back Pressure (Ata)	0.105	0.105
Steam flow at super heater outlet under BMCR condition (tons/hr)	865	865
Steam Pressure at super heater outlet under BMCR condition) (kg/Cm2)	156	156
Steam Temperature at super heater outlet under BMCR condition (0C)	540±5 oC	540±5 oC
Steam Temperature at Reheater outlet at BMCR condition (0C)	540±5 oC	540±5 oC
Design / Guaranteed Boiler Efficiency (%) 4	87.48	87.48
Design Fuel with and without Blending of domestic / imported coal	142.40 Tonne/hr	142.40 Tonne/hr
Type of Cooling Tower	**IDCT**	**IDCT**
Type of cooling system5	**Closed Cycle**	**Closed Cycle**
Type of Boiler Feed Pump6	**Electric motor driven through variable speed hydraulic coupling**	**Electric motor driven through variable speed hydraulic coupling**
Fuel Details7		

-Primary Fuel	Coal	Coal
-Secondary Fuel	LDO/HFO	LDO/HFO
-Alternate Fuels		

Special Features/Site Specific Features8
Special Technological Features9
Environmental Regulation related features10
Any other special features 1: At Turbine MCR condition. 2: with 0% (Nil) make up and design Cooling water temperature 3: at TMCR output based on gross generation, 0% (Nil) makeup and design Cooling water 4: With Performance coal based on Higher Heating Value (HHV) of fuel and at BMCR) out put 5: Closed circuit cooling, once through cooling, sea cooling, natural draft cooling, induced draft cooling etc. 6: Motor driven, Steam turbine driven etc. 7: Coal or natural gas or Naptha or lignite etc. 8: Any site specific feature such as Merry-Go-Round, Vicinity to sea, Intake / makeup water systems etc. scrubbers etc. 9: Any Special Technological feature like Advanced class FA technology in Gas Turbines, etc. 10: Environmental Regulation related features like FGD, ESP etc.
Note 1: In case of deviation from specified conditions in Regulation, correction curve of manufacturer may also be **Note 2:** Heat Balance Diagram has to be submitted along with above information in case of new stations. **Note 3:** The Terms – MCR, BMCR, HHV, Performance coal, are as defined in CEA Technical Standards for **Note 4:** The copy of Certificate shall be submitted in terms of Regulation 4 as per Appendix-VI

PART -1
FORM-3

Normative parameters considered for tariff computations

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

Year Ending March

Particulars	Unit	Existing 2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	
1	2	3	4	5	6	7	8	
Guaranteed Design heat rate	kCal / kWh	NA		2221	2221	2221	2221	
Base Rate of Return on Equity	%			15.50%	15.50%	15.50%	15.50%	
Effective Tax Rate 4	%			21.34%	21.34%	21.34%	21.34%	
Target Availability	%			80.00%	80.00%	80.50%	85.00%	*As per IM dated May 2017*
Auxiliary Energy Consumption	%			9.0%	9.0%	9.0%	9.0%	
Gross Station Heat Rate	kCal / kWh			2321	2321	2321	2321	
Specific Fuel Oil Consumption	ml / kWh			0.5	0.5	0.5	0.5	
Normative Handling / Transit Loss of Coal	% of Coal Qty.			0.80%	0.80%	0.80%	0.80%	
Cost of Coal for WC1	Months			2	2	2	2	
Cost of Main Secondary Fuel Oil for WC1	Months			2	2	2	2	
Fuel Cost for WC2	Months			NA	NA	NA	NA	
Liquid Fuel Stock for WC2	Months			NA	NA	NA	NA	
O & M expenses *	Rs lakh / MW			25.40	27.00	28.70	30.51	
Maintenance Spares for WC	% of O&M			20%	20%	20%	20%	
Receivables for WC	in Months			2	2	2	2	
Storage capacity of Primary fuel	MT			310000	310000	310000	310000	
SBI Base Rate + 350 basis points as on 05.04.2016 (9.3%)	%			12.80%	12.80%	12.80%	12.80%	
Blending ratio of domestic coal/imported coal				NA	NA	NA	NA	

* O & M Expenses Considered at Rs.23.90 Lakhs per MW and also Escalation considered @ 6.3% per annum (as per CERC Norms of Operation from CERC Terms and Conditions of Tariff 2014-2019).
1. For Coal based/lignite based generating stations
2. For Gas Turbine/Combined Cycle generating stations duly taking into account the mode of operation on gas fuel and liquid fuel
3. Mention relevant date
4. Effective tax rate is to be computed in accordance with Regulation 25 i.e. actual tax (or advance tax)/gross income, where gross income refers the profit before tax

PART -1
FORM-5A

Abstract of Capital Cost Estimates and Schedule of Commissioning for the New Projects

Name of the Petitioner	:	**GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station	:	**GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State)	:	**TARN TARAN, PUNJAB STATE, INDIA**

New Projects
Capital Cost Estimates

Board of Director / Agency approving the Capital cost estimates:		
Date of approval of the Capital cost estimates:		
		Present Day Cost
Price level of approved estimates		As on actual COD of the Station (16.04.2016)
Foreign Exchange rate considered for the Capital cost estimates		
Capital Cost excluding IDC,IEDC& FC		
Foreign Component, if any (In Million US $ or the relevant Currency)		-
Domestic Component (Rs. Lakh)		2,84,870
Capital cost excluding IDC, IEDC, FC, FERV & Hedging Cost (Rs. Cr)		2,84,870
IDC, IEDC,FC, FERV & Hedging Cost		
Foreign Component, if any (In Million US $ or the relevant Currency)		-
Domestic Component (Rs. Lakh)		1,50,683
Total IDC, IEDC, FC, FERV & Hedging Cost (Rs. Lakh)		1,50,683
Rate of taxes & duties considered		
Capital cost Including IDC, IEDC, FC, FERV & Hedging Cost		
Foreign Component, if any (In Million US $ or the relevant Currency)		

Domestic Component (Rs. Lakh)		4,35,554
Capital cost Including IDC, IEDC& FC (Rs. Lakh)		4,35,554
Schedule of Commissioning		
Scheduled COD of Unit-I/Block-I as per Investment Approval		31.01.2016
Scheduled COD of Unit-II/Block-II as per Investment Approval		31.01.2016

Note:
1. Copy of Investment approval letter should be enclosed
2. Details of Capital Cost are to be furnished as per FORM-5B or 5C as applicable
3. Details of IDC & Financing Charges are to be furnished as per FORM-14.

PART -1
FORM-5B

Break-up of Capital Cost for New Coal/ Lignite based projects

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

(INR Lakhs)

Sl. No.	Break Down	As per Original Estimates approved by APTEL	Actual Capital Expenditure and Liabilities/ Provisions				Variation (3 - 6 - 7)	Specific Reasons for Variation
			Cummulative Capitalisation Amount as on Unit-1 COD - 05.04.2016	Liability Provision as on Unit-1 COD - 05.04.2016	Cummulative Capitalisation Amount as on Unit-2 COD - 16.04.2016	Liability Provision as on Unit-2 COD - 16.04.2016		
1	2	3	4	5	6	7	8	9
1	**Cost of Land & Site Development**							
1.1	Land*	10,935	12,377		12,377		-1,442	see tariff petition
1.2	Rehabilitation & Resettlement (R&R) (Included in construction and pre-operative expenses)	-	-		-			
1.3	Preliminary Investigation & Site Development	25	25		25		-	
	Total Land & Site Development	**10,960**	**12,402**		**12,402**		-1,442	
2	**Plant & Equipment**							
2.1	**Steam Generator Island**							
2.2	**Turbine Generator Island ****	**1,21,339**	**58,324**		**1,16,648**	**439**	4,251	see tariff petition
2.3	**BOP *****	**95,500**	**87,219**		**92,740**	**73**	2,686	see tariff petition
2.3.1	**BOP Supplies (Ex-works)**	**44,800**	**39,236**		**44,757**			
A	**BOP Mechanical**		**25,629**		**31,150**			
A.1	Ash Handling System	**Included in Sl No. 2.3 i.e. BOP**	6,523		6,523			
A.2	Boiler		95		95			
A.3	Chimney		118		118			
A.4	Coal Handling System		5,927		11,854			
A.5	Compressed Air System		595		595			
A.6	Cooling Water System		8,741		8,336			
A.7	Cranes/ Hoist (80T, Misc.)		457		457			
A.8	Fire Protection system		1,426		1,426			
A.9	Fuel Oil System		442		442			
A.10	HV & AC		788		788			
A.11	Raw Water Supply System		177		177			
A.12	Sewage Treatment Plant		42		42			

A.13	Turbine		298		298			
B	**BOP Electrical**		**12,758**		**12,758**			
B.1	Construction Power Equipment		490		490			
B.2	Control Cable & Cabling Accessories		1,266		1,266			
B.3	Earthing		140		140			
B.4	Electrical Lab Equipment		192		192			
B.5	Emergency DG Set	**Included in Sl No. 2.3 i.e. BOP**	203		203			
B.6	Illumination system		1,048		1,048			
B.7	Plant Communication System		77		77			
B.8	Switch Yard		4,685		4,685			
B.9	Switchgear		4,659		4,659			
C	**Control & Instrumentation (C & I) Package**		**848**		**848**			
C.1	Cooling Water System		406		406			
C.2	Field Instruments		63		63			
C.3	Instrumentation & Control System		380		380			
2.3.2	**BOP Services**	**25,000**	**23,091**		**23,091**			
2.3.3	**BOP Steel & Cement**	**25,700**	**24,892**		**24,892**			
A	Structural Steel		12,764		12,764			
B	Reinforcement Steel		8,865		8,865			
C	Cement		3,264		3,264			
Total Plant & Equipment including taxes & Duties		**2,16,839**	**1,45,544**	**-**	**2,09,389**	**513**	6,938	see tariff petition
2.6	**Taxes & Duties**	**Included in Sl No. 2.3 i.e. BOP**						
3	**Initial Spares**	**3,965**	**1,379**		**1,379**		2,586	see tariff petition
4	**Non-EPC works**	**13,500**	**33,731**		**33,731**		-20,231	see tariff petition
4.1	Ash Pond	**Included in Sl No. 4**	3,805		3,805			
4.2	Boiler		162		162			
4.3	Canteen		20		20			
4.4	Car Parking		9		9			
4.5	Coal Handling System		283		283			
4.6	Coal Pulvarizers		10		10			
4.7	Compound Wall & Boundary Wall		558		558			
4.8	Construction of Rain Water Outlets, Water Chutes & Drainage System		25		25			
4.9	Cooling Water System		10		10			
4.10	CWIP - BOP - Others		74		74			
4.11	CWIP - Site Development & Other Expenses		6		6			
4.12	CWIP-Non EPC-Others		13		13			

4.13	Dozer Shed		28		28			
4.14	Earth Filling of Nallas, Wells, Ponds		13		13			
4.15	Earthwork- Cutting,grading and fitting		6,076		6,076			
4.16	Electrical Fittings		1		1			
4.17	Fire Station Building		37		37			
4.18	Green Belt and water supply net work		111		111			
4.19	Guard Pond		130		130			
4.20	Hydrogen Shed		21		21			
4.21	Land Development		188		188			
4.22	LP Piping		169		169			
4.23	New Office Extension		7		7			
4.24	Plant Enabling Roads		753		753			
4.25	Railway Siding		12,159		12,159			
4.26	Raw Water Supply System		1		1			
4.27	Residential Colony		6,477		6,477			
4.28	Service Building		1,893		1,893			
4.29	Site Office		5		5			
4.30	Storage Shed		262		262			
4.31	Switch Yard		0.3		0.3			
4.32	Truck parking area		313		313			
4.33	Work Shop		110		110			
5	**Construction & Pre- Commissioning Expenses**	**10,581**	**27,969**		**27,969**			
A	**Add:**		**33,448**		**33,448**			
5.1	Security Charges		842		842			
5.2	Repairs & Maintenance		631		631			
5.3	Power & Fuel		3,257		3,257			
5.4	Rent		647		647			
5.5	Rates & Taxes		231		231			
5.6	Legal & Professional charges		5,413		5,413			
5.7	Financial Charges incl BG Commission		3,200		3,200			
5.8	Miscellaneous Expenses		863		863			
5.9	Contract Labour		1,044		1,044			
5.10	Insurance		1,656		1,656			
5.11	Printing & Stationery		54		54			
5.12	Travelling & Conveyance		1,699		1,699			
5.13	Communication Cost		182		182			
5.14	Advertisement Expenses		58		58			
5.15	Auditor's remuneration		1		1			
5.16	Certification Fees		0.2		0.2			
5.17	Employees benefits		5,802		5,802			
5.18	Fuel used for Trial runs		7,129		7,129			
5.19	Ash Handling Charges		57		57			
5.20	Depreciation		627		627			

5.21	Debit Balances Written Off		0.3		0.3			
5.22	Loss on Sale of Materials		10		10			
5.23	Loss on sale of Mutual Funds		2		2			
5.24	Loss on sale of Asset		42		42			
B.	**Less**		**5,479**		**5,479**			
	Credit Balances & Excess Provisions Written Back		9		9			
	Interest Earned		952		952			
	Dividends from Mutual Funds		659		659			
	Profit on redemption of Mutal Funds		72		72			
	Profit on Sale of Assets		0.1		0.1			
	Profit on Forward Contracts		141		141			
	Miscellaneous Income		13		13			
	Insurance claim received		19		19			
	Sale of Infirm Power		3,961		3,961			
	Less: Provision for Income Tax		347		347			
6	**Total Capital cost excluding IDC & FC**	**2,67,130**	**2,34,577**	**-**	**2,84,870**	**513**	-18,253	
7	**IDC, FC, FERV & Hedging Cost**							
7.1	Interest During Construction (IDC)	36,774	1,47,484		1,47,484		-1,10,710	see tariff petition
7.2	Financing Charges (FC)	3,714	3,200		3,200		514	see tariff petition
7.3	Foreign Exchange Rate Variation (FERV)	-	-		-		-	
7.4	Hedging Coat	-	-		-		-	
	Total of IDC, FC,FERV & Hedging Cost	**40,488**	**1,50,683**		**1,50,683**		-1,10,195	
8	**Capital cost including IDC, FC, FERV & Hedging Cost**	**3,07,618**	**3,85,260**		**4,35,554**	**513**	-1,28,448	
9	**Overheads**							
9.1	Contingency	6,685	2,800		2,800		3,885	see tariff petition
9.2	Margin Money for WC	4,600	10,752		10,752		-6,152	see tariff petition
	Total Overheads	**11,285**	**13,552**		**13,552**		-2,267	
							-	
10	**(Less): Margin money for WC**		**10,752**		**10,752**			
11	**Net Cumulative capitalization**	**3,07,618**	**3,74,508**	**-**	**4,38,354**	**513**		

Note:

1. In case of cost variation, a detailed note giving reasons of such variation should be submitted clearly indicating whether such cost over-run was beyond the control of the generating company.
2. In case of both time & cost overrun, a detailed note giving reasons of such time and cost over-run should be submitted clearly bringing out the agency responsible and whether such time and cost overrun was beyond the control of the generating company.

3. The implication on cost due to time over run, if any shall be submitted separately giving details of increase in prices in different packages from scheduled COD to Actual COD/anticipated COD, increase in IEDC from scheduled COD to actual COD/anticipated COD and increase of IDC from scheduled COD to actual anticipated COD.

4. Impact on account of each reason for Time over run on Cost of project should be quantified and substantiated with necessary documents and supporting workings.

5. A list of balance work assets/work wise including initial spare on original scope of works along with estimate shall be furnished positively.

* Entire land is Freehold land and there is nothing Lease hold land.

** BTG Contract included Supply and service Contract

*** Balance of Plant contract include BOP Mechanical, Electrical and Service Contract

PART -1
FORM-5D

Break-up of Construction/ Supply/ Service packages

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

Sl. No.	Name/No. of Construction / Supply / Service Package	BTG Supply	BOP Supply (ex-works)	BOP Supplies (Cement & steel)	BTG Services	BOP Services	Non-EPC	Total Cost of all packages
1	Scope of works1 (in line with head of cost break-ups as applicable)	Boiler, TG transformers	CHP,AHP,220kV Switchyard HT & LT Switchgear, DMPT, IDCT, CWT, STP.				Earth work, Colony works, Railway work, Site Grading, Vibro - Compaction, Hydrogen storage shed, road works	
2	Whether awarded through ICB / DCB / Departmentally / Deposit Work	ICB	ICB	ICB	ICB	ICB	DCB	
3	No. of bids received	3	3	3	3	3	2	
4	Date of Award							
5	Date of Start of work	19-10-2009	01-12-2009	01-12-2009	19-10-2009	01-12-2009	04-08-2009	
6	Date of Completion of Work	31-01-2016	31-01-2016	31-01-2016	31-01-2016	31-01-2016	31-01-2016	
7	Value of Award2 in (Rs. Lakh)	1,05,639	44,800	25,700	15,700	25,000	1,35,000	3,51,839
8	Value of Award in Foreign Currency payable in INR (USD Mn)	30.339						30.339
	Value of Award in Foreign Currency payable in INR (Euro in Mn)	19.582						19.582
	Firm or With Escalation in prices	Firm	Firm	Firm	Firm	Firm	Firm	
9	Actual capital expenditure till the completion or up to COD whichever is earlier(Rs.Lakh) *	1,16,648		69,649	Included in BTG supply	23,091	33,731	2,43,120
10	Taxes & Duties and IEDC (Rs. Lakh)							42,900
11	IDC, FC, FERV & Hedging cost (Rs. Lakh)							1,50,683
12	Sub -total (9+10+11) (Rs. Lakh)							4,36,704

* Actual expenditure in respect of Non-EPC works include payments to railway authorities for railway siding.

Note:

1. The scope of work in any package should be indicated in conformity of Capital cost break-up for the coal/lignite based plants in the FORM-5B to the extent possible. In case of Gas/Liquid fuel based projects, break down in the similar manner in the relevant heads as per FORM-5C.

2. If there is any package, which need to be shown in Indian Rupee and foreign currency(ies), the same should be shown separately along with the currency, the exchange rate and the date e.g. Rs.80 Cr. +US$50m=Rs.390Cr. at US$=Rs62 as on say 01.04.14.

(Petitioner)

PART -1
FORM-5E

Details of variables, parameters, optional package etc. for New Project

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

Unit Size	270 MW
Number of Units	2
Greenfield / Extension	Green Field

S. No.	Variables	(Design Operating Range) Values
1	Coal Quality – Calorific Value (kCal/kg)	
	Domestic Coal	3960
	Imported Coal	NA
2	Ash Content	
	Domestic Coal	34%
	Imported Coal	NA
3	Moisture Content	
	Domestic Coal	12%
	Imported Coal	NA
4	Boiler Efficiency	87.48%
5	Suspended Particulate Matter	
6	Ash Utilization (Fly ash)	100%
7	Boiler Configuration (t/hr)	865
8	Turbine Heat Rate (kCal/kWh)	1943
9	CW Temperature (^{o}C)	33
10	Water Source	River Beas
11	Distance of Water Source (km)	1.5
12	Clarifier	

13	Mode of Unloading Oil	By Pumps from Truck
14	Coal Unholding Mechanism	Wagon Tippler & side arm Charger and Locos
15	Type of Fly Ash Disposal and Distance	By Silos to Containers 150km
16	Type of Bottom Ash Disposal and Distance	Ash pond - 3 km
17	Type of Soil	Sandy
18	Foundation Type (Chimney)	Piles
19	Water Table	1.0 m from ground level
20	Seismic and Wind Zone	Zone -IV
21	Condensate Cooling Method	Condensor & IDC
22	Desalination/RO Plant	Not Applicable
23	Evacuation Voltage Level	220kV
24	Type of Coal (Domestic/Imported)	Domestic

Parameter / Variables	**Values**
Completion Schedule	36 months & 42 months
Terms of Payment	monthly
Performance Guarantee Liability	Yes LDs
Basis of Price (Firm/Escalation-Linked)	Firm
Equipment Supplier (Country of Origin)	India
Optional Packages	**Yes/No**
Desalination Plant/RO Plant	Not Applicable
MGR	Not Applicable
Railway Siding	Yes
Unloading Equipment at Jetty	Not Applicable
Rolling Stock/Locomotive	Locos - 2 Nos
FGD Plant	Not Applicable - Provision is made in layout
Length of Transmission Line till Tie Point (in km)	end gantry -0.0 km

(Petitioner)

PART-I
FORM- 5Ei

In case there is cost over run

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

(Amount in Rs. Lakhs)

Sl. No.	Break Down	Original Cost as approved by the Board Members (Rs.Lakh)	Actual Cost as incurred (Rs. Lakh)	Difference	Reasons for Variation (Please submit supporting computations and documents wherever applicable)
		Total Cost	Total Cost	Total Cost	
1	**Cost of Land & Site Development**				
1.1	Land*	10,935	12,377	1,442	Refer tariff petition
1.2	Rehabilitation & Resettlement (R&R) (Included in construction and pre-operative expenses)				
1.3	Preliminary Investigation & Site Development	25	25	-	
	Total Land & Site Development	**10,960**	**12,402**	**1,442**	
2	**Plant & Equipment**				
2.1	**Steam Generator Island**				
2.2	**Turbine Generator Island ****	**1,21,339**	**1,16,648**	**-4,691**	
2.3	**BOP *****	**95,500**	**92,740**	**-2,760**	
2.3.1	**BOP Supplies (Ex-works)**	**44,800**	**44,757**	**-43**	
A	**BOP Mechanical**	**-**	**31,150**		
A.1	Ash Handling System		6,523		
A.2	Boiler		95		
A.3	Chimney		118		
A.4	Coal Handling System		11,854		
A.5	Compressed Air System		595		

A.6	Cooling Water System	Included in Sl No. 2.3 i.e. BOP	8,336	
A.7	Cranes/ Hoist (80T, Misc.)		457	
A.8	Fire Protection system		1,426	
A.9	Fuel Oil System		442	
A.10	HV & AC		788	
A.11	Raw Water Supply System		177	
A.12	Sewage Treatment Plant		42	
A.13	Turbine		298	
B	**BOP Electrical**	-	**12,758**	
B.1	Construction Power Equipment	Included in Sl No. 2.3 i.e. BOP	490	
B.2	Control Cable & Cabling Accessories		1,266	
B.3	Earthing		140	
B.4	Electrical Lab Equipment		192	
B.5	Emergency DG Set		203	
B.6	Illumination system		1,048	
B.7	Plant Communication System		77	
B.8	Switch Yard		4,685	
B.9	Switchgear		4,659	
C	**Control & Instrumentation (C & I) Package**	-	**848**	
C.1	Cooling Water System	-	406	
C.2	Field Instruments	-	63	
C.3	Instrumentation & Control System	-	380	
		-	-	-
2.3.2	**BOP Services**	**25,000**	**23,091**	**-1,909**
2.3.3	**BOP Steel & Cement**	**25,700**	**24,892**	**-808**
A	Structural Steel	-	12,764	
B	Reinforcement Steel	-	8,865	
C	Cement	-	3,264	
	Total Plant & Equipment including taxes & Duties	**2,16,839**	**2,09,389**	**-7,450**
		-	-	-
2.6	**Taxes & Duties**	**Included in Sl No. 2.3 i**	-	
		-	-	-
3	**Initial Spares**	**3,965**	**1,379**	**-2,586**

4	**Non-EPC works**	**13,500**	**33,731**	**20,231**
4.1	Ash Pond	**Included in Sl No. 4**	3,805	
4.2	Boiler	-	162	
4.3	Canteen	-	20	
4.4	Car Parking	-	9	
4.5	Coal Handling System	-	283	
4.6	Coal Pulvarizers	-	10	
4.7	Compound Wall & Boundary Wall	-	558	
4.8	Construction of Rain Water Outlets, Water Chutes & Draina	-	25	
4.9	Cooling Water System	-	10	
4.10	CWIP - BOP - Others	-	74	
4.11	CWIP - Site Development & Other Expenses	-	6	
4.12	CWIP-Non EPC-Others	-	13	
4.13	Dozer Shed	-	28	
4.14	Earth Filling of Nallas, Wells, Ponds	-	13	
4.15	Earthwork- Cutting,grading and fitting	-	6,076	
4.16	Electrical Fittings	-	1	
4.17	Fire Station Building	-	37	
4.18	Green Belt and water supply net work	-	111	
4.19	Guard Pond	-	130	
4.20	Hydrogen Shed	-	21	
4.21	Land Development	-	188	
4.22	LP Piping	-	169	
4.23	New Office Extension	-	7	
4.24	Plant Enabling Roads	-	753	
4.25	Railway Siding	-	12,159	
4.26	Raw Water Supply System	-	1	
4.27	Residential Colony	-	6,477	
4.28	Service Building	-	1,893	
4.29	Site Office	-	5	
4.30	Storage Shed	-	262	
4.31	Switch Yard	-	0	
4.32	Truck parking area	-	313	
4.33	Work Shop	-	110	
5	**Construction & Pre- Commissioning Expenses**	**10,581**	**27,969**	17,388

A	**Add:**	-	**33,448**	
5.1	Security Charges	-	842	
5.2	Repairs & Maintenance	-	631	
5.3	Power & Fuel	-	3,257	
5.4	Rent	-	647	
5.5	Rates & Taxes	-	231	
5.6	Legal & Professional charges	-	5,413	
5.7	Financial Charges incl BG Commission	-	3,200	
5.8	Miscellaneous Expenses	-	863	
5.9	Contract Labour	-	1,044	
5.10	Insurance	-	1,656	
5.11	Printing & Stationery	-	54	
5.12	Travelling & Conveyance	-	1,699	
5.13	Communication Cost	-	182	
5.14	Advertisement Expenses	-	58	
5.15	Auditor's remuneration	-	1	
5.16	Certification Fees	-	0	
5.17	Employees benefits	-	5,802	
5.18	Fuel used for Trial runs	-	7,129	
5.19	Ash Handling Charges	-	57	
5.20	Depreciation	-	627	
5.21	Debit Balances Written Off	-	0	
5.22	Loss on Sale of Materials	-	10	
5.23	Loss on sale of Mutual Funds	-	2	
5.24	Loss on sale of Asset	-	42	
B.	**Less**	-	**5,479**	
	Credit Balances & Excess Provisions Written Back	-	9	
	Interest Earned	-	952	
	Dividends from Mutual Funds	-	659	
	Profit on redemption of Mutal Funds	-	72	
	Profit on Sale of Assets	-	0	
	Profit on Forward Contracts	-	141	
	Miscellaneous Income	-	13	
	Insurance claim received	-	19	
	Sale of Infirm Power	-	3,961	
	Less: Provision for Income Tax	-	347	

6	**Total Capital cost excluding IDC & FC**	**2,67,130**	**2,84,870**	**17,740**
7	**IDC, FC, FERV & Hedging Cost**			
7.1	Interest During Construction (IDC)	36,774	1,47,484	1,10,710
7.2	Financing Charges (FC)	3,714	3,200	-514
7.3	Foreign Exchange Rate Variation (FERV)	-	-	-
7.4	Hedging Coat	-	-	-
	Total of IDC, FC,FERV & Hedging Cost	**40,488**	**1,50,683**	**1,10,195**
8	**Capital cost including IDC, FC, FERV & Hedging Cost**	**3,07,618**	**4,35,554**	**1,27,936**
9	**Overheads**			
9.1	Contingency	6,685	2,800	-3,885
9.2	Margin Money for WC	4,600	10,752	6,152
	Total Overheads	**11,285**	**13,552**	**2,267**
		-	-	-
10	**(Less): Margin money for WC**	-	**10,752**	**10,752**
		-	-	-
11	**Net Cumulative capitalization**	**3,07,618**	**4,38,354**	**1,30,736**
9	**Capital cost including IDC, FC, FERV & Hedging Cost**	**3,07,618**	**4,35,554**	**1,27,936**

*Submit details of Freehold and Lease hold land

Note: Impact on account of each reason for Cost overrun should be quantified and substantiated with necessary documents and supporting workings.

(Petitioner)

PART-I
FORM- 5Eii

In case there is time over run

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

Sr. No	Description of Activity / Works / Service	Original Schedule (As per Planning)		Actual Schedule (As per Actual)		Time Over-Run	Reasons for delay	Other Activity affected (Mention Sr No of activity affected)
		Start Date	Completion Date	Start Date	Completion Date	Months		
1	BTG	19-Oct-09	18-Jul-12	19-Oct-09	1-Apr-16	44	Refer tariff petition	
2	Land acquisition for Goindwal Sahib Railway Siding	26-May-09	26-May-10	26-May-09	9-Feb-13	32		
3	Railway clearances for Goindwal Sahib Railway Siding	26-May-09	26-May-10	26-May-09	24-Feb-14	45		
4	Approval for Goindwal Sahib Railway Siding commissioning	26-May-11	26-Aug-11	30-Sep-14	5-Oct-15	9		
5	Forest land diversion for Tokisud Coal Mine	26-May-09	26-Feb-10	26-May-09	9-Jul-14	52		
6	Railway clearances for Tokisud Mine side Railway Siding	26-May-09	26-May-10	26-May-09	10-May-13	35		
7	Switchyard Commissioning	19-Oct-09	1-Nov-11	19-Oct-09	12-Oct-12	11		

Note:
1. Delay on account of each reason in case of time overrun should be quantified and substantiated with necessary documents and supporting
2. Indicate the activities on critical path

(Petitioner)

PART-I
FORM- 6

Financial Package upto COD

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

Project Cost as on COD1 : 4442 INR Crores
Date of Commercial Operation of the Station : 16.04.2016

	Financial Package as Approved			Financial Package as on COD			As Admitted on COD		
	Currency and Amount3			Currency and Amount3			Currency and Amount3		
1	2	3			4	5		6	7
Loan-I	INR	2,307	Lakh	INR	2,400	Lakh	INR		Lakh
Loan-II	INR	0	Lakh	INR	497	Lakh	INR		Lakh
Loan-III	INR	0	Lakh	INR	472	Lakh	INR		Lakh
Loan-IV	INR	0	Lakh	INR	148	Lakh	INR		Lakh
Total Debt	INR	2,307	Lakh	INR	3,516	Lakh	INR		Lakh
Equity-									
Foreign		NIL			NIL				
Domestic	INR	769	Lakh	INR	1,252	Lakh		INR	Lakh
Total Equity	INR	769	Lakh	INR	1,252	Lakh		INR	Lakh
Debt : Equity Ratio		3.00			2.81				

Note:
1. Say Rs. 80 Cr. + US$ 200 m or Rs. 1320 Cr. including US$ 200 m at an exchange rate of US$=Rs62
2. Provide details on commercial operation as on COD of each Unit
3. For example : US $ 200m, etc.

(Petitioner)

	Original	Final
Debt %	75.00%	73.75%
Equity %	25.00%	26.25%

PART-I
FORM- 7

Details of project specific loans

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

Particulars	Original Term Loan (RTL-I)	Cost overrun 1 (RTL-II)	Cost overrun 2 (RTL-III)	Cost overrun 3 (RTL-IV)	Package5	Package6
1	2	3	4	5	6	7
Source of Loan1	IDBI Consortium	IDBI Consortium	IDBI Consortium	IDBI Consortium		
Currency2	INR (in lakhs)	INR (in lakhs)	INR (in lakhs)	INR (in lakhs)		
Amount of Loan sanctioned (INR Crores)	2,40,000	49,700	47,153	14,760		
Amount of Gross Loan drawn upto 16.04.2016 (upto COD) 3,4,5,13,15	2,40,000	49,132	44,084	-		
Interest Type6	Floating	Floating	Floating	Floating		
Fixed Interest Rate, if applicable						
Base Rate, if Floating Interest7	IDBI MCLR	IDBI MCLR	IDBI MCLR	IDBI MCLR		
Margin, if Floating Interest8	4.45%	4.35%	4.45%	4.45%		
Are there any Caps/Floor9	No	No	No	No		
If above is yes, specify caps/floor	Not Applicable	Not Applicable	Not Applicable	Not Applicable		
Moratorium Period10	6 Months	6 Months	6 Months	6 Months		
Moratorium effective from	from COD	from COD	from COD	from COD		
Repayment Period11	Loan to be repaid in 42 Quarterly Instalments	Loan to be repaid in 39 Quarterly Instalments	Loan to be repaid in 39 Quarterly Instalments	Loan to be repaid in 39 Quarterly Instalments		
Repayment effective from	01-11-2016	01-11-2016	01-11-2016	01-11-2016		
Repayment Frequency12	Quarterly	Quarterly	Quarterly	Quarterly		
Repayment Instalment13,14						
Base Exchange Rate16	Not Applicable	Not Applicable	Not Applicable	Not Applicable		
Are foreign currency loan hedged?	Not Applicable	Not Applicable	Not Applicable	Not Applicable		
If above is yes, specify details17	Not Applicable	Not Applicable	Not Applicable	Not Applicable		

Note:
1. Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.
2. Currency refers to currency of loan such as US$, DM, Yen, Indian Rupee etc.
3. Details are to be submitted as on 31.03.2014 for existing assets and as on COD for the remaining assets.
4. Where the loan has been refinanced, details in the Form is to be given for the loan refinanced. However, the details of the original loan is to be given separately in the same form.

5. If the Tariff in the petition is claimed separately for various units, details in the Form is to be given separately for all the units in the same form.
6. Interest type means whether the interest is fixed or floating.
7. Base rate means the base as PLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.
8. Margin means the points over and above the floating rate.
9. At times caps/floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.
10. Moratorium period refers to the period during which loan servicing liability is not required.
11. Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.

12. Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.

13. Where there is more than one drawal/repayment for a loan, the date & amount of each drawal/repayment may also be given separately
14. If the repayment installment amount and repayment date cannot be worked out from the data furnished above, the repayment schedule to be furnished separately.
15. In case of Foreign loan, date of each drawal& repayment along with exchange rate at that date may be given.
16. Base exchange rate means the exchange rate prevailing as on 31.03.2004 or COD, whichever is later
17. In case of hedging, specify details like type of hedging, period of hedging, cost of hedging, etc.

18. In case of foreign loans, provide details of exchange rate considered on date of each repayment of principal and date of interest payment.
19. At the time of truing up rate of interest with relevant reset date (if any) to be furnished separately
20. At the time of truing up provide details of refinancing of loans considered earlier. Details such as date on which refinancing done, amount of refinanced loan, terms and conditions of refinanced loan, financing and other charges incurred for refinancing, etc.

(Petitioner)

PART-I
FORM- 9E

Statement of Capital cost

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

(To be given for relevant dates and year wise)

(Amount in Rs. Lakh)

Sl. No.	Particulars	As on 05.04.2016	As on 16.04.2016	2017-18	2018-19
A	**a) Opening Gross Block Amount as per books**	**3,74,508**	**4,38,866**	**4,38,866**	**4,38,866**
	b) Amount of capital liabilities in A(a) above	-	513	-	-
	c) Amount of IDC in A(a) above	1,47,484	1,47,484	1,47,484	1,47,484
	d) Amount of FC in A(a) above	3,200	3,200	3,200	3,200
	e) Amount of FERV in A(a) above	-			
	f) Amount of Hedging Cost in A(a) above	-			
	g) Amount of IEDC in A(a) above	41,521	41,521	41,521	41,521
B	**a) Addition in Gross Block Amount during the period (Direct purchases)**				
	b) Amount of capital liabilities in B(a) above	-	-	-	-
	c) Amount of IDC in B(a) above	-	-	-	-
	d) Amount of FC in B(a) above	-	-	-	-
	e) Amount of FERV in B(a) above	-	-	-	-
	f) Amount of Hedging Cost in B(a) above	-	-	-	-
	g) Amount of IEDC in B(a) above	-	-	-	-

C	**a) Addition in Gross Block Amount during the period (Transferred from CWIP)**				
	b) Amount of capital liabilities in C(a) above	-	-	-	-
	c) Amount of IDC in C(a) above	-	-	-	-
	d) Amount of FC in C(a) above	-	-	-	-
	e) Amount of FERV in C(a) above	-	-	-	-
	f) Amount of Hedging Cost in C(a) above	-	-	-	-
	g) Amount of IEDC in C(a) above	-	-	-	-
D	**a) Deletion in Gross Block Amount during the period**				
	b) Amount of capital liabilities in D(a) above	-	-	-	-
	c) Amount of IDC in D(a) above	-	-	-	-
	d) Amount of FC in D(a) above	-	-	-	-
	e) Amount of FERV in D(a) above	-	-	-	-
	f) Amount of Hedging Cost in D(a) above	-	-	-	-
	g) Amount of IEDC in D(a) above	-	-	-	-
E	**a) Closing Gross Block Amount as per books**	**3,74,508**	**4,38,866**	**4,38,866**	**4,38,866**
	b) Amount of capital liabilities in E(a) above	-	513	-	-
	c) Amount of IDC in E(a) above	1,47,484	1,47,484	1,47,484	1,47,484
	d) Amount of FC in E(a) above	3,200	3,200	3,200	3,200
	e) Amount of FERV in E(a) above	-	-	-	-
	f) Amount of Hedging Cost in E(a) above	-	-	-	-
	g) Amount of IEDC in E(a) above	41,521	41,521	41,521	41,521

Note:
1.Relevant date/s means date of COD of unit/s/station and financial year start date and end date

(Petitioner)

PART-I
FORM- 9E

Statement of Capital Works in Progress

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

(To be given for relevant dates and year wise)

(Amount in Rs. Lakh)

Sl. No.	Particulars	As on 05.04.2016	As on 16.04.2016	2017-18	2018-19
A	**a) Opening CWIP as per books**	**64,358**	**-**	**-**	**-**
	b) Amount of capital liabilities in A(a) above	513	-	-	-
	c) Amount of IDC in A(a) above	-	-	-	-
	d) Amount of FC in A(a) above	-	-	-	-
	e) Amount of FERV in A(a) above	-	-	-	-
	f) Amount of Hedging Cost in A(a) above	-	-	-	-
	g) Amount of IEDC in A(a) above	-	-	-	-
B	**a) Addition in CWIP during the period**				
	b) Amount of capital liabilities in B(a) above	-	-	-	-
	c) Amount of IDC in B(a) above	-	-	-	-
	d) Amount of FC in B(a) above	-	-	-	-
	e) Amount of FERV in B(a) above	-	-	-	-
	f) Amount of Hedging Cost in B(a) above	-	-	-	-
	g) Amount of IEDC in B(a) above	-	-	-	-

C	**a) Transferred to Gross Block Amount during the period**				
	b) Amount of capital liabilities in C(a) above	-	-	-	-
	c) Amount of IDC in C(a) above	-	-	-	-
	d) Amount of FC in C(a) above	-	-	-	-
	e) Amount of FERV in C(a) above	-	-	-	-
	f) Amount of Hedging Cost in C(a) above	-	-	-	-
	g) Amount of IEDC in C(a) above	-	-	-	-
D	**a) Deletion in CWIP during the period**				
	b) Amount of capital liabilities in D(a) above	-	-	-	-
	c) Amount of IDC in D(a) above	-	-	-	-
	d) Amount of FC in D(a) above	-	-	-	-
	e) Amount of FERV in D(a) above	-	-	-	-
	f) Amount of Hedging Cost in D(a) above	-	-	-	-
	g) Amount of IEDC in D(a) above	-	-	-	-
E	**a) Closing CWIP as per books**	**64,358**	**-**	**-**	**-**
	b) Amount of capital liabilities in E(a) above	**513**	**-**	**-**	**-**
	c) Amount of IDC in E(a) above	**-**	**-**	**-**	**-**
	d) Amount of FC in E(a) above	**-**	**-**	**-**	**-**
	e) Amount of FERV in E(a) above	**-**	**-**	**-**	**-**
	f) Amount of Hedging Cost in E(a) above	**-**	**-**	**-**	**-**
	g) Amount of IEDC in E(a) above	**-**	**-**	**-**	**-**

Note:
1.Relevant date/s means date of COD of unit/s/station and financial year start date and end date

(Petitioner)

PART-I
FORM- 11

Calculation of Depreciation

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

(Amount in Rs Lakh)

Sl. no.	Name of the Assets1	Depreciation Rates as per CERC's Depreciation Rate Schedule	Gross Block as on 05.04.2016	Depreciation Amount from 06.04.2016 to 15.04.2016	Gross Block as on 16.04.2016	Depreciation Amount from 17.04.2016 to 31.03.2017	Gross Block as on 01.04.2017	Depreciation Amount from 01.04.2017 to 31.03.2018	Gross Block as on 01.04.2018	Depreciation Amount from 01.04.2018 to 31.03.2019
1	Land (under full ownership)	0.00%	12,402	-	12,402	-	12,402	-	12,402	-
2	Building and roads	3.34%	70,117	2,342	70,117	2,342	70,117	2,342	70,117	2,342
3	Plant & Machinery	5.28%	2,11,753	11,181	3,52,921	18,634	3,52,921	18,634	3,52,921	18,634
4	Furnitures and fixtures	6.33%	177	11	177	11	177	11	177	11
5	Office equipment	6.33%	161	10	161	10	161	10	161	10
6	Computers	15.00%	90	14	90	14	90	14	90	14
7	Vehicles	9.50%	91	9	91	9	91	9	91	9
8	Computer software	15.00%	18	3	18	3	18	3	18	3
9	Right to use railway line	0.00%	2,394	-	2,394	-	2,394	-	2,394	-
	TOTAL		2,97,202	13,569	4,38,371	21,022	4,38,371	21,022	4,38,371	21,022
	Weighted Average Rate of Depreciation (%)		4.57%		4.80%		4.80%		4.80%	

*Provide details of Freehold land and Lease hold land separately
Note:
1.Name of the Assets should conform to the description of the assets mentioned in Depreciation Schedule
* ENTIRE LAND IS FREE HOLD LAND.

(Petitioner)

PART-I
FORM- 12

Statement of Depreciation

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

(Amount in Rs Lakh)

Sl. No.	Particulars	05.04.2016 to 15.04.2016	16.04.2016 to 31.03.2017	2017-18	2018-19
1	2	3	4	5	6
	Opening Capital Cost	19,618	2,97,202	4,38,371	4,38,371
	Closing Capital Cost	2,97,202	4,38,371	4,38,371	4,38,371
	Average Capital Cost	1,58,410	3,67,786	4,38,371	4,38,371
	Freehold land	12,402	12,402	12,402	12,402
	Right to use railway line	2,394	2,394	2,394	2,394
	Rate of depreciation				
	Land (under full ownership)	0.00%	0.00%	0.00%	0.00%
	Building and roads	3.34%	3.34%	3.34%	3.34%
	Plant & Machinery	5.28%	5.28%	5.28%	5.28%
	Furnitures and fixtures	6.33%	6.33%	6.33%	6.33%
	Office equipment	6.33%	6.33%	6.33%	6.33%
	Computers	15.00%	15.00%	15.00%	15.00%
	Vehicles	9.50%	9.50%	9.50%	9.50%
	Computer software	15.00%	15.00%	15.00%	15.00%
	Right to use railway line	0.00%	0.00%	0.00%	0.00%
	Depreciable value	1,43,614	3,52,991	4,23,575	4,23,575

	Balance useful life at the beginning of the period	25	25	24	23
	Remaining depreciable value	1,43,614	3,52,991	4,23,575	4,23,575
	Depreciation (for the period)	186	20,158	21,022	21,022
	Depreciation (annualised)	13,569	21,022	21,022	21,022
	Cumulative depreciation at the end of the period	186	20,344	41,367	62,389
	Less: Cumulative depreciation adjustment on account of un-discharged liabilities deducted as on 01.04.2009/Station COD	-	-	-	-
	Less: Cumulative depreciation adjustment on account of de-capitalisation	-	-	-	-
	Net Cumulative depreciation at the end of the period	186	20,344	41,367	62,389
1. In case of details of FERV and AAD, give information for the applicable period.					

(Petitioner)

PART-I
FORM- 13

Calculation of Weighted Average Rate of Interest on Actual Loans

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

(Rs. Lakhs)

Particulars	01.04.2016 to 15.04.2016	16.04.2016 to 31.03.2017	2017-18	2018-19
Loan-1				
Gross loan - Opening	2,40,000	2,40,000	2,40,000	2,40,000
Cumulative repayments of Loans uptoprevious year	-	-	5,280	18,960
Net loan - Opening	**2,40,000**	**2,40,000**	**2,34,720**	**2,21,040**
Add: Drawal(s) during the Year				
Less: Repayment (s) of Loans during the year	-	5,280	13,680	18,000
Net loan - Closing	**2,40,000**	**2,34,720**	**2,21,040**	**2,03,040**
Average Net Loan	2,40,000	2,37,360	2,27,880	2,12,040
Rate of Interest on Loan on annual basis [1]	13.20%	13.20%	13.20%	13.20%
Interest on loan	31,680	31,332	30,080	27,989
Loan-2				
Gross loan - Opening	49,132	49,132	49,132	49,132
Cumulative repayments of Loans uptoprevious year	-	-	1,268	3,803
Net loan - Opening	**49,132**	**49,132**	**47,865**	**45,330**
Add: Drawal(s) during the Year				
Less: Repayment (s) of Loans during the year	-	1,268	2,535	2,535
Net loan - Closing	**49,132**	**47,865**	**45,330**	**42,795**
Average Net Loan	49,132	48,498	46,597	44,062

Rate of Interest on Loan on annual basis [2]	13.15%	13.15%	13.15%	13.15%
Interest on loan	6,463	6,379	6,129	5,796
Loan-3				
Gross loan - Opening	44,315	44,315	44,315	44,315
Cumulative repayments of Loans uptoprevious year	-	-	831	2,492
Net loan - Opening	**44,315**	**44,315**	**43,484**	**41,823**
Add: Drawal(s) during the Year				
Less: Repayment (s) of Loans during the year	-	831	1,662	1,662
Net loan - Closing	**44,315**	**43,484**	**41,823**	**40,161**
Average Net Loan	44,315	43,900	42,653	40,992
Rate of Interest on Loan on annual basis [3]	13.15%	13.15%	13.15%	13.15%
Interest on loan	5,829	5,775	5,611	5,392
Loan-4				
Gross loan - Opening	7,668	7,668	7,668	7,668
Cumulative repayments of Loans uptoprevious year	-	-	22	66
Net loan - Opening	**7,668**	**7,668**	**7,645**	**7,601**
Add: Drawal(s) during the Year				
Less: Repayment (s) of Loans during the year	-	22	44	44
Net loan - Closing	**7,668**	**7,645**	**7,601**	**7,557**
Average Net Loan	7,668	7,656	7,623	7,579
Rate of Interest on Loan on annual basis	13.25%	13.25%	13.25%	13.25%
Interest on loan	1,016	1,014	1,010	1,004
Total Loan				
Gross loan - Opening	3,41,115	3,41,115	3,41,115	3,41,115
Cumulative repayments of Loans uptoprevious year	-	-	7,400	25,321
Net loan - Opening	**3,41,115**	**3,41,115**	**3,33,714**	**3,15,793**
Add: Drawal(s) during the Year	-	-	-	-

Less: Repayment (s) of Loans during the year	-	7,400	17,921	22,241
Net loan - Closing	**3,41,115**	**3,33,714**	**3,15,793**	**2,93,552**
Average Net Loan	3,41,115	3,37,414	3,24,754	3,04,673
Interest on loan	44,988	44,500	42,830	40,182
Weighted average Rate of Interest on Loans	**13.19%**	**13.19%**	**13.19%**	**13.19%**

Note:

1. Axis Bank Limited (200 Cr) @ 12.65%, Remaining lenders (2200 Cr) @ 13.25%

2. Karnataka Bank (20 Cr) @ 13.25%, Remaining lenders (477 Cr) @ 13.15%

3. Karnataka Bank (20.63 Cr) @ 13.25%, Remaining lenders (450.91 Cr) @ 13.15%

(Petitioner)

PART-I
FORM- 13

Calculation of Interest on Normative Loans

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

S. No.	Particulars	05.04.2016 to 15.04.2016	16.04.2016 to 31.03.2017	2017-18	2018-19
1	Gross Normative loan - Opening	3,41,115	3,41,115	3,41,115	3,41,115
2	Cumulative repayment of Normative Loan upto previous year	-	186	20,344	41,367
3	Net Normative loan - Opening	3,41,115	3,40,929	3,20,770	2,99,748
4	Increase/Decrease due to ACE during the Year	-	-	-	-
5	Repayments of Normative Loan during the year	186	20,158	21,022	21,022
6	Net Normative loan - Closing	3,40,929	3,20,770	2,99,748	2,78,725
7	Average Normative Loan	3,41,022	3,30,849	3,10,259	2,89,237
8	Effective Days ratio				
9	Weighted average Rate of Interest of actual Loans	13.19%	13.19%	13.19%	13.19%
10	Interest on Normative loan	44,976	43,634	40,919	38,146

(Petitioner)

PART-I
FORM- 13B

Calculation of Interest on Working Capital

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

(Amount in Rs Lakhs)

Sl. No.	Particulars	Existing 2013-14	2014-15	05.04.2016 to 15.04.2016	16.04.2016 to 31.03.2017	2017-18	2018-19
1	2	3	4	5	6	7	8
1	Cost of Coal/Lignite1	NA	NA	9,679	19,359	19,481	20,570
2	Cost of Main Secondary Fuel Oil1	NA	NA	31	63	63	67
3	Fuel Cost2	NA	NA	NA	NA	NA	NA
4	Liquid Fuel Stock2	NA	NA	NA	NA	NA	NA
5	O & M Expenses	NA	NA	608	1,215	1,292	1,373
6	Maintenance Spares	NA	NA	1,458	2,916	3,100	3,295
7	Receivables	NA	NA	24,737	36,747	36,959	37,799
8	Total Working Capital	NA	NA	36,513	60,299	60,894	63,103
9	Rate of Interest	NA	NA	12.80%	12.80%	12.80%	12.80%
10	Interest on Working Capital	NA	NA	4,674	7,718	7,794	8,077

Note:
1. For Coal based/Lignite based generating stations
2. For Gas Turbine/Combined Cycle generating stations duly taking into account the annual mode of operation (last available) on gas fuel and liquid fuel

(Petitioner)

Annual Generation	**Unit**	**As on 05.04.2016**	**As on 15.04.2016**	**2017-18**	**2018-19**
Annual gross generation corresponding to NAPAF	MU	1892	3784	3808	4021
Annual net generation corresponding to NAPAF	MU	1722	3444	3465	3659

PART-I
FORM- 13D

Incidental Expenditure during Construction up to Scheduled COD and up to Actual/ Anticipated (COD)

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

(Amount in Rs. Lakh)

Sl. No.	Parameters	As on scheduled COD (Up to 2013-14)	As on actual COD (16.04.2016)
A	**Head of Expenses**		
1	Security Charges	400	842
2	Repairs & Maintenance - Buildings	178	247
3	- Other Assets	246	384
4	Power & Fuel	1,128	3,257
5	Rent	517	647
6	Rates & Taxes	99	231
7	Legal & Professional charges	4,190	5,413
8	Interest on Fixed Loans - Term Loans	70,506	1,47,484
9	- Others	2,195	2,709
10	Financial Charges incl BG Commission	1,898	3,200
11	Bank Guarantee Commission	-	-
12	Miscellaneous Expenses	586	863
13	Contract Labour	208	1,044
14	Insurance	946	1,656
15	Printing & Stationery	46	54
16	Travelling & Conveyance	1,402	1,699
17	Communication Cost	121	182
18	Advertisement Expenses	57	58
19	Auditor's remuneration	1	1
20	Certification Fees	0	0

21	Employees benefits	3,345	5,802
22	Fuel used for Trail runs	1,233	7,129
23	Ash Handling Charges	-	57
24	Mining Fee	-	-
25	Depreciation	196	627
26	Debit Balances Written Off	0	0
27	Loss on Sale of Materials	10	10
28	Loss on sale of Mutual Funds	2	2
29	Loss on sale of Asset	-	42
B	**Total Expenses**	**89,510**	**1,83,641**
C	**Less:**	**1,685**	**5,826**
1	Credit Balances & Excess Provisions Written Back	3	9
2	Interest Earned	835	952
3	Dividends from Mutual Funds	640	659
4	Profit on redemption of Mutal Funds	65	72
5	Profit on Sale of Assets	0	0
6	Profit on Forward Contracts	141	141
7	Miscellaneous Income	0	13
8	Insurance claim received	-	19
9	Sale of Infirm Power	-	3,961
D	**Net Expenses**	**87,826**	**1,77,815**

(Petitioner)

PART-I
FORM- 13E

Expenditure under different packages up to Scheduled COD and up to Actual/anticipated COD

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

(Amount in Rs. Lakh)

Sl.No.	Parameters	As on scheduled COD (Up to 2013-14)	As on actual COD (16.04.2016)
1	BTG Supply & Service	1,21,339	1,16,648
2	BOP Supply & Service	95,500	92,740
3	Non EPC	13,500	33,731
4	Spares	3,965	1,379
	TOTAL	**2,34,304**	**2,44,499**

(Petitioner)

PART-I

FORM- 14

Draw Down Schedule for Calculation of IDC & Financing Charges

Name of the Petitioner : GVK POWER (GOINDWAL SAHIB) LIMITED

Name of the Generating Station : GOINDWAL SAHIB THERMAL POWER

S.No	Drawdown Particulars	Quarter-1 (FY 2010-11)			Quarter-2 (FY 2010-11)			(
		Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
1	**Loans**							
1.1	**Total Foreign Loans**							
	Drawdown Amount	-	-	-	-	-	-	-
	IDC	-	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-	-
	Foreign Exchange Rate Variation	-	-	-	-	-	-	-
	Hedging Cost	-	-	-	-	-	-	-
1.2	**Indian Loans**							
1.2.1	**Indian Loan 1**							
	Drawdown Amount	-	-	-	-	-	1,40,00,00,000	-
	IDC	-	-	-		-	97,47,433	-
	Financing Charges	-	-	-	-	-	-	-
1.2.2	**Indian Loan 2**							
	Drawdown Amount	-	-	-	-	-	-	-
	IDC	-	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-	-
1.2.3	**Indian Loan 3**							

S.No	Drawdown Particulars	Quarter-1 (FY 2010-11) Quantum in Foreign Currency	Quarter-1 (FY 2010-11) Exchange Rate on Drawdown Date	Quarter-1 (FY 2010-11) Amount in Indian Rupees	Quarter-2 (FY 2010-11) Quantum in Foreign Currency	Quarter-2 (FY 2010-11) Exchange Rate on Drawdown Date	Quarter-2 (FY 2010-11) Amount in Indian Rupees	Quantum in Foreign Currency
	Drawdown Amount	-	-	-	-	-	-	-
	IDC	-	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-	-
1.2.4	**Indian Loan 4**							
	Drawdown Amount	-	-	-	-	-	-	-
	IDC	-	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-	-
1.2	**Total Indian Loans**							
	Drawdown Amount	-	-	-	-	-	1,40,00,00,000	-
	IDC	-	-	-	-	-	97,47,433	-
	Financing Charges	-	-	14,04,63,562	-	-	-	-
1	**Total of Loans Drawan**	**-**	**-**	**-**	**-**	**-**	**1,40,00,00,000**	**-**
	IDC	**-**	**-**	**-**	**-**	**-**	**97,47,433**	**-**
	Financing Charges	**-**	**-**	**14,04,63,562**	**-**	**-**	**-**	**-**
	Foreign Exchange Rate Variation							
	Hedging Cost							
2	**Equity**							
2.1	Foreign Equity Drawn							
2.2	Indian Equity Drawn			2,40,05,00,000	-	-	-	-
	Total Equity Deployed			**2,40,05,00,000**	**-**	**-**	**-**	**-**

S.No	Drawdown Particulars	Quarter-1 (FY 2010-11)			Quarter-2 (FY 2010-11)			(
		Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
	Cumulative Debt			-			1,40,00,00,000	
	Cumulative Equity			2,40,05,00,000			2,40,05,00,000	
	Debt Equity ratio			-			0.58	

Note:

1.Drawal of debt and equity shall be on paripassu basis quarter wise to meet the commissioning

1.Drawal of debt and equity shall be on paripassu basis quarter wise to meet the commissioning schedule. Drawal of higher equity in the beginning is permissible

2. Applicable interest rates including reset dates used for above computation may be furnished separately

3. In case of multi unit project details of capitalization ratio used to be furnished.

PART-I
FORM- 14
Name of the Petitioner
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S.No	Drawdown Particulars	Quarter-3 (FY 2010-11)		Quarter-4 (FY 2010-11)			Quarter-5 (FY 2011	
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date
1	**Loans**							
1.1	**Total Foreign Loans**							
	Drawdown Amount	-	-	-	-	-	-	-
	IDC	-	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-	-
	Foreign Exchange Rate Variation	-	-	-	-	-	-	-
	Hedging Cost	-	-	-	-	-	-	-
1.2	**Indian Loans**							
1.2.1	**Indian Loan 1**							
	Drawdown Amount	-	3,64,00,00,000	-	-	2,04,00,00,000	-	-
	IDC	-	8,82,24,659	-	-	17,06,41,017	-	-
	Financing Charges	-	-	-	-	-	-	-
1.2.2	**Indian Loan 2**							
	Drawdown Amount	-	-	-	-	-	-	-
	IDC	-	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-	-
1.2.3	**Indian Loan 3**							

S.No	Drawdown Particulars	Quarter-3 (FY 2010-11) Exchange Rate on Drawdown Date	Quarter-3 (FY 2010-11) Amount in Indian Rupees	Quarter-4 (FY 2010-11) Quantum in Foreign Currency	Quarter-4 (FY 2010-11) Exchange Rate on Drawdown Date	Quarter-4 (FY 2010-11) Amount in Indian Rupees	Quarter-5 (FY 2011 Quantum in Foreign Currency	Quarter-5 (FY 2011 Exchange Rate on Drawdown Date
	Drawdown Amount	-	-	-	-	-	-	-
	IDC	-	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-	-
1.2.4	**Indian Loan 4**							
	Drawdown Amount	-	-	-	-	-	-	-
	IDC	-	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-	-
1.2	**Total Indian Loans**							
	Drawdown Amount	-	3,64,00,00,000	-	-	2,04,00,00,000	-	-
	IDC	-	8,82,24,659	-	-	17,06,41,017	-	-
	Financing Charges	-	19,63,098	-	-	55,68,639	-	-
1	**Total of Loans Drawan**	**-**	**3,64,00,00,000**	**-**	**-**	**2,04,00,00,000**	**-**	**-**
	IDC	**-**	**8,82,24,659**	**-**	**-**	**17,06,41,017**	**-**	**-**
	Financing Charges	**-**	**19,63,098**	**-**	**-**	**55,68,639**	**-**	**-**
	Foreign Exchange Rate Variation							
	Hedging Cost							
2	**Equity**							
2.1	Foreign Equity Drawn							
2.2	Indian Equity Drawn	-	55,00,00,000	-	-	-	-	-
	Total Equity Deployed	**-**	**55,00,00,000**	**-**	**-**	**-**	**-**	**-**

S.No	Drawdown Particulars	Quarter-3 (FY 2010-11)		Quarter-4 (FY 2010-11)			Quarter-5 (FY 2011	
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date
	Cumulative Debt		5,04,00,00,000			7,08,00,00,000		
	Cumulative Equity		2,95,05,00,000			2,95,05,00,000		
	Debt Equity ratio		1.71			2.40		

Note:
1.Drawal of debt and equity sh
1.Drawal of debt and equity sh
schedule. Drawal of higher equ
2. Applicable interest rates incl
separately
3. In case of multi unit project c

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S.No	Drawdown Particulars	-12)	Quarter-6 (FY 2011-12)			Quarter-7 (FY 2011-	
		Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date
1	**Loans**						
1.1	**Total Foreign Loans**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
	Foreign Exchange Rate Variation	-	-	-	-	-	-
	Hedging Cost	-	-	-	-	-	-
1.2	**Indian Loans**						
1.2.1	**Indian Loan 1**						
	Drawdown Amount	1,26,00,00,000	-	-	2,28,00,00,000	-	-
	IDC	22,47,18,588	-	-	27,46,98,659	-	-
	Financing Charges	-	-	-	-	-	-
1.2.2	**Indian Loan 2**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
1.2.3	**Indian Loan 3**						

S.No	Drawdown Particulars	-12) Amount in Indian Rupees	Quarter-6 (FY 2011-12) Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quarter-7 (FY 2011- Quantum in Foreign Currency	Exchange Rate on Drawdown Date
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
1.2.4	**Indian Loan 4**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
1.2	**Total Indian Loans**						
	Drawdown Amount	1,26,00,00,000	-	-	2,28,00,00,000	-	-
	IDC	22,47,18,588	-	-	27,46,98,659	-	-
	Financing Charges	-	-	-	22,39,695	-	-
1	**Total of Loans Drawan**	**1,26,00,00,000**	**-**	**-**	**2,28,00,00,000**	**-**	**-**
	IDC	**22,47,18,588**	**-**	**-**	**27,46,98,659**	**-**	**-**
	Financing Charges	**-**	**-**	**-**	**22,39,695**	**-**	**-**
	Foreign Exchange Rate Variation						
	Hedging Cost						
2	**Equity**						
2.1	Foreign Equity Drawn						
2.2	Indian Equity Drawn	-	-	-	43,00,00,000	-	-
	Total Equity Deployed	**-**	**-**	**-**	**43,00,00,000**	**-**	**-**

S.No	Drawdown Particulars	-12)	Quarter-6 (FY 2011-12)			Quarter-7 (FY 2011-	
		Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date
	Cumulative Debt	8,34,00,00,000			10,62,00,00,000		
	Cumulative Equity	2,95,05,00,000			3,38,05,00,000		
	Debt Equity ratio	2.83			3.14		

Note:
1.Drawal of debt and equity sha
1.Drawal of debt and equity sha
schedule. Drawal of higher equ
2. Applicable interest rates inclu
separately
3. In case of multi unit project c

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		-12)	Quarter-8 (FY 2011-12)			Quarter-9 (FY 2012	
S.No	Drawdown Particulars	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date
1	**Loans**						
1.1	**Total Foreign Loans**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
	Foreign Exchange Rate Variation	-	-	-	-	-	-
	Hedging Cost	-	-	-	-	-	-
1.2	**Indian Loans**						
1.2.1	**Indian Loan 1**						
	Drawdown Amount	1,54,00,00,000	-	-	2,99,00,00,000	-	-
	IDC	33,63,12,215	-	-	43,21,99,407	-	-
	Financing Charges	-	-	-	-	-	-
1.2.2	**Indian Loan 2**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
1.2.3	**Indian Loan 3**						

S.No	Drawdown Particulars	-12) Amount in Indian Rupees	Quarter-8 (FY 2011-12) Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quarter-9 (FY 2012 Quantum in Foreign Currency	Exchange Rate on Drawdown Date
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
1.2.4	**Indian Loan 4**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
1.2	**Total Indian Loans**						
	Drawdown Amount	1,54,00,00,000	-	-	2,99,00,00,000	-	-
	IDC	33,63,12,215	-	-	43,21,99,407	-	-
	Financing Charges	55,37,967	-	-	11,03,227	-	-
1	**Total of Loans Drawan**	**1,54,00,00,000**	**-**	**-**	**2,99,00,00,000**	**-**	**-**
	IDC	**33,63,12,215**	**-**	**-**	**43,21,99,407**	**-**	**-**
	Financing Charges	**55,37,967**	**-**	**-**	**11,03,227**	**-**	**-**
	Foreign Exchange Rate Variation						
	Hedging Cost						
2	**Equity**						
2.1	Foreign Equity Drawn						
2.2	Indian Equity Drawn	1,11,00,00,000	-	-	80,00,00,000	-	-
	Total Equity Deployed	**1,11,00,00,000**	**-**	**-**	**80,00,00,000**	**-**	**-**

S.No	Drawdown Particulars	-12)	Quarter-8 (FY 2011-12)			Quarter-9 (FY 2012	
		Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date
	Cumulative Debt	12,16,00,00,000			15,15,00,00,000		
	Cumulative Equity	4,49,05,00,000			5,29,05,00,000		
	Debt Equity ratio	2.71			2.86		

Note:
1.Drawal of debt and equity sh
1.Drawal of debt and equity sh
schedule. Drawal of higher equ
2. Applicable interest rates incl
separately
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S.No	Drawdown Particulars	-13)	Quarter-10 (FY 2012-13)			C
		Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
1	**Loans**					
1.1	**Total Foreign Loans**					
	Drawdown Amount	-	-	-	-	-
	IDC	-	-	-	-	-
	Financing Charges	-	-	-	-	-
	Foreign Exchange Rate Variation	-	-	-	-	-
	Hedging Cost	-	-	-	-	-
1.2	**Indian Loans**					
1.2.1	**Indian Loan 1**					
	Drawdown Amount	2,37,00,00,000	-	-	91,87,50,000	-
	IDC	53,49,71,064	-	-	61,67,96,116	-
	Financing Charges	-	-	-	-	-
1.2.2	**Indian Loan 2**					
	Drawdown Amount	-	-	-	-	-
	IDC	-	-	-	-	-
	Financing Charges	-	-	-	-	-
1.2.3	**Indian Loan 3**					

S.No	Drawdown Particulars	-13) Amount in Indian Rupees	Quarter-10 (FY 2012-13) Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Q Quantum in Foreign Currency
	Drawdown Amount	-	-	-	-	-
	IDC	-	-	-	-	-
	Financing Charges	-	-	-	-	-
1.2.4	**Indian Loan 4**					
	Drawdown Amount	-	-	-	-	-
	IDC	-	-	-	-	-
	Financing Charges	-	-	-	-	-
1.2	**Total Indian Loans**					
	Drawdown Amount	2,37,00,00,000	-	-	91,87,50,000	-
	IDC	53,49,71,064	-	-	61,67,96,116	-
	Financing Charges	11,20,903	-	-	11,46,996	-
1	**Total of Loans Drawan**	**2,37,00,00,000**	**-**	**-**	**91,87,50,000**	**-**
	IDC	**53,49,71,064**	**-**	**-**	**61,67,96,116**	**-**
	Financing Charges	**11,20,903**	**-**	**-**	**11,46,996**	**-**
	Foreign Exchange Rate Variation					
	Hedging Cost					
2	**Equity**					
2.1	Foreign Equity Drawn					
2.2	Indian Equity Drawn	80,55,00,000	-	-	50,00,00,000	-
	Total Equity Deployed	**80,55,00,000**	**-**	**-**	**50,00,00,000**	**-**

S.No	Drawdown Particulars	-13)	Quarter-10 (FY 2012-13)			G
		Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
	Cumulative Debt	17,52,00,00,000			18,43,87,50,000	
	Cumulative Equity	6,09,60,00,000			6,59,60,00,000	
	Debt Equity ratio	2.87			2.80	

Note:
1.Drawal of debt and equity sh
1.Drawal of debt and equity sh
schedule. Drawal of higher equ
2. Applicable interest rates incl
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3. In case of multi unit project c

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S.No	Drawdown Particulars	uarter-11 (FY 2012-13)		Quarter-12 (FY 2012-13)			(
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
1	**Loans**						
1.1	**Total Foreign Loans**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
	Foreign Exchange Rate Variation	-	-	-	-	-	-
	Hedging Cost	-	-	-	-	-	-
1.2	**Indian Loans**						
1.2.1	**Indian Loan 1**						
	Drawdown Amount	-	1,94,64,50,000	-	-	7,50,00,000	-
	IDC	-	67,27,74,515	-	-	69,34,88,741	-
	Financing Charges	-	-	-	-	-	-
1.2.2	**Indian Loan 2**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
1.2.3	**Indian Loan 3**						

S.No	Drawdown Particulars	uarter-11 (FY 2012-13)		Quarter-12 (FY 2012-13)			(
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
1.2.4	**Indian Loan 4**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
1.2	**Total Indian Loans**						
	Drawdown Amount	-	1,94,64,50,000	-	-	7,50,00,000	-
	IDC	-	67,27,74,515	-	-	69,34,88,741	-
	Financing Charges	-	11,46,996	-	-	11,22,061	-
1	**Total of Loans Drawan**	**-**	**1,94,64,50,000**	**-**	**-**	**7,50,00,000**	**-**
	IDC	**-**	**67,27,74,515**	**-**	**-**	**69,34,88,741**	**-**
	Financing Charges	**-**	**11,46,996**	**-**	**-**	**11,22,061**	**-**
	Foreign Exchange Rate Variation						
	Hedging Cost						
2	**Equity**						
2.1	Foreign Equity Drawn						
2.2	Indian Equity Drawn	-	30,00,00,000	-	-	50,40,00,000	-
	Total Equity Deployed	**-**	**30,00,00,000**	**-**	**-**	**50,40,00,000**	**-**

S.No	Drawdown Particulars	uarter-11 (FY 2012-13)		Quarter-12 (FY 2012-13)			(
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
	Cumulative Debt		20,38,52,00,000			20,46,02,00,000	
	Cumulative Equity		6,89,60,00,000			7,40,00,00,000	
	Debt Equity ratio		2.96			2.76	

Note:
1.Drawal of debt and equity sha
1.Drawal of debt and equity sha
schedule. Drawal of higher equ
2. Applicable interest rates inclu
separately
3. In case of multi unit project c

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Name of the Generating Statio

S.No	Drawdown Particulars	uarter-13 (FY 2013-14)		Quarter-14 (FY 2013-14)			Q
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
1	**Loans**						
1.1	**Total Foreign Loans**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
	Foreign Exchange Rate Variation	-	-	-	-	-	-
	Hedging Cost	-	-	-	-	-	-
1.2	**Indian Loans**						
1.2.1	**Indian Loan 1**						
	Drawdown Amount	-	1,25,00,00,000	-	-	64,50,00,000	-
	IDC	-	67,07,18,328	-	-	74,71,43,989	-
	Financing Charges	-	-	-	-	-	-
1.2.2	**Indian Loan 2**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
1.2.3	**Indian Loan 3**						

S.No	Drawdown Particulars	Quarter-13 (FY 2013-14)		Quarter-14 (FY 2013-14)			Q
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
1.2.4	**Indian Loan 4**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
1.2	**Total Indian Loans**						
	Drawdown Amount	-	1,25,00,00,000	-	-	64,50,00,000	-
	IDC	-	67,07,18,328	-	-	74,71,43,989	-
	Financing Charges	-	11,34,528	-	-	-	-
1	**Total of Loans Drawan**	**-**	**1,25,00,00,000**	**-**	**-**	**64,50,00,000**	**-**
	IDC	**-**	**67,07,18,328**	**-**	**-**	**74,71,43,989**	**-**
	Financing Charges	**-**	**11,34,528**	**-**	**-**	**-**	**-**
	Foreign Exchange Rate Variation						
	Hedging Cost						
2	**Equity**						
2.1	Foreign Equity Drawn						
2.2	Indian Equity Drawn	-	-	-	-	60,00,00,000	-
	Total Equity Deployed	**-**	**-**	**-**	**-**	**60,00,00,000**	**-**

S.No	Drawdown Particulars	Quarter-13 (FY 2013-14)		Quarter-14 (FY 2013-14)			Q
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
	Cumulative Debt		21,71,02,00,000			22,35,52,00,000	
	Cumulative Equity		7,40,00,00,000			8,00,00,00,000	
	Debt Equity ratio		2.93			2.79	

Note:
1.Drawal of debt and equity sh
1.Drawal of debt and equity sh
schedule. Drawal of higher equ
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3. In case of multi unit project c

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S.No	Drawdown Particulars	uarter-15 (FY 2013-14)		Quarter-16 (FY 2013-14)			Q
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
1	**Loans**						
1.1	**Total Foreign Loans**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
	Foreign Exchange Rate Variation	-	-	-	-	-	-
	Hedging Cost	-	-	-	-	-	-
1.2	**Indian Loans**						
1.2.1	**Indian Loan 1**						
	Drawdown Amount	-	1,27,50,00,000	-	-	6,03,78,375	-
	IDC	-	78,97,56,382	-	-	78,76,01,161	-
	Financing Charges	-	-	-	-	-	-
1.2.2	**Indian Loan 2**						
	Drawdown Amount	-	-	-	-	67,50,00,000	-
	IDC	-	-	-	-	8,18,322	-
	Financing Charges	-	-	-	-	-	-
1.2.3	**Indian Loan 3**						

S.No	Drawdown Particulars	Quarter-15 (FY 2013-14)		Quarter-16 (FY 2013-14)			Q
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
1.2.4	**Indian Loan 4**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
1.2	**Total Indian Loans**						
	Drawdown Amount	-	1,27,50,00,000	-	-	73,53,78,375	-
	IDC	-	78,97,56,382	-	-	78,84,19,483	-
	Financing Charges	-	2,05,11,318	-	-	70,29,072	-
1	**Total of Loans Drawan**	**-**	**1,27,50,00,000**	**-**	**-**	**73,53,78,375**	**-**
	IDC	**-**	**78,97,56,382**	**-**	**-**	**78,84,19,483**	**-**
	Financing Charges	**-**	**2,05,11,318**	**-**	**-**	**70,29,072**	**-**
	Foreign Exchange Rate Variation						
	Hedging Cost						
2	**Equity**						
2.1	Foreign Equity Drawn						
2.2	Indian Equity Drawn	-	-	-	-	79,50,00,000	-
	Total Equity Deployed	**-**	**-**	**-**	**-**	**79,50,00,000**	**-**

S.No	Drawdown Particulars	uarter-15 (FY 2013-14)		Quarter-16 (FY 2013-14)			C
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
	Cumulative Debt		23,63,02,00,000			24,36,55,78,375	
	Cumulative Equity		8,00,00,00,000			8,79,50,00,000	
	Debt Equity ratio		2.95			2.77	

Note:
1.Drawal of debt and equity sh 100000
1.Drawal of debt and equity sh
schedule. Drawal of higher equ
2. Applicable interest rates incl
separately
3. In case of multi unit project c

PART-I
FORM- 14
Name of the Petitioner
Name of the Generating Statio

S.No	Drawdown Particulars	uarter-17 (FY 2014-15)		Quarter-18 (FY 2014-15)			Q
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
1	**Loans**						
1.1	**Total Foreign Loans**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
	Foreign Exchange Rate Variation	-	-	-	-	-	-
	Hedging Cost	-	-	-	-	-	-
1.2	**Indian Loans**						
1.2.1	**Indian Loan 1**						
	Drawdown Amount	-	15,99,14,110	-	-	2,13,67,008	-
	IDC	-	81,64,64,404	-	-	82,81,69,152	-
	Financing Charges	-	-	-	-	-	-
1.2.2	**Indian Loan 2**						
	Drawdown Amount	-	-	-	-	62,37,31,471	-
	IDC	-	2,48,28,280	-	-	2,84,41,007	-
	Financing Charges	-	-	-	-	-	-
1.2.3	**Indian Loan 3**						

S.No	Drawdown Particulars	Quarter-17 (FY 2014-15)		Quarter-18 (FY 2014-15)			Q
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
1.2.4	**Indian Loan 4**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
1.2	**Total Indian Loans**						
	Drawdown Amount	-	15,99,14,110	-	-	64,50,98,479	-
	IDC	-	84,12,92,684	-	-	85,66,10,159	-
	Financing Charges	-	27,05,875	-	-	4,44,62,940	-
1	**Total of Loans Drawan**	**-**	**15,99,14,110**	**-**	**-**	**64,50,98,479**	**-**
	IDC	**-**	**84,12,92,684**	**-**	**-**	**85,66,10,159**	**-**
	Financing Charges	**-**	**27,05,875**	**-**	**-**	**4,44,62,940**	**-**
	Foreign Exchange Rate Variation						
	Hedging Cost						
2	**Equity**						
2.1	Foreign Equity Drawn						
2.2	Indian Equity Drawn	-	72,02,90,000	-	-	89,67,23,000	-
	Total Equity Deployed	**-**	**72,02,90,000**	**-**	**-**	**89,67,23,000**	**-**

S.No	Drawdown Particulars	uarter-17 (FY 2014-15)		Quarter-18 (FY 2014-15)			Q
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
	Cumulative Debt		24,52,54,92,485			25,17,05,90,964	
	Cumulative Equity		9,51,52,90,000			10,41,20,13,000	
	Debt Equity ratio		2.58			2.42	

Note:
1.Drawal of debt and equity sh
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schedule. Drawal of higher equ
2. Applicable interest rates incl
separately
3. In case of multi unit project c

PART-I
FORM- 14
Name of the Petitioner
Name of the Generating Static

S.No	Drawdown Particulars	uarter-19 (FY 2014-15)		Quarter-20 (FY 2014-15)			
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
1	**Loans**						
1.1	**Total Foreign Loans**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
	Foreign Exchange Rate Variation	-	-	-	-	-	-
	Hedging Cost	-	-	-	-	-	-
1.2	**Indian Loans**						
1.2.1	**Indian Loan 1**						
	Drawdown Amount	-	6,16,40,507	-	-	5,55,00,000	-
	IDC	-	83,30,62,225	-	-	81,69,85,280	-
	Financing Charges	-	-	-	-	-	-
1.2.2	**Indian Loan 2**						
	Drawdown Amount	-	72,76,95,000	-	-	47,03,08,568	-
	IDC	-	5,06,51,596	-	-	7,95,68,773	-
	Financing Charges	-	-	-	-	-	-
1.2.3	**Indian Loan 3**						

S.No	Drawdown Particulars	uarter-19 (FY 2014-15)		Quarter-20 (FY 2014-15)			
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
1.2.4	**Indian Loan 4**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
1.2	**Total Indian Loans**						
	Drawdown Amount	-	78,93,35,507	-	-	52,58,08,568	-
	IDC	-	88,37,13,821	-	-	89,65,54,053	-
	Financing Charges	-	82,25,480	-	-	1,56,33,554	-
1	**Total of Loans Drawan**	**-**	**78,93,35,507**	**-**	**-**	**52,58,08,568**	**-**
	IDC	**-**	**88,37,13,821**	**-**	**-**	**89,65,54,053**	**-**
	Financing Charges	**-**	**82,25,480**	**-**	**-**	**1,56,33,554**	**-**
	Foreign Exchange Rate Variation						
	Hedging Cost						
2	**Equity**						
2.1	Foreign Equity Drawn						
2.2	Indian Equity Drawn	-	25,22,31,800	-	-	13,57,55,200	-
	Total Equity Deployed	**-**	**25,22,31,800**	**-**	**-**	**13,57,55,200**	**-**

S.No	Drawdown Particulars	uarter-19 (FY 2014-15)		Quarter-20 (FY 2014-15)			
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
	Cumulative Debt		25,95,99,26,471			26,48,57,35,039	
	Cumulative Equity		10,66,42,44,800			10,80,00,00,000	
	Debt Equity ratio		2.43			2.45	

Note:
1.Drawal of debt and equity sh
1.Drawal of debt and equity sh
schedule. Drawal of higher equ
2. Applicable interest rates incl
separately
3. In case of multi unit project c

PART-I
FORM- 14
Name of the Petitioner
Name of the Generating Static

S.No	Drawdown Particulars	Quarter-21 (FY 2015-16)		Quarter-22 (FY 2015-16)			
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
1	**Loans**						
1.1	**Total Foreign Loans**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
	Foreign Exchange Rate Variation	-	-	-	-	-	-
	Hedging Cost	-	-	-	-	-	-
1.2	**Indian Loans**						
1.2.1	**Indian Loan 1**						
	Drawdown Amount	-	1,10,00,000	-	-	-	-
	IDC	-	83,01,82,806	-	-	83,65,09,360	-
	Financing Charges	-	-	-	-	-	-
1.2.2	**Indian Loan 2**						
	Drawdown Amount	-	1,70,11,83,685	-	-	56,82,15,187	-
	IDC	-	9,70,33,226	-	-	15,79,18,825	-
	Financing Charges	-	-	-	-	-	-
1.2.3	**Indian Loan 3**						

S.No	Drawdown Particulars	Quarter-21 (FY 2015-16)		Quarter-22 (FY 2015-16)			
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
	Drawdown Amount	-	-	-	-	47,16,35,976	-
	IDC	-	-	-	-	84,370	-
	Financing Charges	-	-	-	-	-	-
1.2.4	**Indian Loan 4**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
1.2	**Total Indian Loans**						
	Drawdown Amount	-	1,71,21,83,685	-	-	1,03,98,51,163	-
	IDC	-	92,72,16,032	-	-	99,45,12,555	-
	Financing Charges	-	37,22,364	-	-	1,97,26,410	-
1	**Total of Loans Drawan**	**-**	**1,71,21,83,685**	**-**	**-**	**1,03,98,51,163**	**-**
	IDC	**-**	**92,72,16,032**	**-**	**-**	**99,45,12,555**	**-**
	Financing Charges	**-**	**37,22,364**	**-**	**-**	**1,97,26,410**	**-**
	Foreign Exchange Rate Variation						
	Hedging Cost						
2	**Equity**						
2.1	Foreign Equity Drawn						
2.2	Indian Equity Drawn	-	9,20,20,000	-	-	10,88,000	-
	Total Equity Deployed	**-**	**9,20,20,000**	**-**	**-**	**10,88,000**	**-**

S.No	Drawdown Particulars	Quarter-21 (FY 2015-16)		Quarter-22 (FY 2015-16)			
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
	Cumulative Debt		28,19,79,18,724			29,23,77,69,887	
	Cumulative Equity		10,89,20,20,000			10,89,31,08,000	
	Debt Equity ratio		2.59			2.68	

Note:
1.Drawal of debt and equity sh
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schedule. Drawal of higher equ
2. Applicable interest rates incl
separately
3. In case of multi unit project c

PART-I
FORM- 14
Name of the Petitioner
Name of the Generating Statio

S.No	Drawdown Particulars	Quarter-23 (FY 2015-16)		Quarter-24 (FY 2015-16)			
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
1	**Loans**						
1.1	**Total Foreign Loans**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
	Foreign Exchange Rate Variation	-	-	-	-	-	-
	Hedging Cost	-	-	-	-	-	-
1.2	**Indian Loans**						
1.2.1	**Indian Loan 1**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	82,80,07,403	-	-	81,90,22,825	-
	Financing Charges	-	-	-	-	-	-
1.2.2	**Indian Loan 2**						
	Drawdown Amount	-	10,50,66,089	-	-	4,20,00,000	
	IDC	-	16,92,03,680	-	-	17,21,78,312	-
	Financing Charges	-	-	-	-	-	-
1.2.3	**Indian Loan 3**						

S.No	Drawdown Particulars	Quarter-23 (FY 2015-16)		Quarter-24 (FY 2015-16)			
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
	Drawdown Amount	-	1,86,59,12,445	-	-	1,30,84,69,689	
	IDC	-	3,52,68,383	-	-	9,65,18,907	
	Financing Charges	-	-	-	-	-	-
1.2.4	**Indian Loan 4**						
	Drawdown Amount	-	-	-	-	-	
	IDC	-	-	-	-	-	
	Financing Charges	-	-	-	-	-	-
1.2	**Total Indian Loans**						
	Drawdown Amount	-	1,97,09,78,535	-	-	1,35,04,69,689	-
	IDC	-	1,03,24,79,466	-	-	1,08,77,20,044	-
	Financing Charges	-	1,62,27,713	-	-	1,49,79,173	-
1	**Total of Loans Drawan**	**-**	**1,97,09,78,535**	**-**	**-**	**1,35,04,69,689**	**-**
	IDC	**-**	**1,03,24,79,466**	**-**	**-**	**1,08,77,20,044**	**-**
	Financing Charges	**-**	**1,62,27,713**	**-**	**-**	**1,49,79,173**	**-**
	Foreign Exchange Rate Variation						
	Hedging Cost						
2	**Equity**						
2.1	Foreign Equity Drawn						
2.2	Indian Equity Drawn	-	2,02,96,000	-	-	1,11,19,73,000	-
	Total Equity Deployed	**-**	**2,02,96,000**	**-**	**-**	**1,11,19,73,000**	**-**

S.No	Drawdown Particulars	Quarter-23 (FY 2015-16)		Quarter-24 (FY 2015-16)			
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
	Cumulative Debt		31,20,87,48,421			32,55,92,18,110	
	Cumulative Equity		10,91,34,04,000			12,02,53,77,000	
	Debt Equity ratio		2.86			2.71	

Note:

1.Drawal of debt and equity sh

1.Drawal of debt and equity sh

schedule. Drawal of higher equ 0.269720449

2. Applicable interest rates incl 0.262543915

separately

3. In case of multi unit project c

PART-I
FORM- 14
Name of the Petitioner
Name of the Generating Static

S.No	Drawdown Particulars	Quarter-25 (FY 2016-17)		Quarter-26 (FY 2016-17)			
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
1	**Loans**						
1.1	**Total Foreign Loans**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-
	Foreign Exchange Rate Variation	-	-	-	-	-	-
	Hedging Cost	-	-	-	-	-	-
1.2	**Indian Loans**						
1.2.1	**Indian Loan 1**						
	Drawdown Amount	-	-	-	-	-	-
	IDC	-	13,19,26,480	-	-	-	-
	Financing Charges	-	-	-	-	-	-
1.2.2	**Indian Loan 2**						
	Drawdown Amount						
	IDC	-	2,68,70,985	-	-	-	-
	Financing Charges	-	-	-	-	-	-
1.2.3	**Indian Loan 3**						

S.No	Drawdown Particulars	Quarter-25 (FY 2016-17)		Quarter-26 (FY 2016-17)			
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
	Drawdown Amount		76,23,42,834			2,31,40,792	
	IDC		1,88,85,192				
	Financing Charges	-	-	-	-	-	-
1.2.4	**Indian Loan 4**						
	Drawdown Amount						
	IDC						
	Financing Charges	-	-	-	-	-	-
1.2	**Total Indian Loans**						
	Drawdown Amount	-	76,23,42,834	-	-	2,31,40,792	-
	IDC	-	17,76,82,657	-	-	-	-
	Financing Charges	-	41,82,247	-	-	-	-
1	**Total of Loans Drawan**	**-**	**76,23,42,834**	**-**	**-**	**2,31,40,792**	**-**
	IDC	**-**	**17,76,82,657**	**-**	**-**	**-**	**-**
	Financing Charges	**-**	**41,82,247**	**-**	**-**	**-**	**-**
	Foreign Exchange Rate Variation						
	Hedging Cost						
2	**Equity**						
2.1	Foreign Equity Drawn						
2.2	Indian Equity Drawn	-	1,98,28,000	-	-	4,01,70,000	-
	Total Equity Deployed	**-**	**1,98,28,000**	**-**	**-**	**4,01,70,000**	**-**

S.No	Drawdown Particulars	Quarter-25 (FY 2016-17)		Quarter-26 (FY 2016-17)			
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency
	Cumulative Debt		33,32,15,60,944			33,34,47,01,736	
	Cumulative Equity		12,04,52,05,000			12,08,53,75,000	
	Debt Equity ratio		2.77			2.76	

Note:
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PART-I
FORM- 14
Name of the Petitioner
Name of the Generating Static

S.No	Drawdown Particulars	Quarter-27 (FY 2016-17)		Quarter-28 (FY 2016-17)			Quarter-29 (FY 2(	
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date
1	**Loans**							
1.1	**Total Foreign Loans**							
	Drawdown Amount	-	-	-	-	-	-	-
	IDC	-	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-	-
	Foreign Exchange Rate Variation	-	-	-	-	-	-	-
	Hedging Cost	-	-	-	-	-	-	-
1.2	**Indian Loans**							
1.2.1	**Indian Loan 1**							
	Drawdown Amount	-	-	-	-	-	-	-
	IDC	-	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-	-
1.2.2	**Indian Loan 2**							
	Drawdown Amount							
	IDC	-	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-	-
1.2.3	**Indian Loan 3**							

S.No	Drawdown Particulars	Quarter-27 (FY 2016-17)		Quarter-28 (FY 2016-17)			Quarter-29 (FY 20	
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date
	Drawdown Amount							
	IDC							
	Financing Charges	-	-	-	-	-	-	-
1.2.4	**Indian Loan 4**							
	Drawdown Amount		42,65,72,478			27,28,99,900		
	IDC							
	Financing Charges	-	-	-	-	-	-	-
1.2	**Total Indian Loans**							
	Drawdown Amount	-	42,65,72,478	-	-	27,28,99,900	-	-
	IDC	-	-	-	-	-	-	-
	Financing Charges	-	-	-	-	-	-	-
1	**Total of Loans Drawan**	**-**	**42,65,72,478**	**-**	**-**	**27,28,99,900**	**-**	**-**
	IDC	**-**	**-**	**-**	**-**	**-**	**-**	**-**
	Financing Charges	**-**	**-**	**-**	**-**	**-**	**-**	**-**
	Foreign Exchange Rate Variation							
	Hedging Cost							
2	**Equity**							
2.1	Foreign Equity Drawn							
2.2	Indian Equity Drawn	-	43,25,03,100	-	-	-	-	-
	Total Equity Deployed	**-**	**43,25,03,100**	**-**	**-**	**-**	**-**	**-**

S.No	Drawdown Particulars	Quarter-27 (FY 2016-17)		Quarter-28 (FY 2016-17)			Quarter-29 (FY 20	
		Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date	Amount in Indian Rupees	Quantum in Foreign Currency	Exchange Rate on Drawdown Date
	Cumulative Debt		33,77,12,74,214			34,04,41,74,114		
	Cumulative Equity		12,51,78,78,100			12,51,78,78,100		
	Debt Equity ratio		2.70			2.72		

Note:
1.Drawal of debt and equity sh
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schedule. Drawal of higher equ
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separately
3. In case of multi unit project c

PART-I
FORM- 14
Name of the Petitioner
Name of the Generating Static

S.No	Drawdown Particulars	)17-18) Amount in Indian Rupees	Total Amount in Indian Rupees
1	**Loans**		
1.1	**Total Foreign Loans**		
	Drawdown Amount	-	-
	IDC	-	-
	Financing Charges	-	-
	Foreign Exchange Rate Variation	-	-
	Hedging Cost	-	-
1.2	**Indian Loans**		
1.2.1	**Indian Loan 1**		
	Drawdown Amount	-	24,00,00,00,000
	IDC	-	13,79,01,22,209
	Financing Charges	-	-
1.2.2	**Indian Loan 2**		
	Drawdown Amount		4,91,32,00,000
	IDC	-	80,75,13,006
	Financing Charges	-	-
1.2.3	**Indian Loan 3**		

S.No	Drawdown Particulars	)17-18) Amount in Indian Rupees	Total Amount in Indian Rupees
	Drawdown Amount		4,43,15,01,736
	IDC		15,07,56,852
	Financing Charges	-	-
1.2.4	**Indian Loan 4**		
	Drawdown Amount	6,72,77,622	76,67,50,000
	IDC		-
	Financing Charges	-	-
1.2	**Total Indian Loans**		
	Drawdown Amount	6,72,77,622	34,11,14,51,736
	IDC	-	14,74,83,92,067
	Financing Charges	-	31,99,53,818
1	**Total of Loans Drawan**	**6,72,77,622**	**34,11,14,51,736**
	IDC	**-**	14,74,83,92,067
	Financing Charges	**-**	31,99,53,818
	Foreign Exchange Rate Variation		
	Hedging Cost		
2	**Equity**		
2.1	Foreign Equity Drawn		-
2.2	Indian Equity Drawn	-	12,51,78,78,100
	Total Equity Deployed	**-**	12,51,78,78,100

S.No	Drawdown Particulars	)17-18) Amount in Indian Rupees	Total Amount in Indian Rupees
	Cumulative Debt	34,11,14,51,736	
	Cumulative Equity	12,51,78,78,100	
	Debt Equity ratio	2.73	

Note:
1.Drawal of debt and equity sha
1.Drawal of debt and equity sha
schedule. Drawal of higher equ
2. Applicable interest rates inclu
separately
3. In case of multi unit project c

PART-I
FORM- 14A

Actual cash expenditure

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

(Amount in Rs. Lakhs)

Particulars	Opening	Quarter-1 (FY 2010-11)	Quarter-2 (FY 2010-11)	Quarter-3 (FY 2010-11)	Quarter-4 (FY 2010-11)	Quarter-5 (FY 2011-12)	Quarter-6 (FY 2011-12)
Expenditure towards Gross Block	16,876	17,898	17,936	17,929	17,967	18,043	19,238
Add: Expenditure towards CWIP	9,103	11,812	23,555	35,500	57,365	77,210	1,09,255
Add: Capital Advances, if any	23,989	24,254	23,637	25,474	23,996	22,327	21,297
Less: Un-discharged liabilities (included above)	850	257	1,702	3,077	6,206	8,585	13,594
Add/Less: Others							
Payment to contractors / suppliers towards capital assets	**49,119**	**53,707**	**63,426**	**75,826**	**93,122**	**1,08,994**	**1,36,195**
Payment During the Quarter		**4,588**	**9,719**	**12,400**	**17,296**	**15,872**	**27,201**
Cumulative payments	**49,119**	**53,707**	**63,426**	**75,826**	**93,122**	**1,08,994**	**1,36,195**

Note: If there is variation between payment and fund deployment justification need to be furnished

(Petitioner)

Name of the Petitioner
Name of the Generating Station
Place (Region/District/State)

Particulars	Quarter-7 (FY 2011-12)	Quarter-8 (FY 2011-12)	Quarter-9 (FY 2012-13)	Quarter-10 (FY 2012-13)	Quarter-11 (FY 2012-13)	Quarter-12 (FY 2012-13)	Quarter-13 (FY 2013-14)
Expenditure towards Gross Block	19,484	19,142	19,302	19,382	19,431	19,456	19,470
Add: Expenditure towards CWIP	1,42,820	1,98,314	2,17,357	2,35,432	2,53,108	2,65,774	2,84,374
Add: Capital Advances, if any	18,726	11,423	14,771	16,489	21,924	19,194	21,955
Less: Un-discharged liabilities (included above)	17,899	30,686	26,758	29,677	32,500	31,145	32,325
Add/Less: Others							
Payment to contractors / suppliers towards capital assets	**1,63,131**	**1,98,194**	**2,24,672**	**2,41,626**	**2,61,963**	**2,73,279**	**2,93,475**
Payment During the Quarter	**26,936**	**35,063**	**26,479**	**16,954**	**20,337**	**11,316**	**20,196**
Cumulative payments	**1,63,131**	**1,98,194**	**2,24,672**	**2,41,626**	**2,61,963**	**2,73,279**	**2,93,475**
Note: If there is variation between pay							

Name of the Petitioner
Name of the Generating Station
Place (Region/District/State)

Particulars	Quarter-14 (FY 2013-14)	Quarter-15 (FY 2013-14)	Quarter-16 (FY 2013-14)
Expenditure towards Gross Block	19,644	19,688	19,705
Add: Expenditure towards CWIP	2,94,497	3,01,967	3,23,170
Add: Capital Advances, if any	21,622	26,449	23,672
Less: Un-discharged liabilities (included above)	32,268	27,318	38,563
Add/Less: Others			
Payment to contractors / suppliers towards capital assets	**3,03,495**	**3,20,785**	**3,27,983**
Payment During the Quarter	**10,020**	**17,290**	**7,198**
Cumulative payments	**3,03,495**	**3,20,785**	**3,27,983**
Note: If there is variation between pa			

Name of the Petitioner
Name of the Generating Station
Place (Region/District/State)

Particulars	Quarter-17 (FY 2014-15)	Quarter-18 (FY 2014-15)	Quarter-19 (FY 2014-15)	Quarter-20 (FY 2014-15)	Quarter-21 (FY 2015-16)	Quarter-22 (FY 2015-16)	Quarter-23 (FY 2015-16)
Expenditure towards Gross Block	19,713	19,944	19,875	20,150	20,150	20,151	20,153
Add: Expenditure towards CWIP	3,32,769	3,46,404	3,57,623	3,69,206	3,79,447	3,92,981	4,06,175
Add: Capital Advances, if any	26,848	26,662	24,854	23,792	23,889	24,063	26,893
Less: Un-discharged liabilities (included above)	43,793	39,296	40,823	38,483	36,816	39,494	35,165
Add/Less: Others							
Payment to contractors / suppliers towards capital assets	**3,35,537**	**3,53,714**	**3,61,530**	**3,74,664**	**3,86,669**	**3,97,701**	**4,18,057**
Payment During the Quarter	**7,554**	**18,176**	**7,816**	**13,134**	**12,005**	**11,032**	**20,356**
Cumulative payments	**3,35,537**	**3,53,714**	**3,61,530**	**3,74,664**	**3,86,669**	**3,97,701**	**4,18,057**
Note: If there is variation between pay							

Name of the Petitioner
Name of the Generating Station
Place (Region/District/State)

Particulars	Quarter-24 (FY 2015-16)
Expenditure towards Gross Block	22,030
Add: Expenditure towards CWIP	4,17,544
Add: Capital Advances, if any	25,541
Less: Un-discharged liabilities (included above)	41,938
Add/Less: Others	
Payment to contractors / suppliers towards capital assets	**4,23,177**
Payment During the Quarter	**5,120**
Cumulative payments	**4,23,177**
Note: If there is variation between pay	

PART-I
FORM- 15

Details/Information to be Submitted in respect of Fuel for Computation of Energy Charges1

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

	Particulars	Period -->	Feb-17	May-17	Jun-17
		Unit	Domestic Coal		
1	Quantity of Coal/Lignite supplied by Coal/ Lignite Company	MT	4140	3276	3615
2	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	MT			
3	Coal supplied by Coal/Lignite Company (1+2)	MT	4140	3276	3615
4	Normative Transit & Handling Losses (For coal/Lignite based Projects)	MT	33	26	29
5	**Net coal / Lignite Supplied (3-4)**	**MT**	**4107**	**3250**	**3586**
6	Amount charged by the Coal /Lignite Company	(Rs.)	8321943	74,15,484	84,66,436
7	Adjustment (+/-) in amount charged made by Coal/Lignite Company	(Rs.)			
8	**Total amount Charged (6+7)**	**(Rs.)**	**8321943**	**74,15,484**	**84,66,436**
9	Transportation charges by rail/ship/road transport	(Rs.)	1,32,36,680	97,28,607	1,02,52,332
10	Adjustment (+/-) in amount charged made by Railways/ Transport Company	(Rs.)			
11	Demurrage Charges, if any (-)	(Rs.)	NA	NA	NA
12	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)	NA	NA	NA
13	**Total Transportation Charges (9+/-10- 11+12)**	**(Rs.)**	**13236680**	**97,28,607**	**1,02,52,332**
14	**Total amount Charged for coal/ supplied including Transportation (8+13)**	**(Rs.)**	**21558623**	**1,71,44,091**	**1,87,18,768**
15	GCV of Coal as fired	(kCal/ Kg)	3768	4178	3981
16	**Landed cost of coal/ Lignite**	**Rs./MT**	**5250**	**5275**	**5220**

Note:
1. Similar details to be furnished for natural gas/liquid fuel for CCGT station and secondary fuel oil for coal/ based thermal plants with appropriate units.
2. As billed and as received GCV, quantity of coal, and price should be submitted as certified by statutory auditor.

	Particulars	Period -->	Mar-16	Apr-16	Jun-17	Feb-16	Mar-16	Jun-17
		Unit	LDO			HFO		
1	Quantity of Oil supplied by Oil Company	(KL)	48	89	36	1170	877	37
2	Adjustment (+/-) in quantity supplied made by Oil Company	(KL)						
3	Oil supplied by Oil Company (1+2)	(KL)	48	89	36	1170	877	37
4	Normative Transit & Handling Losses	(KL)						
5	Net Oil Supplied (3-4)	(KL)	48	89	36	1170	877	37
6	Amount charged by the Oil Company	(Rs.)	1601482	3029687	1478652	20923660	16681852	1151835
7	Adjustment (+/-) in amount charged made by Oil Company	(Rs.)	0	0	0	0	0	0
8	Total amount Charged (6+7)	(Rs.)	1601482	3029687	1478652	20923660	16681852	1151835
9	Transportation charges by rail/ship/road transport	(Rs.)	Included above	Included above	Included above	Included above	Included above	Included above
10	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)						
11	Unloading, Sampling Charges etc.	(Rs.)						
12	Cost of diesel in transporting oil through MGR system, if applicable	(Rs.)						
13	Total Transportation Charges (9+/-10 + 11 +12)	(Rs.)	0	0	0	0	0	0
14	Total amount Charged for Oil supplied including Transportation (8+13)	(Rs.)	1601482	3029687	1478652	20923660	16681852	1151835
15	Weighted average GCV of oil as fired	(kCal/L)	9562	9562	9562	9943	9943	9943
16	Price of Oil	Rs./KL	33364	34149	41074	17877	19011	30765

			Monthly Average			
			05.04.2016 to 15.04.2016	16.04.2016 to 31.03.2017	2017-18	2018-19
Domestic Coal	Weighted Avg GCV of Domestic Coal	kCal/kg	3789	4420	3960	3960
	Weighted Avg Landed price of Domestic Coal	Rs./MT	6151	5744	5248	5248
Secondary Fuel	Weighted Avg GCV of Secondary Fuel	kCal/L	10267	10114	9914	9914
	Weighted Avg Price of Secondary Fuel	Rs./kL	21797	19050	19870	19870

(Petitioner)

Annexure: Actuals as per Electricity sale invoices

Particulars	Unit	Apr-16	Jul-16	Aug-16
Total amount of coal	MT	41669	52434	84487
Weighted Avg GCV of Domestic Coal	kCal/kg	3789	4482	4381
Weighted Avg Landed price of Domestic Coal	Rs./MT	6151	5873	5664

Total quantity of LDO	kL	997	137	68
Weighted Avg GCV of LDO	kCal/L	10700	10700	10700
Weighted Avg Price of LDO	Rs./kL	30267	33873	39895
Total quantity of HFO	kL	2446	2446	2446
Weighted Avg GCV of HFO	kCal/L	10090	10090	10090
Weighted Avg Price of HFO	Rs./kL	18346	18346	18346

PART-I
FORM- 17

Details/Information to be Submitted in respect of Capital Spares

Name of the Petitioner : **GVK POWER (GOINDWAL SAHIB) LIMITED**
Name of the Generating Station : **GOINDWAL SAHIB THERMAL POWER**
Place (Region/District/State) : **TARN TARAN, PUNJAB STATE, INDIA**

Sl. No.	Details of Capital Spares and Expenses		Claimed as a part of additional Capitalisation	Funded through compensatory allowance	Funded through Special allowance (If Applicable)	Claimed as a part of stores and spares
	Name of spare	Amount (Rs.in lacs)	Amount (Rs.in lacs)	Amount (Rs.in lacs)	Amount (Rs.in lacs)	Amount (Rs.in lacs)
1	BTG spares	5,444.00	-	-	-	
2	BOP Spares	1,621.00	-	-	-	
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Annexure P-17 (Colly.)

INDEX

FORMAT-1

GVK Power (GOINDWAL SAHIB) LIMITED
ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17
ENERGY SALES

Sr. No.	Category of Consumer	No. of Consumers at the End of the Year (Nos.)	Connected Load at the End of the Year (KW)	Energy Sal / Demand (Mus)
1	**2**	**3**	**4**	**5**
1	Domestic			
2	Commercial			
3	Industrial			
(a)	Small Supply			
(b)	Medium Supply			
(c)	Large Supply			
(d)	**Total**			
4	Street Lighting			
5	Bulk Supply			
(a)	HT			
(b)	LT			
(c)	**Total**			
6	Railway Traction			
7	Total Metered Sales (Except (AP) within State (total 1 to 6)		Not Applicable	
8	AP Consumption			
(a)	Metered			
(b)	Un-metered			
(c)	**Total**			
9	Total Sale Within State (7-8)			
10	Sales Outside State			
11	Sales to Common Pool Consumers			
12	Sales to Electricity Trades			
13	Sales to Other Distribution Licensees			
14	Total Sales (9+10+11+12+13)			

Note :

Month-wise agribulture consumption data as per sample meters may also be supplied for different years separately for monoblock and submersible agriculture pumpsets

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FORMAT-2

GVK Power (GOINDWAL SAHIB) LIMITED
ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17
TECHNICAL AND COMMERCIAL DETAILS OF THERMAL PLANTS
NAME OF THE THERMAL POWER PLANT GVK POWER (GOINDWAL SAHIB) LTD

Sr. No.	Item	Unit	Ensuing Year Projections (2016-17)
1	**2**	**3**	**4**
1	Installed Capacity	MW	540.00
2	Generation	MU	3,765
3	PFL	%	83%
4	Plant Availability	%	100%
5	Auxiliary Consumption		
	(i)	MU	339
	(ii)	%	9
6	Net Generation	MU	3,426
7	Station Heat Rate	Kcal/kwh	2321
8	Calorific Value of Coal (Weighted Average)	Kcal/Kg	4140
9	Coal Transit Loss	%	1
10	Total Coal Consumption	Tonnes	21,32,017
11	Total Oil Consumption	KL	1882.44
12	Specific Oil Consumption	ml/kwh	0.5
13	Calorific Value of Oil	Kcal/Litre	9500
14	Price of Coal	Rs. / Tonne	5540
15	Price of Oil	Rs / KL	26550
16	Total coal Cost	Rs. Crores	1,181.14
17	Total Oil Cost	Rs. Crores	5.00
18	Total Fuel Cost	Rs. Crores	1,186.14

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FORMAT-3

GVK Power (GOINDWAL SAHIB) LIMITED
ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17
MAINTENANCE SCHEDULE OF THERMAL POWER STATIONS YEAR 2016-17

Sr. No.	Plant / Unit	Period	Days	Type of Mte
1	**GVK Power (Goindwal Sahib) Ltd**			
	Unit-I	03.05.2016 to 26.05.2016	24	LP Turbine Inspection
	Unit-II	20.03.2017 to 06.04.2017	18	TG Bearing 1&2 Inspection

Note :
Information to be supplied separately for previous year, current year and ensuing year.

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FORMAT-4

GVK Power (GOINDWAL SAHIB) LIMITED
ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17
GENERATION AT PSEB HYDEL STATIONS AND SHARE FROM BBMP

Sr. No.	Hydel Station	Previous Year (Actuals)	Current Year (R.E)	Ensuing Year (Projections)
1	2	3	4	5
A) I)	**OWN GENERATION (Capacity (MW)**			
1	Shanan HEP			
2	UBDC Hydel Project			
3	Ranjit Sagar Project			
4	Mukerian Hydel Station			
5	Anandpur Sahib Hydel Project			
6	Micro Hydel Projects			
7	**Total**			
II)	**Gross Generation (MU)**			
1	Shanan HEP			
2	UBDC Hydel Project			
3	Ranjit Sagar Project			
4	Mukerian Hydel Station		Not Applicable	
5	Anandpur Sahib Hydel Project			
6	Micro Hydel Projects			
7	**Total**			
8	**Aux Consumption (MU)**			
9	**Trnasformation Losses (MU)**			
10	**Net Hydel Generation (MU)**			
B)	**BBMB (MU)**			
1	PSEB Share excluding Common Pool Share (Net)			
2	Common Pool Share (Net)			
3	**Availability from BBMB (Net)**			
C)	**Total Hydel Availability (MU)**			

Note :
Royalty of HP in Shanan and Share of HP in RSD may be indicated separately.

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FORMAT-5

GVK Power (GOINDWAL SAHIB) LIMITED
ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17
ENERGY BALANCE

(MU)

Sr. No.	Item	Previous Year (Actuals)	Current Year (R.E)	Ensuing Year (Projections)
1	**2**	**3**	**4**	**5**
A)	**ENERGY REQUIREMENT**			
1	Energy sales to metered category within the State			
2	Energy sales to AP			
3	Total sales within the State			
4	Sales to common pool consumers			
5	Sales outside state			
6	Sales to electricity traders			
7	Sales to other distribution licensees			
8	Total Sales		Not Applicable	
9	T&D losses			
i)	%			
ii)	MU			
10	Total energy requirement			
B)	**ENERGY AVAILABILITY**			
1	Net thermal generation			
2	Net hydel generation (own + shared)			
3	Net power purchase			
4	**Total energy availability**			

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FORMAT-6

GVK Power (GOINDWAL SAHIB) LIMITED
ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17
ENTITLEMENT FROM CENTRAL GENERATING STATIONS
YEAR _______________

Sr. No.	Station	Capacity (MW)	Firm allocation to PSEB		Gen. (MU)	PLF %	Aux. Cons.		Energy sent out (MU)	Firm Energy entitlement of PSEB (MU)	Actual Allocation to PSEB	
			%	MW			MU	%			MU	%
1	2	3	4	5	6	7	8	9	10	11	12	13
I	**NTPC**											
1	Anta											
2	Auraiya											
3	Dadri Gas											
4	Singrauli											
5	Rihand											
6	Unchahar-I											
7	Unchahar-II											
II	**NHPC**											
8	Salal					Not Applicable						
9	Bairasuil											
10	Tanakpur											
11	Chamera-I											
12	Chamera-II											
13	Uri											
14	Dulhasti											
III	**NPC**											
15	NAPP											
16	RAPP											
IV	**Other Sources**											
17	NJPC											
18	Tehri											

Note :
Information may be supplied separately for the previous year, currentyear and ensuing year.

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FORMAT-7

GVK Power (GOINDWAL SAHIB) LIMITED
ANNUAL REVENUE REQUIREMENT FOR THE YEAR 15-16
POWER PURCHASE COST
YEAR _______________

Sr. No.	Source	Purchase (MU)	External losses (%)	Energy recd by PSEB (MU)	AFC (Rs. Crores)	PSEB share (%)	VC (Ps / Unit)	FC (Rs. Crores)	VC (Rs. Crores)	Others (Rs. Crores)	Total (Rs. Crores)
1	2	3	4	5	6	7	8	9	10	11	12
I	**NTPC**										
1	Anta										
2	Auraiya										
3	Dadri Gas										
4	Singrauli										
5	Rihand										
6	Unchahar-I										
7	Unchahar-II										
II	**NHPC**										
8	Salal					Not Applicable					
9	Bairasuil										
10	Tanakpur										
11	Chamera-I										
12	Chamera-II										
13	Uri										
14	Dulhasti										
III	**NPC**										
15	NAPP										
16	RAPP										
IV	**Other Sources**										
17	Co-gen. including Jalkheri										
18	**Banking**										
a)	HPSEB										
b)	J&K										
c)	UPCL										
19	NJPC										
20	Tehri										
21	PTC/Others (may be specified)										
22	UI										
V	**Other Charges**										
22	PGCIL										
23	ULDC										
24	NRLDC										
	Total										

Note :
Information may be supplied separately for the previous year, current year and ensuing year.

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FORMAT-8

GVK Power (GOINDWAL SAHIB) LIMITED
ANNUAL REVENUE REQUIREMENT FOR THE YEAR 16-17
EMPLOYEE COST FOR THE YEAR

Sr. No.	Particulars	PSEB (excluding BBMB share)	BBMP Share	Total
1	2	3	4	5
1	Basin Pay			
2	Dearness Pay			
3	Dearness allowance			
4	House rent allowance			
5	Fixed medical allowance			
6	Medical reimbursement charges			
7	Over time payment			
8	Other allowances (detailed list to be atached)			
9	Generaton incentive			
10	Bonus			
11	**Total**		**As per Appedix-1**	
	Terminal Benefits			
12	Leave encashment			
13	Gratuity			
14	Commutation of pension			
15	Workman compensation			
16	Ex-gratia			
17	**Total**			
	Pension Payments			
18	Basic pension			
19	Dearness pension			
20	Dear ness allowance			
21	Any other expenses			
22	**Total**			
23	**Total (11+17+22)**			
24	Amount capitalized			
25	Net amount			
26	Add prior period expenses			
27	**Grand Total**			

Note :
Year-wise details of peior period employees cost, if any, may be provided

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Appendix 1 Form F8

Employee Expenses

	S.No	Particulars	Ensuing Year Eastimates FY 2016-17
A		**Employee Cost (Other than covered in 'C'&'D')**	
	1	Salaries	**11.30**
	2	Dearness Allowance (DA)	
	3	Other Allowances	
	4	Interim Relief / Wage Revision	
	5	Overtime	
	6	Bonus	
	7	Generation Incentive	
	8	Any Other Item (specify)	
		Sub Total	**11.30**
B		**Other Costs**	
	1	Medical Expenses Reimbursement	
	2	Travelling Allowance(Conveyance Allowance)	
	3	Leave Travel Assistance	
	4	Payment Under Workman's Compensation Act	
	5	Electricity Concession to Employees	
	6	Other Staff Welfare Expenses	**1.20**
	7	Any Other Item (specify)	
		Sub Total	**1.20**
C	1	**Apprentice and Other Training Expenses**	**0.60**
D		**Contribution to Terminal Benefits**	
	1	Earned Leave Encashment	**0.60**
	2	Provident Fund Contribution	**0.90**
	3	Provision for PF Fund	
	4	Pension	
	5	Gratuity	**0.30**
	6	Ex-gratia	
	7	Any Other Item (specify)	
		Sub Total	**1.80**
E		**Grand Total (A+B+C+D)**	**14.90**
F		Employee Expenses Capitalized	**0.52**
G		**Net Employee Expenses (E)-(F)**	**14.38**

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FORMAT-9

GVK Power (GOINDWAL SAHIB) LIMITED
ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17
TOTAL NUMBER OF PSEB EMPLOYEES

Sr. No.	Particulars	Previous Year (Actuals)	Current Year (R.E)	Ensuing Year (Projections)
1	**2**	**3**	**4**	**5**
1	Number of employees with PSEB as on 1st April			
2	Number of employees posted with BBMB as on 1st April			
3	PSEB employees on deputation / foreign service as on 1st April		Details are at Appendix to Format-9	
4	**total number of employees (1+2+3)**			
5	Number of employees retired / retiring during the year			
6	Number of employees at the end of the year (4-5)			
7	Number / share of employees required to be posted with BBMB as per agreement			

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GVK Power (GOINDWAL SAHIB) LIMITED
ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17
TOTAL NUMBER OFGVK Power (Goindwal Sahib Ltd) EMPLOYEES

Sr. No.	Particulars	Ensuing Year (Projections)
1	**2**	**3**
1	Number of employees with GPGSL as on 1st April	146.00
2	Number of employees additions during the year	26.00
3	Number of employees reired/reiring/resigned during the year	-
4	**Number of employees at the end of the year (1+2-3)**	**172.00**

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FORMAT-10

GVK Power (GOINDWAL SAHIB) LIMITED
ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17
EMPLOYEES PRODUCTIVITY PARAMETERS

Sr. No.	Particulars	Previous Year (Actuals)	Current Year (R.E)	Ensuing Year (Projections)
1	**2**	**3**	**4**	**5**
1	Number of consumers in million			
2	Connected load in KW			
3	Line circuit in KM			
4	Energy sold in MU		**Not Applicable**	
5	Employees per MU of energy sold			
6	Employees per 1000 consumers			
7	Share of employees cost in total costs			
8	Employees cost in paise / kwh of energy sold			
9	Line circuit KM per employee			

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FORMAT-11

GVK Power (GOINDWAL SAHIB) LIMITED					
ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17					
VALUE OF ASSETS AND DEPRECIATION CHARGES					
(information to be supplied for the previous year (acutals), current year (RE) and the ensuing year (projections) separately)					
Sr. No.	**Particulars**	**Assets value at the beginning of the year**	**Rate of depreciation**	**Depreciation charges**	**Accumulated depreciation**
1	**2**	**3**	**4**	**5**	
	(i) Thermal				
1	Land and land rights	182	0	0	0
2	Buildings	701	3.34%	22.45	22.45
3	Hydraulic works				
4	Other civil works				
5	Plant and machinery	3558	5.28%	180.14	185.88
6	Lines and cable network				
7	Vehicles				
8	Furniture and fixtures				
9	Office equipment				
10	**Total**	**4441**		**202.59**	**208.33**
	(ii) Hydel				
1	Land and land rights				
2	Buildings				
3	Hydraulic works				
4	Other civil works				
5	Plant and machinery				
6	Lines and cable network				
7	Vehicles				
8	Furniture and fixtures				
9	Office equipment				
10	**Total**				
	(iii) Internal combustion				
1	Land and land rights				
2	Buildings				
3	Hydraulic works				
4	Other civil works				
5	Plant and machinery				
6	Lines and cable network				
7	Vehicles				
8	Furniture and fixtures				
9	Office equipment				
10	**Total**				
	(iv) Transmission				
1	Land and land rights				
2	Buildings				
3	Hydraulic works				
4	Other civil works				
5	Plant and machinery				
6	Lines and cable network				
7	Vehicles				
8	Furniture and fixtures				
9	Office equipment				
10	**Total**				
	(v) Distirbution				
1	Land and land rights				
2	Buildings				
3	Hydraulic works				
4	Other civil works				
5	Plant and machinery				
6	Lines and cable network				
7	Vehicles				
8	Furniture and fixtures				
9	Office equipment				
10	**Total**				
	(vi) Others				
	Grand Total (I to vi)				

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FORMAT-12

GVK Power (GOINDWAL SAHIB) LIMITED
ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17
DEPRECIATION CHARGES

(Rs. in crores)

Sr. No.	Item	Assets as on April 1 of previous year	Depreciation for previous year	Assets as on April 1 of Current year	Depreciation for current year	Assets as on April 1 of ensuing year	Depreciation for ensuing year
1	2	3	4	5			
1	Thermal					4441	202.59
2	Hydro						
3	Internal combustion						
4	Transmission						
5	Distribution						
6	Others						
7	**Total**					**4441**	**202.59**

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FORMAT-13

GVK Power (GOINDWAL SAHIB) LIMITED
ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17
REPAIRS AND MAINTENANCE EXPENSES

(Rs. in crores)

Sr. No.	Particulars	Previous Year (Actuals)	Current Year (R.E)	Ensuing Year (Projections)
1	2	3	4	5
1	Plant & Machinery			
2	Buildings			
3	Hydraulic works & civil works			
4	Line cable & network			
5	Vehicles	As per Appendix 1		
6	Furniture & fixtures			
7	Office equipments			
8	Operating expenses			
9	**Total**			
10	Add BBMB share			
11	**Total expenses**			
12	Less capitalized			
	---- PSEB			
	---- BBMB			
13	Net expenses			
14	Add peior period *			
15	Total expenses charged to revenue			

* year-wise details of these charges may be provided.

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Appendix 1 -Form 13

Repair & Maintenance Expenditure

S. No	Particulars	Ensuing Year 2016-17
1	Plant and Machinery	60.00
	- Boiler	
	- Turbine	
	- Generator	
	- Others (specify)	4.80
2	Buildings	2.40
3	Civil Works	1.20
4	Hydraulic Works	6.00
5	Lines, Cable Networks etc.	6.00
6	Vehicles	1.20
7	Furniture and Fixtures	0.30
8	Office Equipments	0.45
9	Station Supplies	0.30
10	Any other item (specify)	
	Contract labour	2.40
11	Total R&M Expenses (1 to 10)	**85.05**
12	R&M Expenses Capitalized	
13	Net R&M Expenses (11-12)	**85.05**

Note :
1. The above information is to be provided Generating Station-wise and in consolidated form in case of Generation

FORMAT-14

GVK Power (GOINDWAL SAHIB) LIMITED
ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17
Administration and General Expenses

(Rs. in crores)

Sr. No.	Particulars	Previous Year (Actuals)	Current Year (R.E)	Ensuing Year (Projections)
1	2	3	4	5
1	Rent, rates & taxes			
2	Insurance			
3	Telephone, postage & telegrams			
4	Consultancy feesTechnical fees			
5	Other professional charges			
6	coneyance & travel expenses			
7	Electricity & water charges			
8	Others			
9	Freight	**As per Appendix 1**		
10	Other material related expenses			
11	**Total**			
12	Add BBMB share			
13	Less capitalized			
14	---- PSEB			
15	---- BBMB			
16	Net expenses			
17	Add prior period *			
18	**Total expenses charged to revenue**			

* year-wise details of these charges may be provided.

* year-wise details of these charges may be provided.

Appendix-1- Form F14

Administration & General Expenses

S.No		Particulars		Ensuing Year 2016-17
A.	1	Lease/ Rent		0.30
	2	Insurance		8.00
	3	Revenue Stamp Expenses Account		
	4	Telephone, Postage, Telegram & Telex Charges		0.30
	5	Incentive & Award to Employees/Outsiders		0.30
	6	Consultancy Charges		2.40
	7	Technical Fees		
	8	Other Professional Charges		2.40
	9	Conveyance and Travelling Expenses		6.00
	10	License and Registration Fees		1.20
	11	Vehicle Expenses (Other Than Trucks and Delivery Vans)	Vehicles Running Expenses Petrol and Oil	0.60
			Hiring of Vehicles	
	12	Security / Service Charges Paid to Outside Agencies		4.80
		Sub Total 'A' (1 to 12)		**26.30**
B. Other Charges	1	Fee and Subscription for Books and Periodicals		
	2	Printing and Stationery Expenses		0.60
	3	Advertisement Expenses (Other than Purchase Related) Exhibition & Demo.		0.30
	4	Contributions/Donations to Outside Institutes / Associations		
	5	Electricity Charges of Offices		5.40
	6	Water Charges		1.21
	7	Entertainment Charges		0.30
	8	Miscellaneous Expenses (specify details)		0.02
	9	Other Administrative Exp		2.32
		Sub-Total 'B' (1 To 9)		**10.15**
C.		**Legal Fee/Charges**		**3.60**
D.		**Auditor's Fee**		**0.05**
E. Material Related Expenses	1	Freight on Capital Equipments		
	2	Purchase Related Advertisement Expenses		
	3	Vehicle Running Expenses Truck / Delivery Van		
	4	Vehicle Hiring Expenses Truck / Delivery Van		
	5	Other Freight		
	6	Transit Insurance		
	7	Octroi		
	8	Incidental Stores Expenses		
	9	Fabrication Charges		
		Sub Total 'E' (1 To 9)		**-**
F.		**Direction And Supervision Charges**		
G.		**Annual license fee and tariff determination fee payable to PSERC**		**0.28**
		Grand Total (A To G)	**Total Charges**	**40.38**

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Format-15

GVK POWER (GOINDWAL SAHIB) LIMITED
ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17
Details of loans for the year
(Information to be supplied for the previous year (actuals), current year (RE) and ensuing year (projections))

(Rs. in crores)

Sl. No.	Particulars (source)	Opening balance	Rate of interest	Addition during the year	Repayment during the year	Closing balance	Amount of interest paid
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
1	TL-I	2,400.00	12.75%		138.06	2,261.94	285.49
2	TL-II	491.32	12.75%	11.68	28.93	474.07	59.01
3	TL-III	364.60	13.25%	106.40	27.09	443.91	51.36
4	TL-IV		13.25%	148.00	8.51	139.49	8.86
	TOTAL	**3,255.92**		**266.08**	**202.59**	**3,319.41**	**404.72**

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Format-16

GVK POWER (GOINDWAL SAHIB) LIMITED

ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17

Interest and Finance Charges

(Rs. in crores)

Sr. No.	Source of loan	Previous year (actuals)	Current year (RE)	Ensuing year (projections)
1	**2**	**3**	**4**	**5**
1	IDBI Bank			87.93
2	Union Bank of India			43.97
3	Axis Bank			35.17
4	IIFCL			35.17
5	LIC of India			35.17
6	Bank of Baroda			35.17
7	Lease rental			26.38
8	PFC			26.38
9	GPF			26.38
10	Bank of India			17.59
11	Indian Bank			17.59
	Karnataka Bank			17.59
12	OBC			17.59
13	**Total**			422.07
14	Add state Govt. loan			
15	**Total (13+14)**			422.07
16	Less capitalization			17.35
17	**Net interest**			404.72
18	Add prior period			
19	**Total interest**			
20	Finance charges			
21	**Total interest and finance charges**			

Format-17

GVK POWER (GOINDWAL SAHIB) LIMITED

ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17

Interest Capitalized

(Rs. in crores)

Sr.No.	Interest Capitalized	Previous year (actuals)	Current year (RE)	Ensuing year (projections)
1	2	3	4	5
1	WIP		4175	4224
2	GFA at the end of the year		220	217
3	WIP+GFA at the end of the year		4395	4441
4	Interest(excluding interest on WCL)		404.19	429.72
5	Interest Capitalized		404.19	25.00

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Format-18
GVK POWER (GOINDWAL SAHIB) LIMITED
ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17
Information regarding restructuring of outstanding loans during the year

Sr. No.	Source of loan	Amount of original loan (Rs. in crores)	Old rate of interest	Amount already restructured (Rs. in crores)	Revised rate of interest	Amount now being restructured (Rs. in crores)	New rate of interest
1	2	3	4	5	6	7	8
				Not Applicable			

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Format-19

GVK POWER (GOINDWAL SAHIB) LIMITED

ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17

Lease Details

Sr. No.	Name of Lesser	Gross Assets (Rs.in crores)	Lease entered on	Lease Rentals	Primary period ended/ending by	Secondary period ending by
1	2	3	4	5	6	7
			Not Applicable			

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GVK POWER (GOINDWAL SAHIB) LIMITED

ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17

Non Tariff Income

(Rs. in crores)

Sr. No.	Particulars	Previous year (actuals)	Current year (RE)	Ensuing year (projections)
1	2	3	4	5
1	Meter/service rent			
2	Late payment surcharge			
3	Theft/pilferage of energy			
4	Misc. receipts			
5	Misc. charges (except PLEC)			
6	Wheeling charges			
7	Interest on staff loans & advance		Not Applicable	
8	Income from trading			
9	Income staff welfare activities			
10	Excess on verification			
11	Investments & bank balances			
12	**Total income**			
13	Add prior period income*			
14	**Total non tariff income**			

*Year-wise details of prior period income may be provided

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GVK POWER (GOINDWAL SAHIB) LIMITED
ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17
Investment Plan (Scheme-wise)

(Rs. in crores)

Sr.No.	Name of Scheme /Project	Approved outlay	Previous year (actuals)	Current year (RE)	Ensuing year (Projections)	Progressive Expenditure Up to ensuing year
1	2	3	4	5	6	7
1	Ranjit Sagar Dam Project					
2	Shahpur kandi HEP					
3	Mukerian Hydro Electric Project Stage-II					
4	Micro Hydel Power Houses at Ropar					
5	R&M of Bhakra Power Houses					
6	Shanan & Other Board Projects					
7	GHTP Stage-I					
8	GHTP Stage-II Lehra Mohabbat					
9	Doraha gas Based Thermal Plant					
10	R&M works at Thermal Plants as per RLA study (unit-I & II)			Not Applicable		
11	R&M of GNDTP Bhatinda Phase-II					
12	R&M GNDTP Bhatinda Unit-III&IV based on RLA study					
13	R&M of GGSSTP Ropar under APDRP scheme					
14	Transmission & Distribution including APDRP					
15	Revamping of ME Labs. and workshops					
16	Release of tube-well connections					
17	Rural Electrification (PMGY)					
18	Any other new project taken up by Board					
19	Total					

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GVK POWER (GOINDWAL SAHIB) LIMITED

ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17

Investment Plan (year-wise)

(Rs. in crores)

Sr. No.	Year	Originally proposed by the Board	Approved by the Commission	Revised by the Board	Revised approval by the Commission in review	Actual expenditure
1	2	3	4	5	6	7
			Not Applicable			

Note :

i. Information for previous year to be given in columns 1 to 7.

ii. Information for the current year to be given in columns 1 to 5.

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Appendix-1-F23 ***Amount in Crs***

RETURN ON EQUITY				
Particulars	2016-17	2017-18	2018-19	2019-20
Approved Project Cost	4,773.00	4,773.00	4,773.00	4,773.00
Add: Additional Capitalization as per investment Plan	-	-	-	-
Closing Project Cost	4,773.00	4,773.00	4,773.00	4,773.00
Debt (73.8%)	3,522.00	3,522.00	3,522.00	3,522.00
Equity (26.2%)	1,251.00	1,251.00	1,251.00	1,251.00
Equity Considered for Computing ROE	**1,251.00**	**1,251.00**	**1,251.00**	**1,251.00**
Total Equity Invested	1,251.00	1,251.00	1,251.00	1,251.00
Rate of Return	15.50%	15.50%	15.50%	15.50%
Return on Equity	185.94	193.91	193.91	193.91

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GVK POWER (GOINDWAL SAHIB) LIMITED

ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17

Capital Base and Return

(Rs. in crores)

Sr. No.	Particulars	Previous year (actuals)	Current year (RE)
1	2	3	4
1	Gross block at beginning of the year		
2	Less accumulated depreciation		
3	Net block at beginning of the year		
4	Less accumulated consumer contribution		
5	Net fixed assets at beginning of the year		
6	Reasonable return @3% of NFA		

Sr. No.	Particulars	WIP	Fixed Assets
1	*2*	*3*	*4*
1	As on 31st March of previous year		
	Add capital expenditure during current year		
	Total:		
	Less transferred to fixed assets		
		As per Appendix-1	
2	As on 31st March of current year		
	Add capital expenditure during ensuing year		
	Total:		
	Less transferred to fixed assets		
3	As on 31st March of ensuing year		

Sr. No.	Particulars	Amount
1	2	3
1	Accumulated Depreciation	
2	As on 31st March of previous year	
3	Add: Depreciation for current year	
4	As on 31st March of current year	
5	Consumers Contribution	
6	As on 31st March of previous year	
7	Addition during current year	
8	As on 31st March of current year	

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GVK POWER (GOINDWAL SAHIB) LIMITED

ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17

Cash flow statement for the ensuing year (projections)

(Rs. in crores)

Sr. No.	Month	Sources of receipt	Amount	Particulars of payment	Amount
1	2	3	4	5	6
1	April				
2	May				
3	June				
4	July				
5	August				
6	September		Not Applicable		
7	October				
8	November				
9	December				
10	January				
11	February				
12	March				
13	Total				

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GVK POWER (GOINDWAL SAHIB) LIMITED

ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17

Original Cost of Fixed Assets

(Rs. in crores)

Sr. No.	Assets group	Value of assets at the beginning of previous year	Addition during previous year	Closing balance at the end of previous year	Addition during the current year	Closing balance at the end of current year	Addition during ensuing year	Closing balance at the end of ensuing year
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1	Thermal	201	19	220.00	4,221.00	4,441.00	230	4,671.00
2	Hydro							
3	Internal combustion							
4	Transmission							
5	Distribution							
6	Others							
7	**Total**							

Note:Additions during the year includes CWIP capitalised during the year

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GVK POWER (GOINDWAL SAHIB) LIMITED

ANNUAL REV-17ENUE REQUIREMENT FOR THE YEAR 2016-17

Works-in-Progress

(Rs. in crores)

Sr. No.	Particulars	Previous year (actuals)	Current year (RE)	Ensuing year (projections)
1	**2**	**3**	**4**	**5**
1	Opening balance	3,428.00	3,893.00	4,395.00
2	Add: New investments	465.00	502.00	46.00
3	Total	3,893.00	4,395.00	4,441.00
4	Less investment capitalized	-	-	4,441.00
5	**Closing balance**	**3,893.00**	**4,395.00**	**-**

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GVK POWER (GOINDWAL SAHIB) LIMITED

ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17

Revenue from Existing Tariff

(Information to be supplied for previous year (actuals), current year (RE), ensuing year (projections)

Sr. No.	Category of consumers	Energy sales (MU)	Tariff rates (p/unit)	Revenue (Rs. in crores)
1	**2**	**3**	**4**	**5**
1	Domestic			
a)	Up to 100 units			
b)	101-300 units			
c)	Above 300 units			
	Total			
2	NRS			
3	Public lighting			
4				
a)	SP			
b)	MS			
c)	LS		Not Applicable	
	Total			
5	Bulk supply			
6	Railway traction			
7	Common pool			
8	Outside state			
9	**Total**			
10	AP consumption			
11	**Total**			
12	Add MMC and Other charges			
13	Grand Total			

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GVK POWER (GOINDWAL SAHIB) LIMITED
ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17

(Rs. in crores)

Sr. No.	Item of expense	Proposed by the Board	Revised by the Board	Approved by the Commission	Actuals as per accounts
1	**2**	**3**	**4**	**5**	**6**
1	Cost of fuel				
2	Cost of power purchase				
3	Employee costs				
4	O&M expenses				
5	Administration and general expenses				
6	Depreciation				
7	Interest charges				
8	Return on NFA				
9	Total revenue requirement		As per Appedix 1		
10	Less: non tariff income				
11	Net revenue requirement (9-10)				
12	Revenue from tariff				
13	Gap (11-12)				
14	Gap for ------------				
15	**Total gap (13+14)**				
16	Revenue surplus carried over				
17	Additional revenue from propsed tariff				
18	Regulatory asset				
19	**Energy sales (MU)**				

Note :

i. Columns 1 to 6 applicable for previous year.
ii. Columns 1 to 4 applicable for current year.
iii. Columns 1 to 3 applicable for ensuing year.

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Appendix-1-F28

Annual Revenue Requirement

S. No.	Particulars	Ensuing Year Estimated 2016-17
1	Fuel Cost	
a)	Primary Fuel Cost	1180.95
b)	Secondary Fuel Cost	5.00
2	SLDC Fees & Charges	
3	O&M expenses (Gross)	139.81
	a) R&M Expenses	
	b) Employee Expenses	
	c) A&G Expenses	
4	Depreciation	202.59
5	Interest on Loans	404.72
6	Interest on Working Capital	73.62
7	Prior Period Expense	
8	Extraordinary Items	
9	Other Debts and Write-offs	
10	Income Tax	0.00
11	Less: Expenses capitalised	
	a) Interest Charges Capitalized	
	b) R&M Expenses Capitalized	
	c) A&G Expense Capitalized	
	d) Employee Expenses Capitalized	
	Subtotal (a+b+c+d)	0.00
	Subtotal Expenditure (1+2+3+4+5+6+7+8+9+10-11)	2006.69
C	Return on Equity	185.94
D	Non Tariff and other Income	0.00
E	**Annual Revenue Requirement (B+C-D)**	**2192.63**

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GVK POWER (GOINDWAL SAHIB) LIMITED

ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17

Information regarding Wholesale Price Index (All Commodities)

(to be supported with documentary evidence)

Sr. No.	Period	WPI	Increase over previous year
1	2	3	4
1	As on April1 of previous year		
2	As on April1 of current year	As per Appendix 1	
3	As on April1 of ensuing year		

Appendix to Form-29

Esclation of Index

Information regarding Wholesale Price Inded(All Commodities) & Consumer Price Index

S.No	Period	WPI	CPI
	Average (April-2014 to Mar-15)	181.19	250.83
1	Average (April-2015 to Mar-16)	176.675	265.00
2	Average (April-2016 to Mar-17)	183.20	275.92

Month	Wholesale Price Index (All Commodities)	Consumer Price Index
Mar-17	185.80	275
Feb-17	185.50	274
Jan-17	185.10	274
Dec-16	183.30	275
Nov-16	183.50	277
Oct-16	183.60	278
Sep-16	183.20	277
Aug-16	183.30	278
Jul-16	184.20	280
Jun-16	182.90	277
May-16	180.20	275
Apr-16	177.80	271
Mar-16	175.30	268
Feb-16	174.10	267
Jan-16	175.40	269
Dec-15	176.80	269
Nov-15	177.50	270
Oct-15	176.90	269
Sep-15	176.50	266
Aug-15	176.50	264
Jul-15	177.60	263
Jun-15	179.10	261
May-15	178.00	258
Apr-15	176.40	256
Mar-15	176.10	254
Feb-15	175.60	253
Jan-15	177.30	254
Dec-14	178.70	253
Nov-14	181.20	253
Oct-14	183.70	253
Sep-14	185.00	253
Aug-14	185.90	253
Jul-14	185.00	252
Jun-14	183.00	246
May-14	182.00	244
Apr-14	180.80	242

Source http://eaindustry.nic.in
http://labourbureaunew.gov.in

WPI & CPI Inflation from Base FY 2015-16 to FY 2016-17

S.No	**Particulars**	**WPI**	**CPI**
1	Average (April-2014 to Mar-15)	181.19	250.83
2	Average (April-2015 to Mar-16)	176.675	265.00
3	Average (April-2016 to Mar-17)	183.20	275.92

	WPI	CPI
Inflation-2015-16	-2.493%	5.648%
Inflation-2016-17	3.693%	4.119%
INDEXn=(0.5*CPIn+0.5*WPIn) 2016-17	3.906%	
INDEXn-1=(0.5*CPIn-1+0.5*WPIn-1) 2015-16	1.578%	

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GVK POWER (GOINDWAL SAHIB) LIMITED

ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17

Information regarding amount of Equity & Loan

Sr. No.	Period	Amt. of Equity (Rs. in crores)	Amt. of Loan (Rs. in crores)	Ratio of equity & loan
1	**2**	**3**	**4**	**5**
1	As on March 31 of current year (15-16)	1,204.22	3,255.93	27:73
2	As on March 31 of ensuing year (16-17)	1,251.00	3,522.00	26.2:73.8

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GVK POWER (GOINDWAL SAHIB) LIMITED

ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17

Information regarding Revenue from Other Business

Sr. No.	Particulars	Amount (Rs. in crores)
1	*2*	*3*
1	Total revenue from other business	
2	Income from other business to be considered for licensed business as per regulations	Not Applicable

Note : To be supplied for previous year, current year and ensuing year for which licence for other

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GVK POWER (GOINDWAL SAHIB) LIMITED
ANNUAL REVENUE REQUIREMENT FOR THE YEAR
Information regarding Bad and Doubtful Debts

Sr. No.	Particulars	Amount (Rs. in crores)
1	2	3
1	Amount of receivable bad and doubtful debts (audited)	Not Applicable
2	Provision made for debts in ARR	

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GVK POWER (GOINDWAL SAHIB) LIMITED

ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17

Information regarding Working Capital for the current and ensuing year

Sr. No.	Particulars	Amount (Rs. in crores)
1	**2**	**3**
1	Fuel Cost- (2 Months)	206.13
2	Power Purchase Cost (Receivables-2 Months)	381.10
3	One month employees cost and administration & general expenses	11.98
4	One month R&M Cost	
5	Maintenance of Spares	1.80
5	**Total**	**601.01**

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GVK POWER (GOINDWAL SAHIB) LIMITED

ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2016-17

Information regarding Foreign Exchange Rate Variation (FERV)

Sr. No.	Particulars	Amount (Rs. in crores)
1	2	3
1	Amount of liability provided	
2	Amount recovered	Not Applicable
3	Amount adjusted	

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GVK POWER (GOINDWAL SAHIB)

Statement showing the amount of Government subsidy due and received for the year

Particulars	Consumption as per account for the year (in MUs)	Revenue required			Revenue actually receivable from consumers	Amount of subsidy due from GoP	Amount of subsidy received from GoP	Amount of subsidy received from GoP excess/ short (+/-)
		Energy charges	Meter rentals and service charges	Total				
1	2	3	4	5	6	7	8	9
(i) AP consumers								
(ii) Scheduled Castes DS consumers			Not Applicable					
(iii) Non-SC BPL DS consumers								
Total								

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