MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION
5th Floor, "Metro Plaza", Bittan Market, Bhopal - 462 016

Petition No. 03 of 2014

PRESENT:

Rakesh Sahni, Chairman

A. B. Bajpai, Member

Alok Gupta, Member

IN THE MATTER OF:

Determination of the provisional tariff for 2 x 660 MW Super critical coal based Power Project at Nigrie, District Singrauli (M.P.)

M/s. Jaiprakash Power Ventures Ltd.,
Sector 128, Noida. — **Petitioner**

V/s

1. **M.P. Power Management Company Ltd., Jabalpur**
2. **M.P. Poorv Kshetra Vidyut Vitaran Company Ltd, Jabalpur**
3. **M.P. Madhya Kshetra Vidyut Vitaran Company Ltd, Bhopal**
4. **M.P. Paschim Kshetra Vidyut Vitaran Company Ltd, Indore**
5. **M.P. State Mining Corporation Ltd., Bhopal**

Respondents

ORDER

(Passed on this day of 26th September' 2014)

1. M/s. Jaiprakash Power Ventures Ltd. (JPVL) filed the subject petition for determination of tariff for its 2 x 660 MW supercritical coal based power project at Nigrie, District Singrauli in M.P. under section 62 and 64 of the Electricity Act, 2003 and the provisions under MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2012.

2. The petitioner broadly submitted the following in its petition:

   (i) *" M/s. JPVL is promoted by Jaiprakash Associates Limited ("JAL"). JPVL will sell power to Madhya Pradesh Power Management Company Ltd. (MPPMCL) pursuant to a long term Power Purchase Agreement dated 05 January 2011 signed with MPPMCL**.** The present petition is filed u/s 62 read with section 64 of the Electricity Act, 2003. The first unit of the project is scheduled to be commissioned in March-2014 and the second unit is scheduled to be commissioned in September-2014.*

   (ii) *On 16th January, 2007, the Government of Madhya Pradesh ("GoMP") and JAL had entered into a Memorandum of Understanding for setting up a 500 MW thermal power station, which was subsequently amended from time to time for setting up a plant of 1320 MW. The Power Project under the MoU was to be set up by JPVL. Accordingly, JPVL signed an Implementation Agreement dated 12 December, 2007 with GoMP, which was subsequently amended on 27 March, 2008 (**"I.A."**). Under the terms of the I.A., GoMP or its nominated agency has the first right to purchase power from the Power Project, upto thirty percent (30%) of the installed capacity over a period of twenty (20) years at a tariff to be determined by this Hon'ble Commission, and a further 7.5% of the net power (i.e. the gross power generated less the permitted auxiliary consumption) at a price equivalent to the variable charge/cost to be determined by this Hon'ble Commission provided*

that Petitioner was allocated dedicated coal block in the state of Madhya Pradesh for supply of coal to the Power Project.

(iii) *Pursuant to such I.A., the Madhya Pradesh Power Trading Co. Ltd. ("MP Tradeco") as the nominee of the GoMP (now renamed as Madhya Pradesh Power Management Company Ltd.-"MPPMCL") entered into a PPA with JPVL on 5 January, 2011. Under the PPA, MPPMCL will be supplied 30% of the installed capacity of the Power Project at a tariff determined by this Hon'ble Commission. Further, MPPMCL and JPVL entered into a PPA on 6 September, 2011 for supply of 7.5% of the net power to MPPMCL at variable charges/ cost.*

(iv) *The balance capacity is envisaged to be sold through internal arrangements and/or on merchant basis through short/medium term contracts.*

(v) *The cost of the project is estimated at Rs. 10,450 Crores. The project cost is being funded by debt and equity in the ratio of 70:30 with the debt of Rs. 7315 Crores and equity of Rs. 3135 Crores. Debt is being provided to JPVL by a consortium of banks with ICICI Bank as the Lead Bank. The Debt is being arranged through both Rupee Term Loan for Rs. 4821.10 Cr through the consortium of Indian Banks as aforementioned and through External Commercial Borrowing arranged in Japanese Yen for 1530 Cr, from ICICI Bank Singapore Branch. The additional Loan of Rs. 1645 Cr is being arranged from the aforementioned consortium of lenders (Indian Banks Only) The present Weighted Average interest rate on the debt of Rupees Term Loan is 13.82% and the ECB in Japanese Yen is at 4%. The additional Loan is being arranged at the rate of 13.75% per annum. The Current Weighted Average rate of Interest on Disbursed as well as additional Loan works out to be 12.51% per annum. The debt is structured to be repaid in 38 quarterly installments.*

(vi) *The present Power Project has been envisaged and designed as a single generation station consisting of two similar units of 660 MW each and having similar capacity and parameters for generation of* *power. The source of supply of coal for both the units for generation of electricity is common. The combined supply of coal from Amelia (North) and Dongri Tal II will be utilized for meeting the fuel requirement of the Power Project. The electricity generated from both the units will be evacuated through a common bus-bar. The project is connected to the PGCIL sub-station at Satna through a dedicated transmission line, which will carry the power generated from both the units. The two units have been scheduled to be commissioned in a sequential manner within a period of 6 months. The contract entered into by the Petitioner for supply of electricity from the project with MPPMCL have proceeded on the basis that the power generated from both the units will be supplied to MPPMCL under the PPAs to meet the supply obligations. Therefore, the two units of the Power Project form part and parcel of one generating station with similar characteristics in terms of cost and operational parameters. It is therefore submitted that the present project qualifies for determination of combined tariff for the two units under the MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations 2012 (**Tariff Regulations**). Clause 5.1 of the Tariff Regulations provides that the tariff in respect of a generating station may be determined for the whole of the generating station or a stage or unit or block of the generating station. It is submitted that based on the facts and circumstances relating to the present project, this is an appropriate case for treatment of the project as an integrated station for a blended tariff. Further, regulation 8.2 of the Tariff Regulations provides that the tariff in respect of generating company may be determined unit-wise or for a group of units. It is submitted that for the present project, both the units will be commissioned after 01.04.2013 and the determination of the tariff for both the units is therefore guided by the Tariff Regulations. Moreover, since the supply of power under the different PPAs / arrangements will be supplied from both the units, it will be operationally convenient to have a combined tariff for the entire station as opposed to unit-wise tariff.*

(vii) The petitioner herein is seeking determination of tariff (or provisional tariff as may be deemed appropriate by this Hon'ble Commission) on the basis of the projections / estimates of cost to be incurred on the project. Some of the important factors in relation to the Power Project are discussed briefly herein below. Applicant reserves its right to address the Hon'ble Commission in greater detail on any of the factors / issues related to the determination of generation tariff for the Power Project during the tariff proceedings and file additional and relevant documents (if any) in this regard, as and when required.

(viii) The entire power from the Power Project will be evacuated to the Power Grid Corporation of India Limited's sub-station at Satna in the state of Madhya Pradesh, through a 161 km-long, 400 KV double circuit dedicated transmission line. That, the transmission corridor of 161 km, however, involves an 11 km length passing through forest area. Final forest clearance for diversion of the aforesaid land (~51.52 Ha.) has been accorded by the Ministry of Environment and Forests, vide its letter dated 5 June, 2013 to the GoMP and the approval of the GoMP is expected shortly. The National Wildlife Board has already given its clearance in this regard vide its letter dated 17-12-2013, as per the order of Hon'ble Supreme Court dated 02-09-2013. It is further submitted that out of the total distance of 161 km, stringing work has already been completed in respect of 85 km. JPVL expects to complete the construction of the transmission line by February 2014.

*(ix) The annual coal requirement for the Power Project is estimated to be approx. 5.11 MTPA ,calculated at 85% PLF. Coal will be sourced from two dedicated coal mines at Amelia (North) and Dongri Tal II. Amelia (North) has been allocated to Madhya Pradesh Jaypee Minerals Ltd. (**MPJML**), a joint venture of JAL (49% holding) and Madhya Pradesh State Mining Corporation Ltd. (51% holding). Dongri Tal II has been allocated to Madhya Pradesh Jaypee Coal Ltd. (**MPJCL**), a joint venture of JAL (49% holding) and Madhya Pradesh State Mining Corporation Ltd. (51% holding). The expected GCV of coal is 4200 kcal/ kg for the Coal supply from Amelia and 4800 kcal/kg for the Coal supply from Dongri Tal II.*

(x) Petitioner has entered into coal supply agreement with MPSMCL (Madhya Pradesh State Mining Corporation Limited) on 17-12-2013, for supply of 2.5 MTPA coal from Amelia North coal block. The Revised Coal Supply agreement for supply of 2.7 MTPA coal from Dongri Tal II coal block is expected shortly. Amelia (North) has commenced production in Dec-2013 and Dongri Tal (II) is expected to commence production by July-2014. In accordance with the provisions thereof, the coal supply agreements shall remain valid for the whole of the mineable life of Amelia (North) and Dongri Tal II, respectively.

*(xi) With respect to statutory clearances and permissions, it is submitted that JPVL has obtained the consent of the M.P. Pollution Control Board to establish the Project on 23rd October, 2010 . The Ministry of Environment and Forests (**"MoEF"**) has, vide its letter dated 25 February, 2010 , given its environmental clearance to the Power Project. The Power Project requires forest clearance from MoEF for construction of a portion of the transmission line of 11 km, which passes over forest area. The Hon'ble Supreme Court by an order dated 02.09.2013 in IA No.181-182 in WP (Civil) No.460 of 2004 has recorded the clearance granted by the Central Empowered Committee to the transmission line passing over the Son Ghariyal Sanctuary. The National Wildlife Board has also given its clearance in this regard vide its letter dated 17th Dec., 2013 .*

(xii) JPVL has obtained the consent of the Water Resources Department, GoMP (vide its letter dated 13 March, 2008) for the allocation of water to the Project. In order to construct a chimney of the height of 275 meters, JPVL has obtained the clearance of the Airport Authority of India (granted vide its letter dated 4 September, 2008). JPVL has also obtained the clearance of the Indian Railways for siding at the Project's site, vide its approval dated 30-11-2011. In addition, the Power Grid Corporation of India Limited has, vide its letter dated 29 July, 2009 granted open access for power transmission to JPVL. Subsequently on 24-02-2010 a Bulk Power Transmission Agreement with PGCIL was signed. "

3. The petitioner has mentioned that the following statutory clearances have been obtained for the project:

(i) The consent of M.P. Pollution Control Board to establish the Project on 23rd October, 2010.

(ii) Ministry of Environment and Forests ("MoEF") has given its environmental clearance to the Power Project.

(iii) National Wildlife Board has given its clearance for construction of the portion of transmission line which passes over forest area.

(iv) JPVL vide letter dated 13th March, 2008 has obtained the consent of the Water Resources Department, GoMP for allocation of water to the Project.

(v) In order to construct a chimney of the height of 275 meters, the clearance of the Airport Authority of India has been granted vide its letter dated 4th September' 2008).

(vi) Clearance of the Indian Railways for siding at the Project's site.

(vii) The Power Grid Corporation of India Limited on 29th July, 2009 has granted open access for power transmission to JPVL.

4. The petitioner has submitted the following documents in various volumes with the petition:

S. No.	Particulars	Volume No.
1	Power Purchase Agreement dated 05.01.2011	1
2	Power Purchase Agreement dated 06.09.2011	1
3	Memorandum of Understanding dated 16.01.07 along with amendments dated 08.12.2007 and 27.03.2008	1
4	Implementation Agreement dated 12.12.2007 along with amendment dated 27.03.2008	1
5	Coal Supply Agreement dated 17.12.2013	1
6	JPVL Balance Sheet as on 31.03.2013	2
7	ECB Agreement dated 31.03.2011 along with amendment to ECB agreement dated 25.06.2011	2
8	Common Facility Agreement dated 03.09.2013	3
9	Details of Loans	3
10	Summary details of Equity	3
11	Detail Project Report prepared in April, 2008,	3
12	Revised Detail Project Report dated 05.05.2013	5

13	Information Memorandum dated July, 2013	5
14	Board Resolution dated 15.10.2009	5
15	Board Resolution dated 12.08.2013	5
16	Certificate of incorporation along with Memorandum and Articles of Association	5
17	Steam Turbine Generator Package, Erection and other Services Contract	5
18	Steam Turbine Generator Package, Erection and other Services Contract	6
19	Steam Generator Package Supply Contract	6
20	Civil Structural and Architectural Work for Plant and Township Contract	7
21	Clearance from Railway Board dated 30.11.2011	7
22	Permission from MP Pollution Control Board	7
23	Approval of design of Barrage from Water Resources Department	7
24	Permission from Water Resources Department dated 13.03.2008	7
25	No Objection Certificate from Airports Authority of India dated 04.09.2008	7
26	MOEF Clearance dated 25.02.2010	7
27	Approval of Principal Chief Conservator of forest dated 17.12.2013	7
28	Minutes of the meeting of the Standing Committee of NBWL	7
29	Geotechnical report dated 09.03.2011 along with executive summary	7
30	Geotechnical report dated 07.06.2008 along with executive summary	8
31	Letter of award for turnkey package for transmission line	8
32	Transmission line cost break up	9
33	Bulk Power Transmission Agreement with PGCIL along with grant of open access by PGCIL, via letter dated 24.02.2010	9
34	Letter of Award for ACSR, moose conductor for transmission line dated 29.08.2011	9
35	Letter of award for detailed survey of transmission line dated 01.07.2010	9
36	Letter of award for disc insulators for transmission line dated 09.09.2011	9
37	Forest clearance dated 05.06.2013 for transmission line from Government of India	9
38	Final route map of transmission line	9
39	Cost break up of acquisition of land along with the documents relating to payments made for acquisition of land	9
40	Documentary proof for the payment of compensatory afforestation	9
41	Environmental clearance for barrage area for storage and use of water	9

5. The petitioner further submitted the following:

(i) The original capital cost of ₹8100 Cr. has been revised to ₹10450 Cr. with equity infusion of ₹3135 Cr. and loan of ₹7315 Cr. (70:30 debt-equity ratio) for the project. The original project cost vis-à-vis the revised project cost under various heads is mentioned as below:

Break-up of the Capital Cost filed in the Petition: ₹Cr.

Sr. No.	Particulars	Revised	Original	Increase
1	Land	35	29	6
2	BTG (including Taxes & Duties)	5209	4511	698
3	BOP (including Taxes & Duties)	1241	1250	-9
4	Civil Works (including Taxes)	1170	660	510
5	Barrage/Weir (including Land and Taxes)	189	6	183
6	Transmission line	374	250	124
7	Railway Siding	128	128	0
8	IDC/ Financing cost	1399	796	603
9	Margin money	178	94	84
10	Contingency	177	132	45
11	Establishment charges	350	244	106
	Total	**10450**	**8100**	**2350**

(ii) The loan is being provided to it by a "Consortium of Banks" with ICICI Bank as the Lead Bank. The Debt is being arranged through Rupee Term Loan of ₹4821.10 Cr through the consortium of Indian Banks and also through External Commercial Borrowings arranged in Japanese Yen for 1530 Cr. from ICICI Bank Singapore branch. The petitioner has further mentioned that the additional Loan of ₹1645 Cr is being arranged from the aforementioned consortium of lenders (Indian Banks Only). A list of Lender Bank and the weighted average rate of interest is as given below:

Sr. No.	Lender Bank	Weighted average rate of interest (%)
1	Bank of Baroda	13.98
2	Bank of Maharashtra	13.63
3	Canara Bank	13.85
4	Central Bank of India	13.93
5	Corporation Bank	13.75
6	IDBI Bank Limited	13.99
7	Indian Overseas Bank	13.50

8	Infrastructure development Finance Company Limited	12.91
9	LIC of India	13.87
10	Oriental Bank of Commerce	13.75
11	Punjab National Bank	13.75
12	State Bank of Bikaner & Jaipur	13.87
13	State Bank of Hyderabad	13.95
14	State Bank of Patliala	14.02
15	Syndicate Bank	13.60
16	UCO Bank	13.88
17	United Bank of India	14.22
18	ICICI Bank of India + Add. loan	13.73
	Add. Loan sanctioned	
19	ICICI Bank Singapore	4.00%

(iii) Considering the aforesaid project cost, the petitioner has claimed the Capacity charges and Energy charges on the following basis:

a) Return on Equity is worked out by considering MAT. The petitioner has also claimed additional equity (0.5%) as an incentive for completion of the project within time limit.

b) The current weighted average rate of interest on disbursed as well as additional loan is worked out by the petitioner @ 12.51% per annum. The debt is structured to be repaid in 38 quarterly instalments.

c) The operation and maintenance expenses and interest on working capital is worked out in accordance with the Tariff Regulations, 2012.

d) Depreciation is worked out by applying the rate of depreciation on different asset base as per Regulations, 2012.

e) While determining the Energy Charges, the petitioner has considered the following operating parameters:

Components	**Unit**	**Value Considered**
Gross station heat rate	kcal/kwh	2317
Specific Fuel Oil Consumption	ml/kwh	1.00
Calorific Value of Secondary Fuel	ml/Kwh	10
Weighted Average Landed Price of the Primary Fuel	Rs per Kg.	2.20

Gross Calorific Vaue of the Primary Fuel as Fired	Kcal/Kg	4200
Normative Auxiliary Energy Consumption	%	6.00

(iv) Considering the above, the petitioner has claimed the following Capacity Charges (fixed charges) and Energy Charges:

Rs. in crores

S.No.	Particulars	FY 13-14	FY 14-15	FY 15-16
1	**Capacity Charge or Fixed Charge**			
1.1	Depreciation	11.12	391.15	508.57
1.2	Interest on Loan	17.64	691.21	871.33
1.3	Return on Equity	11.95	489.44	636.36
1.4	Interest on Working Capital	30.57	105.17	112.91
1.5	O & M Expenses	3.75	142.29	199.67
1.6	Secondary fuel oil cost	1.5	52.92	68.81
1.7	Lease rent payable for Land (yearly)	0.48	0.17	0.22
	Total Fixed Cost	**77.01**	**1,872.35**	**2,397.86**
2	**Variable Charges recoverable**			
	Coal Cost (Fuel Cost)	25.96	915.78	1,190.71
	Total	**102.97**	**2,788.13**	**3,588.57**

(v) With the above submission, the petitioner prayed the following in the petition:

a) "To approve the tariff proposed by the Petitioner for supply of power to the Respondent No.1 from the Petitioner's 1320 MW (2 X 660 MW) coal based power project at Nigrie, District Singrauli under the respective PPAs between the Petitioner and MPPMCL, in accordance with the Tariff Regulations;

b) To allow recovery of provisional tariff till the determination of final tariff in the event that the Commission proceeds to determine the final tariff for the Power Project after commissioning of the station;

c) To allow recovery of the filing fees as and when paid to the Commission and also the water charges, ED and ED Cess payable on Auxilliary Consumption levied by the Statutory Authorities and the publication expenses from the beneficiaries"

6. Motion hearing in the matter was held on 18th February' 2014 when the petition was admitted and the petitioner was directed to serve copies of the petition on all the respondents in the matter. The respondents were also

asked to file their response on the petition if any, by 18th March' 2014. The Commission noted that the annual coal requirement for the petitioner's power project will be sourced from the dedicated coal mines allocated to a joint venture of Jaiprakash Associates Ltd. (49% holding) and M.P. State Mining Corporation Ltd. (51% holding). Therefore, M.P. State Mining Corporation Ltd. was also made the respondent in the matter to explain the price mechanism of the coal to be supplied to the petitioner.

7. Vide Commission's letter No. 288 dated 20th February' 2014, the information gaps and discrepancies in the petition were communicated to the petitioner seeking its response by 18th March' 2014.

8. The respondent Distribution Companies authorized M.P. Power Management Company Ltd., Jabalpur to submit their response and attend hearing in the matter on behalf of them.

9. By affidavit dated 19th April' 2014, the petitioner filed its reply to the issues communicated to it by Commission's letter dated 20th February' 2014.

10. Issue-wise response of the petitioner is as given below:

<u>Capital Cost</u>

(i) **Issue:**

It is observed that contract for civil work has been awarded to JP Associates Ltd. Please confirm whether the petitioner and the said civil contractor are related parties as defined in Companies Act. If yes, required permission from Central Government for entering into contract be furnished. Details establishing that the contract awarded to them has resulted from transparent competitive bidding be also furnished.

Petitioner's Response:

"*Jaiprakash Associates Limited ("**JAL**") has been engaged as a civil contractor by the Petitioner for carrying out civil works of Jaypee Nigrie Super Thermal Power Project.*

a. It is pertinent to note that JAL is also the holding Company of the Petitioner. It is submitted that in the present case no prior approval of

*Central Government is required for entering into an agreement for civil contract, since both the companies i.e. JAL and the Petitioner, are **Public Limited Companies**.*

b. *It is further submitted that pursuant to entering the contract for carrying out the civil works, a Board meeting was held whereby, the requisite entry providing the details of the aforementioned contract, was made in the Register of Contracts, by the Board of Directors as per the requirement of provisions of Section 301 of the Companies Act 1956, applicable to such related Party Contracts.*

c. *It is further submitted that the civil works contract awarded by the Petitioner to JAL is based on the civil contract awarded by Bokaro Jaypee Cement Limited ("BJCL") which is a joint venture company of JAL and Steel Authorities of India Limited ("SAIL"). The contract has been awarded on an arm's length basis and no concessions have been allowed to JAL in terms of rates or the quality of work. In fact, the rates concluded for the civil works contract is based on the civil contract awarded by Bokaro Jaypee Cement Limited ("BJCL") which is a joint venture company of JAL and Steel Authorities of India Limited ("SAIL"). BJCL invited tenders for construction of Civil Works activities for Bokaro Cement Plant in Aug-2008 and the tender documents were issued to the following parties:-*

(i) M/s BSBK Pvt Ltd

(ii) M/s Simplex Infrastructures Ltd.,

(iii) M/s Jaiprakash Associates Ltd.,

(iv) M/s B.L.Kashyap & Sons Ltd.

It is further submitted that the rates of JAL were found to be lowest among all the aforementioned bidders and subsequently the tender was awarded to JAL in Nov-2008.

d. *It is further submitted that the award of civil work for the Nigrie Project was made in the month of May, 2010 which was 18 month later than the award of civil work by BJCL to JAL. It is pertinent to mention that the present contract for carrying out civil works at the Nigrie Project was awarded to JAL at the rate equal to or less than the rate at which* *contract was awarded by BJCL to JAL for civil works at their cement plant, i.e without considering/factoring the impact on account of inflation for the time gap between the two contracts (18 months).*

e. *We are further enclosing a compiled statement (as Annexure A-1) indicating a comparison as under:-*

i) *Cost incurred (₹361.79 Cr.) on itemized quantities of the project, at the awarded rate to JAL for the Nigrie Civil works, with the Cost that would have been incurred (₹ 419.60 Cr.), had the award of contract been done, at BJCL rate on the same BOQ.*

ii) *The Comparison shows that there is a savings of ₹57.81 Cr. due to award of Contract to JAL at the prices lower than the BJCL rates.*

iii) *It is further pointed out in comparing the Nigrie Contract with the BJCL Contract, various items like Cement and Steel worth ₹298.08 Cr., supplied by the Petitioner to JAL for the execution of the civil work of the Project, has not been taken into account in the above calculations, as both contracts (BJCL and Nigrie Civil Works) provide for free supply of Cement and Steel.*

iv) *It is further submitted that a new competitive bidding process would have delayed the construction by at least six months and also could have resulted in further increasing the capital cost.*

f. *In view of the above, it is submitted that the rates given to JAL for civil work were fair, reasonable and the lowest in the market at the time of award of the said contract."*

(ii) **Issue:**

The common facilities between Unit 1 & 2 be informed and the cost of all such common facilities be apportioned appropriately in terms of provisions under MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2012.

Petitioner's Response:

"*The common facilities of Unit I & II can't be identified at the current stage of project development.*

Post COD of the respective units, the Petitioner will submit the CA Certificate(s) indicating the Cost of the project incurred upto COD of each unit, (including the cost incurred on Common Facilities) along with the requisite apportionment on the basis of capacity of units, as per the requirement of the provisions of the regulation under para 8.2 and 8.3 of Madhya Pradesh Electricity Regulatory Commission (Terms & Conditions for Determination of Generation Tariff) Regulations, 2012 ("Regulations")."

(iii) **Issue:**

The balance sheet as on 31/03/2013 filed with the petition is the consolidated financial statements for various projects of the petitioner. The petitioner is required to submit the audited financial statements with regard to the project in the subject petition along with unit-wise breakup of all the items. Pending the aforesaid audited financial statements of the project, the actual expenditure incurred up to the date of commercial operation of the unit(s) duly certified by a Charted Accountant be submitted for determination of provisional tariff.

Petitioner's Response:

"*In reply to the query raised in paragraph 1 (iii) the Petitioner respectfully submits that the Standalone Balance Sheet of the Project as on 31.03.2013 is enclosed as Annexure A-2. It is further submitted that since the commercial operation ("COD") of Unit-I is expected shortly, the Petitioner shall submit the CA Certificate for cost incurred for period upto COD of Unit I, thereafter."*

(iv) **Issue:**

Details of the work completed and the balance works to be completed as on CoD of Unit-I & II with respect to the original scope of work be submitted.

Petitioner's Response:

"*In reply to the query raised in paragraph 1 (iv) the Petitioner respectfully submits that the component wise expenses cannot be identified at present and that the details of Work completed upto COD of Unit I & II can only be submitted after the COD's of the two units."*

(v) **Issue:**

The date of investment approval for the project by the Board of the petitioner's company shall be required to reckon the completion time schedule of the project. Therefore, the copy of initial investment approval for earlier estimated project cost of ₹6000 Crs for the project by the Board of the petitioner's company be also submitted.

Petitioner's Response:

"*The project cost of ₹6,000 Cr., was an adhoc estimation for the purpose of intimation to the Board, which was not based on any quotation etc. The BTG order was subsequently placed with L&T and L&T –MHI Boilers Private Limited ("LMB") (consortium of Larsen & Toubro Ltd., India and Mitsubishi Heavy Industries Ltd., ("MHI"), Japan), for Turbine & Steam Generator respectively, for the two super critical thermal power units of 660 MW each.*

Simultaneously the 1st Project DPR appraised the initial Project Cost to be ₹8,035 Cr. Pursuant to placing the BTG order on 12.08.2009, ICICI Bank, lead lender, estimated the project cost at ₹8,100 Crs., with slight variations, as compared with the DPR of ₹4.63 Cr. in IDC, ₹12.83 Cr. in Margin Money and ₹47.08 Cr in Contingency component of the Project Cost totaling to ₹65 Cr., making the overall Project Cost ₹8,100 Cr.

It is further submitted that based on such estimation, the financial tie-up and project report were prepared on the cost of ₹8,100 Crs. The relevant board resolution for approval (by Finance Committee) of project cost of ₹8,100 Crs. has since been submitted."

(vi) **Issue:**

It is observed from the various documents like Memorandum of undertaking executed with GoMP, Detailed Project Reports (DPR) and the Board's resolution for investment approval of the project that the initial project cost of ₹6,000 Crores was revised to ₹8035 Crores in DPR. The aforesaid cost has been further revised to ₹8,100 Crores in the Implementation Agreement. The complete project cost is now projected as ₹10,450 Crores in the petition for both the units. The reasons for increase in project cost at various points of time be explained along with justification for increase in cost of each item vis-a-vis the original/earlier estimated costs be submitted.

Petitioner's Response:

"*Petitioner submits that in light of the submissions made in para 5 above, the initial approved Project cost stands at ₹8,100 Cr. The increase of Project Cost from ₹8,100 Cr to ₹10,450 Cr has been dealt in detail in the Information Memorandum prepared by ICICI Bank. In response to the said query the Petitioner seeks leave of the Commission to rely on the contents of the petition, the Information Memorandum and the various documents which forms part of the main petition that have set out in detail the rationale and also the evidence in support of the increase in project cost. The Project Cost for Completion of the Project now stands at ₹10,450 Cr., the reasons for Cost overrun has been dealt in detail in the aforementioned Information Memorandum and in addition the LE Cost overrun report is also enclosed as Annexure A-3."*

(vii) **Issue:**

Clause 8.2 of the extract of Board resolution dated 15th October, 2009 indicated that the project cost of the power project was originally estimated to ₹6000 Cr. The Board's resolution further stated that "*The Board approved the revised cost of ₹8100 Cr. to be financed by debt – equity ratio of 70/30."* In view of the above, the petitioner is required to file break-up of original project cost initially approved for the project along with the supporting documents in this regard. The petitioner is also required to file copy of minutes of the meeting of the Board of Directors held on 15th October, 2009.

Petitioner's Response:

The Petitioner reiterates that the initial Project Cost of ₹6,000 Cr., was only a rough estimate for the intimation to the Board. The first detailed estimate, after the award of BTG contract, along with DPR, was made at ₹8,100 Cr, and the same has also been submitted with the Petition. The Minutes of the meeting of the Board of Directors held on 15th October, 2009, have been submitted as Annexure S-9, along with the Petition dated 16th February, 2014. ***We also enclose the copy of the Minutes of the Finance Committee*** *dated 30th March, 2010, whereby the Project Cost of ₹8,100 Cr. was approved.*

(viii) **Issue:**

While comparing the components of the revised project cost vis-a-vis the original project cost, the following is observed:

- The cost of Boiler, Turbine and Generator (BTG) has increased by ₹698 Cr.
- The cost of Civil work has increased by ₹510 Cr.
- The cost of Barrage has increased by ₹183 Cr.
- The cost of Transmission has increased by ₹124 Cr. and,
- IDC and financing charges have increased by ₹603 Cr.

It is observed that the cost of some major items like Civil works; Transmission line and IDC/Financing charges has been increased by more than 50% of their original estimated cost. The contention of the petitioner regarding cost escalation in para 19 of the petition is not supported by relevant documents for justification of such abnormal increase on account of price variations and quantity variation if any, for all such items. The petitioner is required to explain the reasons for cost escalation of each item under capital cost with all relevant documents. As desired in sub para (iii) above, the financial statement duly certified by the Chartered Accountant appointed by the petitioner should certify the actual cost incurred as on date/COD on each component claimed in the capital cost of the project.

Petitioner's Response:

"The Petitioner submits that the explanation for cost increase under various heads is given below:-

(a) ***Boiler, Turbine and Generator****:-*

*The change is on account of price variation (₹254.50 Crs.) increase in taxes and duties, (₹222.10 Crs.) and exchange rate variation (₹221.50 Crs.), aggregating to ₹698.10 Crs. The detailed explanation for this increase in estimation is contained at page no. 17 to 19 of the LE Report on cost overrun dated July, 2013., which is enclosed as Ann. A-3****.***

(b) ***Civil works***

The increase in the estimation of the cost of civil works from ₹660 Crs. to ₹1170 Crs. is primarily on account of the following:

- *Additional excavation, backfilling and PCC for foundation of various plant components on account of actual soil/rock conditions encountered, which were required to be carried out in order to sustain heavy loads of machinery and structures;*
- *Increase in storage capacity of water reservoir and additional provision of HDPE lining;*
- *Additional works in township to provide appropriate amenities to working staff,*
- *Additional Works/Qty for ash dyke, effluent treatment system as per MOEF requirement*
- *Escalation in contracted rates for civil works due to inflation (factored in through CPI and WPI) during the implementation period as per the escalation formula provided in the contract;*
- *Increase in cost of material i.e. cement and steel on account of additional quantities and price inflation.*

This issue has been discussed and explained by ICICI Bank in the Project Information Memorandum ("PIM") for the reappraisal of project cost at ₹10,450 Crs., on page nos. 59 to 62. The Petitioner seeks leave of the Hon'ble Commission to rely on the contents of the PIM which forms part of the main petition along with documents that have been filed with the petition in support of the factors enlisted above. Additionally this issue is also covered at length in the Lenders Engineer's Report from Page no 7 to page no 16. (attached as Annexure A-3). The reason for increase in Civil Cost is summarized below in tabular format:

Particulars	*Original*	*Revised*	*Variance*	*% increased*
Power Generating Block	*245*	*329*	*84*	*34%*
Water system	*26*	*99*	*73*	*280%*
Waste water Treatment Plant	*4*	*4*	*--*	*--*
Coal Handling Plant	*57*	*114*	*57*	*100%*
Pipe cum Cable Rack	*5*	*19*	*14*	*280%*
Chimney	*23*	*63*	*40*	*174%*

Reservoir	*54*	*148*	*94*	*174%*
Township	*102*	*175**	*73*	*72%*
Ash Handling System	*14*	*14*	*--*	*--*
Others (misc)	*120*	*125*	*5*	*4%*
WCT and transit insurance etc	*10*	*25*	*15*	*150%*
Additional Service Tax		*55*	*55*	*100%*
Total	***660***	***1170***	***510***	***78%***

(c) ***Barrage Cost Increased by ₹183 Cr.***

Initially during DPR stage, the construction of Barrage was not envisaged and only an intake well was provided/planned. However, subsequently due to allocation of 89.60 cusecs of Water by Govt of Madhya Pradesh ("GoMP") to M/s D.B.Power Ltd., and M/s Surya Chakra Power Ventures Pvt Limited, which are located upstream on the same river, the construction of the Barrage became an essential requirement for completion of the Project. Accordingly, the Petitioner was advised by Water Resource Department, GoMP vide its letter date 09.02.2011 for creation of gated barrage, to ensure availability of water during lean season. Copy of the letter dated 09.02.2011is enclosed as ***Annexure A-4.*** *The aforementioned requirement of the barrage has been certified by Water Resource Department, GoMP vide its letter dated 09.02.2011 and the Design specifications had been approved in February, 2013. The other details related to Barrage have been mentioned in the Information Memorandum dated July 2013, of ICICI Bank, already submitted in the main Petition as Annexure A-13.*

The breakup of the additional Cost estimated for Barrage are, Land Acquisition (of 173.53 Ha) ₹47.26 Cr., Civil Works Cost and Cost of Hydro Mechanical Equipment (such as hoists, gates, pumps etc) ₹135Cr.

(d) ***Increase in Transmission Line- ₹124 Cr***

The Petitioner submits that as per the initial estimate in the DPR the Cost of EHV Transmission Lines for Power evacuation to PGCIL Sub Station was estimated at ₹250Cr. Later on after the detailed route survey, the following additional requirement was envisaged:

- *The actual line length of transmission line to be constructed for evacuation of Power from the project at 400 kV level to PGCIL's sub-*

*station at Satna, Madhya Pradesh, was initially envisaged at 140 km from the project site. After detailed route survey, length of the transmission Line increased from 140 Km to 161 Km. It is further submitted that out of this increase of 21 Km line length, 11 Km falls in Forest Area, due to which an additional Cost of ₹**6.8 Cr**., for acquisition of alternate Land and ₹**12.97** Cr. towards compensatory afforestation and medicinal plantation (Refer Annexure 4.4 of LE Report attached as Annexure – A3) is estimated to be incurred.*

- *It is further submitted that there was a also an increase in cost on account of the use of Optical Fiber Ground Wire ("OPGW") in place of Ordinary steel ground wire for Phase Measuring Unit ("PMU"). The use of OPGW could not have been avoided as the same was directed to be used by Power Grid Corporation of India Limited ("**PGCIL**"). A Detailed explanation of the said increase has been given in the PIM (page65) already submitted. The Cost of preparation of DPR for transmission line by PGCIL (₹0.19Cr.)Route Survey of Transmission line (₹0.22Cr.) Field quality Services (₹2.53 Cr.)and Optical Ground Wire (₹4.17 Cr.), Consultancy for OPGW(₹0.19Cr.) all adding to an additional cost of ₹**7.30** Cr.*
- *The ROW-Right of Way Compensation incurred an additional cost of ₹**7** Cr.The breakup of increase in transmission line cost is as under:-*

(All figures in Cr.)

Particulars	***Original***	***Revised***	***Variance***	***Remarks***
Transmission Line	*250*	*293*	*43*	*Increased cost of Equipment, Civil Works & increased Taxes & Duties etc.*
Increase in length of Line	-	*44*	*44*	*Proportionate cost of increased Length of line by approx 21 Kms*
Sub Total	***250***	***337***	***87***	
Optical Ground Wire	-	*4*	*4*	*PGCIL Direction to use Optical Ground Wire (OPGW) as compared to earlier provision of Galvanised Steel wire.*
PGCIL Consultancy	-	*6*	*6*	*Not provided earlier.*
Land Compensation /Medicinal Plantation/ Right of Way		*27*	*27*	*Alternative aforestation/Land Compensation/Medicinal Plantation/ROW*
Total	***250***	***374***	***124***	

(e) ***IDC and Financing Cost Increase by ₹603 Cr.***

The increase in the estimation of IDC and Financing Cost Increase is primarily on account of the following:-

- *Increase in Average Rate of Interest for RTL (Weighted Average RTL @13.82% and Combined Weighted average rate including FCL @ 12.47%) during implementation period as compared to original sanction of 11.5%.*
- *The IDC calculation as estimated originally were based on COD by Oct-2013 as per L1 schedule specified in the BTG contract, whereas now commissioning schedule is May-2014.*
- *The additional impact of IDC on additional debt of 1,645 Cr."*

(ix) **Issue:**

While mentioning the cost overrun, the petitioner has filed the revised cost of ₹235 Cr. against the Margin money, Contingency and Establishment Charges. The petitioner is required to clarify the following in light of the MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2012.

- ➢ The cost of various items under margin money is already claimed under working capital. Therefore, the claim of separate margin money in the capital cost needs to be explained.
- ➢ The costs of items under contingency have already been included in different major components of the project cost.
- ➢ The establishment charges which were originally estimated to ₹244 Cr. have not been re-estimated to ₹350 Cr. in the revised project cost.

The break-up of contingency charges, establishment charges and the requirement of all such charges over and above IDC / financing charges and the pre-commissioning expenses be submitted. If applicable, the aforesaid charges be categorically mentioned in the certificate of the Charted Accountant to be filed by the petitioner in favor of the actual expenditure incurred upto the CoD of the project/unit.

Petitioner's Response:

"*In reply to the query raised the Petitioner submits as under:-*

a. *The Margin Money in the revised estimate amounts to ₹178 Cr. This cost has been inadvertently included in the TPS forms as part of the Project Cost. The corrected TPS 5 B and other associated forms are being enclosed as Annexure A-5 for your kind perusal.*

b. *The contingency of ₹177 Cr. has been provided towards Civil Works, Plant and Machinery excluding BTG, Exchange Rate Fluctuation, IDC etc. Furthermore, we confirm that these have not been factored under any other cost of the Project. The Break up of Contingency expenses are:*

Expenses Contingency	***Remarks-Subheads***	***Amount (₹ In Cr.)***
	For Civil Work	*71*
	For Plant And Machinery except BTG	*106*
	Subtotal	***177***

c. *The Establishment Charges of 350 Cr. have been estimated towards the cost incurred/to be incurred in startup fuel expenses, construction power, insurance and other additional Overheads etc. The Breakup of the Establishment Expenses are:*

Expenses	***Remarks-Subheads***	***Amount (₹ In Cr.)***
Establishment	*Technical Consultancy*	*30*
	Salary	*42*
	Construction Power Charges	*34*
	Site Development	*13*
	Administrative and Miscellaneous Charges	*131*
	Start up Fuel Expenses	*100*
	Subtotal	***350***

d. *The breakup of the required charges have been provided in (b) and (c) above. The CA Certificate shall be submitted after the COD's of the units."*

(x) **Issue:**

The total capital cost per MW of ₹7.92 Cr. up to completion of the project is much higher than the capital cost admitted by CERC for other new projects of same capacity like Sipat super thermal power station stage I (3x660 MW). Justifications for claiming the higher capital cost in the petition be submitted.

How the project cost of the project is comparable with the benchmark norms specified by the CERC in its Order dated 04.06.2012 be also explained.

Petitioner's Response:

"In reply to the query raised in paragraph 1 (x) the Petitioner respectfully submits that the Bench Mark Capital Cost for 2x660 MW Super Critical Project (based on 2011 indices as Base) is 5.01 Cr per MW, as per the CERC Order No. L1/103/CERC/2012, dated 04-06-2012 providing the Benchmark Capital Cost (Hard Cost) for TPS. Further CERC has provided a clarification on Benchmark Capital Cost, for Thermal Power Stations with Coal as Fuel vide its aforementioned order, under Issue No. 6, para No. 11.2 and the relevant extracts of the same have been reproduced below for ready reference :-

"However, to calculate the likely cost of similar package for another project, the fixed Component needs to be linked to escalation in WPI for the intervening period, which may be provided..."

In view of the above the indicated capital cost (hard cost) per MW of ₹5.01 Crs. for 2x660 MW Super Critical Project based on 2011 Index as base, needs to be escalated based on WPI Index and brought forward to January, 2014. The table hereunder shows that the Bench Mark capital cost of ₹5.01 Crs./ MW translates, into a project cost (hard cost) of ₹6,613.20 Crs. as on December, 2011, which after applying the escalation factor based on WPI Index, works out to ₹7,524 Crs. translating into ₹5.70 Crs. / MW. WPI Index of 2013-14 is 178.90 and relevant documentary proof of Ministry of Commerce is annexed as Annexure A-6.

The WPI Index as at Dec-2011	*157.3*
The WPI Index as at Jan-14	*178.9*
Inflation factor	*1.14*
Bench Mark Capital Cost for 660x2 MW based on Indices of Dec-2011	*5.01*
Project cost at Bench Mark Capital	*6613.2*
Escalation allowed upto Jan-14	***7,524***
New Benchmark as at Feb-2014 indices shall be	***5.70***

The hard cost for the Petitioner's 2x660 MW Jaypee Nigrie Super Thermal Power Project, in terms of CERC Order dated 04.06.2012 for Bench Mark capital cost, works out as under by removing expenses / estimates on account of Margin Money, IDC, Railway Siding, Transmission Line, Barrage, Township and Taxes, which were not considered by CERC while Bench Marking the capital cost (Hard Cost) of thermal power projects. The table herein below shows that the total estimated project completion cost of ₹10,450 Crs. translates into hard cost of ₹7,349.74 Crs. which in turns works out to ₹5.57 Crs. / MW.

For Calculating Bench Mark Capital Cost compliance	***Value in Crores***
Project Cost	*10,450.00*
Less:	
Margin Money	*- 178.00*
IDC	*- 1,399.00*
Raliway Siding Expenses	*- 128.00*
Transmission Line Exp	*- 374.00*
Barrage Exp	*- 189.00*
Township Expenses	*- 116.26*
Taxes	*- 716.00*
TOTAL Capital Cost	***7,349.74***
Cost per MW	***5.57***

In view of the above the estimated completion cost of the Petitioner's project is well within the Bench Mark capital cost indicated by CERC for 2x660 MW Thermal Project. In addition to the above the Petitioner would like to submit the estimated completion cost of some other thermal projects wherein some cases 660 MW Machines have been used. The data being enumerated herein below is from various unauthenticated sources and is being submitted only for indicatory purpose."

SL	***Name of Project***	***Capacity (MW)***	***Estimated Project Cost In ₹Cr.***	***Project Cost Per/MW***	***Year of Estimation***
i	*NTPC – Solapur*	*1320*	*11600*	*8.79*	*2011*
ii	*NTPC – Barethi STPP*	*1320*	*11268*	*8.54*	*2012*
iii	*NTPC – DSTPP Stage*	*1600*	*12850*	*8.03*	*2010*
iv	*NTPC – Khargone STPP*	*1320*	*10458*	*7.92*	*2011*
v	*NTPC – GSTPP (Stage –I)*	*1600*	*12639*	*7.9*	*2010*
vi	*NPGCPL*	*1980*	*14868*	*7.51*	*2012*

(xi) **Issue:**

The justification for cost and time overrun in the project along with its impact on the interest and finance charges be submitted. If the time and cost overrun was beyond the control of the generating company, the details of responsible contractor/ vendor (s) and the liquidated damages (LD) to be recovered against different packages due to time over-run be also submitted.

Petitioner's Response:

"In reply to the query raised in paragraph 1 (xi) the Petitioner respectfully submits that the impact of cost and time overrun, if any, on the Interest and Finance Charges can be ascertained only after COD of the Units. The details shall be submitted thereafter. The issues related to charging of LD on different packages would also be arrived at only after COD.

(xii) **Issue:**

In terms of Clause 4.2 of the power purchase agreement (PPA), establishing necessary evacuation infrastructure beyond delivery point for evacuation of the contracted capacity is procurer's obligation. The reasons for establishing and claiming the cost of transmission system for evacuation of the contracted capacity in the petition be explained in light of the provisions under the PPA.

Petitioner's Response:

"In reply to the query raised in para 1 (xii), the Petitioner respectfully submits that since the PPA's dated 05.01.2011 and 06.09.2011 are for 30% and 7.5% of power respectively, thereby meaning that the balance power equivalent to 62.5% or 825 MW (gross) also needs to be evacuated. Since construction of multiple transmission lines is not a practical solution considering the ROW, additional cost etc. involved, CTU (presently PGCIL), while granting the Long Term Open Access for the 2x660 MW Nigrie Thermal Project of the Petitioner, vide Letter No. C/ENG/SEF/TA/L/W/09/C01 dated 29th July, 2009 had directed that "dedicated part to be implemented by Long Term Open Access applicant or generation project developer". The configuration finalized by CTU was as under:-

<u>Jaiprakash Power Ventures Ltd. (1320 MW)</u>

(a) Jaiprakash – Satna 400kV D/c (high capacity)

(b) Two nos of 400 kV bays at Satna (POWERGRID)

(xiii) **Issue:**

The un-discharged liabilities as on the date of commercial operation and the list of works deferred along with the estimated cost for execution up to the completion/cut-off date in light of the Regulation 20 of MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2012 be submitted.

Petitioner's Response:

"The Petitioner respectfully submits that the undischarged liabilities as on COD can be ascertained only after COD of the respective units and it is respectfully submitted that the same shall be submitted thereafter".

(xiv) **Issue:**

It is not clear from the contents of the petition whether FERV component is considered in the capital cost claimed by the petitioner The details of FERV hedging or charged on revenue and FERV loss/gain if any, needs to be furnished adequately along with all relevant supporting documents and the prevailing exchange rate of variation.

Petitioner's Response:

"*The Petitioner respectfully submits that the final details of FERV can be ascertained only after COD. In the Information Memorandum of Jul-2013 filed as Annexure–A-13 of the Petition dated 16th Jan-2014, the Component of FERV amounts to ₹221.54 Cr. The same details have been reproduced by the petitioner".*

<u>Return on Equity:</u>

(xv) **Issue:**

Reason for considering MAT on Return on Equity with relevant documents be submitted.

Petitioner's Response:

"Since Nigrie Project is a part of petitioner and petitioner pays MAT, accordingly MAT rate has been used to gross up the ROE of 16% for calculating ROE of Nigrie Project".

(xvi) **Issue:**

The basis of claiming additional ROE be explained along with all relevant documents in light of provisions under MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2012.

Petitioner's Response:

*"The Additional 0.5% ROE, over and above 15.5% as envisaged under regulation has been provided, as the approval of the Project Cost of ₹8,100 Crs. by the Board on 15-10-2009 was conditional, i.e. subject to detailed review and negotiation by the Finance Committee. The final approval of the Finance Committee was received on 30-03-2010. Since the 52 month period from the date of final approval, falls within our COD, the additional 0.5% ROE has been calculated as per para 22.2 of the MPERC regulation dated 12.12.2012. The Copy of Minutes of Finance Committee dated 30th March, 2010 are Annexed herewith as Annexure A-7"***.**

<u>Interest and Finance Charges:</u>

(xvii) **Issue:**

The supporting documents (loan documents) from each lender of the consortium of banks be submitted for applicable weighted average rate of interest claimed in the petition.

Petitioner's Response:

"*The Petitioner has submitted that the Weighted Average Rate of Interest has been calculated on the basis of Actual Disbursement (tranch wise), and ROI (rate of interest) as on the date of disbursement. As per CLA(common loan agreement), the interest rate is decided on each disbursement date separately, by each lender. We receive the intimation of interest rate by mail. Sample copy of such mails are enclosed herewith as Annexure A-8"***.**

(xviii) **Issue:**

Details of funding up to CoD of Unit-I along with drawdown schedule of loan and details of the equity infused along with the actual debt-equity ratio be submitted.

Petitioner's Response:

"In reply to the query raised in paragraph 3 (ii) the Petitioner respectfully submits that the details of funding upto COD shall be submitted after COD of each unit."

(xix) **Issue:**

Calculation for IDC of Unit-I & II in two parts (i) up to actual COD and (ii) up to scheduled COD be submitted in Excel sheet.

Petitioner's Response:

"In reply to the query raised in paragraph 3 (iii) the Petitioner respectfully submits that the calculation of IDC of Unit-I & II shall be submitted after COD of each unit."

(xx) **Issue:**

Detailed computation for increase in IDC &FC along with phasing of funding from loan and equity as per the investment approval/financing plan vis-à-vis the actual achievements as on actual COD and anticipated on schedule COD be submitted.

Petitioner's Response:

"*The Petitioner respectfully submits that the detailed computation of increase in IDC & FC shall be submitted after COD's of each unit'.*

(xxi) **Issue:**

Year-wise statement of interest capitalization upto COD of respective unit/(s) (as considered in petition) indicating the following be submitted:

- Total interest for the period;
- Total interest capitalized to gross block as on respective COD;
- Total interest under CWIP as on respective COD

Petitioner's Response:

"The Petitioner respectfully submits that the interest capitalisation shall be submitted after COD's of each unit."

(xxii) **Issue:**

The petitioner has not filed the copy of common facility agreement initially signed with ICICI Bank. A copy of common facility agreement signed on 07.05.2010 be also submitted.

Petitioner's Response:

"*The Petitioner respectfully submits that the copy of CLA dated 07.05.2010 is enclosed herewith as Annexure A-9.*"

<u>Interest on Working Capital:</u>

(xxiii) **Issue:**

Basis for claiming the rate of interest on working capital be submitted.

Petitioner's Response:

"*As per Regulation 27 of the Regulations, the Interest on Working Capital is calculated as Base Rate of SBI as on 1st April +3.5%. The Base rate of April-13 was 9.7%. As per the aforementioned regulation the interest on working capital had been accordingly worked out at 13.20%, (9.70%+3.5%)*".

(xxiv) **Issue:**

The coal stock capacity is for 45 days as per DPR. The actual coal stock capacity of the power station be informed.

Petitioner's Response:

"*The Coal Stock Capacity of the Power Station is approximately 60 days and the same has been taken as basis of Working Capital Calculation.*"

(xxv) **Issue:**

While computing the working capital, the cost of only main fuel oil is to be considered as per Regulations whereas the weighted average cost of both type of fuel oil is considered in the petition. The reason for claiming the cost of both fuel oil be submitted.

Petitioner's Response:

"*As per Regulation 37.1(ii) the Cost of Secondary Fuel for two months corresponding to the Normative Availability, is to be taken. Accordingly we have taken the Cost of LDO in our Calculation*".

Oil Expenses

(xxvi) **Issue:**

The cost of secondary fuel oil be filed as per provision under Regulation 36.2 of MPERC (Terms and Conditions for determination of Generation Tariff) Regulation, 2012. The supporting documents like copy of Invoice for each type of oil in support of the cost claimed for secondary fuel oil and weighted average rate be submitted.

Petitioner's Response:

"*In reply to the query raised in paragraph 5 the Petitioner respectfully submits that as on date we have purchased only LDO for trial runs of the Unit-1. Copies of Sample invoices of LDO are enclosed herewith, as Annexure A-10."*

Infirm power:

(xxvii) **Issue:**

The petitioner is required to file the details of revenue earned from sale of infirm power duly certified by SLDC along with the details of fuel expenses incurred in generation of infirm power duly certified by the Chartered Accountant.

Petitioner's Response:

"*In reply to the query raised w.r.t to the infirm power in paragraph 6, the Petitioner respectfully submits that the quantum of fuel consumed and Infirm Power generated from date of Synchronisation to COD shall be submitted after COD of the respective units, as presently none of the Units have been synchronized."*

Coal Cost

(xxviii) **Issue:**

Fuel supply agreement for supply of coal from Dongri Tal II be also submitted.

Petitioner's Response:

"*The Fuel Supply agreement with Dongri Tal II has not been executed as yet. The same is expected shortly".*

(xxix) **Issue:**

It is observed from Page 40 of the information memorandum prepared in July 2013 by the lead bank for cost over-run financing of the project that the life of Dongri Tal II Coal Mine is 17 years only whereas the useful life of the project and the term of PPA entered into by the petitioner with the respondents is more than 17 years. The petitioner is required to explain how the annual requirement of coal for the power plant shall be met on completion of the life of Dongri Tal II Coal Mine.

Petitioner's Response:

"The effective life of Dongri Tal-II (Phase-I) Coal Mine situated entirely on non-forest land is 17 years, whereas the effective life of PPA is 20 years from Project COD. It is expected that well before 17 years from COD, the Phase – II of Dongri Tal –II Coal Mine shall also be commissioned and the balance requirement of the Coal for the remaining life of PPA shall be met jointly by Amelia North and Dongri Tal-II (PhaseII) respectively. The Phase II is situated in Forest Land, for which the process for obtaining necessary clearances from concerned authorities has already been initiated. In the interest of the Project, the Dongri Tal –II Coal Mine project has been divided in two phases taking into account the fact that Forest Clearance takes considerable time."

(xxx) **Issue:**

Basis of considering GCV of Coal 4200 Kcal/kg be submitted whereas the GCVs of the coal to be supplied from Amelia (north) and Dongri Tal II are different.

Petitioner's Response:

"*The Gross Calorific Value (**"GCV"**) has been identified as blended GCV of the Coal Mix to be received from the Amelia Coal Mine and Dongri Tal-II Coal Mines, however the Actual GCV on "As Fired Basis" shall be used for Billing purposes, as provided in the Regulation, 2012."*

(xxxi) **Issue:**

Cost of coal and GCV of coal for three preceding months prior to COD of generating units as per Regulations along with supporting documents be submitted. With regard to the cost and GCV of coal, the petitioner is also required to file the following:-

(a) Coal analysis reports in support of GCV of coal for three preceding months as per provision under Regulation, 2012.

(b) Break- up of the landed cost of coal be filed in light of the CIL's notification for other applicable charges along with supporting documents.

Petitioner's Response:

"*The Supply from Amelia North Coal Mine is envisaged to commence shortly. All details pertaining to Cost and Coal Analysis Report etc, shall be submitted thereafter".*

(xxxii) **Issue:**

In format TPS 3, the petitioner has mentioned that the project is pit head station. The reasons for considering the power project as non pit-head station be submitted.

Petitioner's Response:

"*The Project is a Non Pit head station as the transportation of the Coal from the Mine to Power Station requires Public Rail / Road Transport for a distance of approximately 70 kms from each mine and by mistake in TPS 3 the words "for pit head" were not deleted. The Petitioner humbly requests for ignoring the words "for pit head" in form TPS-3."*

(xxxiii) **Issue:**

The basis and mechanism for deriving the Run of mine (basic price) of coal to be supplied from both the coal mines along with complete break up of basic price and other applicable charges, duties, royalty and cess etc. with reference to the CIL's notification be submitted.

Petitioner's Response:

"*The Basic Price of Coal is arrived tentatively at ₹1,225 per MT. Actual Coal Cost and all relevant calculations shall be submitted once the supply commences, on the basis of invoices to be raised on the Petitioner".*

(xxxiv) **Issue:**

Copy of joint venture agreement dated 27.01.2006 and 24.12.2008 in relation to coal block entered into by MP State Mining Corporation ltd and JAL be filed.

Petitioner's Response:

"*Copy of Joint Ventures Agreements dated 27.01.2006 (Annexure A-11) and 24.12.2008 (Annexure A-12) are enclosed herewith."*

(xxxv) **Issue:**

To confirm that no PPA has been executed as on date by the petitioner with any party other than the respondents in the matter for sale of power from the project under Section 62 of the Electricity Act, 2003.

Petitioner's Response:

"In reply to the query raised in paragraph 8 (i) the Petitioner confirms that no PPA has been executed so far under section 62 of the Electricity Act , 2003, other than the PPA's dated 5th Jan-2011 and 6th Sep-2011."

(xxxvi) **Issue:**

Some of the tariff filing formats filed with the petition are not filled up completely/properly and a few of them are not legible. The petitioner is required to file the following revised formats:

(a) In Form TPS-5A, the amount and date of the approval of the capital cost is wrong. Price level, period of quarter and year is also not indicated.

(b) All the columns of form 5B like Original project cost as approved by the authority, Actual /anticipated capital expenditure as on CoD, Liability/provision, variation and reasons for variation be filed.

(c) Form-TPS 5C for detailed break-up of construction/supply/service package is not properly filled up. The details like scope of works and the manner like ICB/DCB/Departmentally etc for awarding the contract, no. of bids received, date of award, date of start of work, date of completion of work, whether the contract is firm or escalable, actual expenditure incurred till date or COD and Taxes/duties levied etc. This form is also not legible. The information as desired be submitted.

(d) Revised Form-6 with the correct information of unit wise actual/anticipated financial package as on CoD be submitted.

(e) In Form-7, the petitioner is required to file detail of Moratorium effective from and Repayment period in years for each package. The information in this form is also illegible. Several details in this form are also missing. Revised form with legible and complete information be submitted

(f) The petitioner is required to revise Form TPS-9A. The closing amount is not matching with the opening and additions of the assets.

(g) Form TPS-14 regarding draw-down schedule for calculation of IDC and financing charges is also illegible. The revised format TPS-14 be submitted.

(h) “Type of Boiler Feed Pump” is not mentioned in the form Form TPS 2 filed in the petition. In the same form, the Guaranteed Design Heat Rate be also filed based on the guaranteed parameters.

Petitioner’s Response:

a) The corrected form TPS 5A is enclosed herewith as Annexure A-13.

b) The Actual Capital Expenditure as on COD shall be submitted after COD of each units.

c) The Revised TPS 5C with Date of each award is enclosed herewith as Annexure A-14. The status of Completion of the Work and the actual expenditure shall be submitted by COD of Unit-I& Unit-II.

d) TPS Form 6 has been compiled for Unit-I and Unit-II as a whole and the unit wise breakup would be submitted post COD of both units. We shall submit the total expenses incurred on the project, and allocation of the same in Unit-I and Unit-II as per provisions of 8.2 and 8.3 of the Regulations, after the COD’s of both units.

e) *Revised TPS Form 7 (reprinted on A3) Sheet is enclosed herewith as Annexure A-15.*

f) *Revised TPS Form 9A is enclosed herewith as Annexure A-16.*

g) *TPS 14 (Reprinted on A-3 sheet) is enclosed herewith as Annexure A-17.*

h) *Type of Boiler Feed Pump is now mentioned and the revised TPS 2 and is enclosed herewith as Annexure A-18.*

*As regards Guaranteed Designed Heat Rate (**"GDHR"**) the Petitioner submits that the same was arrived at by dividing the Maximum Turbine Cycle Heat Rate (1854) by Minimum Boiler Efficiency (85%) and multiplying the result by 1.065 (as per regulation 35.2 B)*

*However the Designed Heat Rate as per design specifications of L&T is 1854 Kcal/Kwh (for Nominal Rating) whereas the Guaranteed Boiler Efficiency of LMB has been mentioned as 89.78% (at nominal rating-660MW). This gives the GSH of the Plant as 1854/89.78% = 2065.05. This value when multiplied by 1.065 (as per regulation 35.2 B), gives the resultant GSH for Tariff purpose equal to 2200 kCal/kwh (rounded off). This corrected GSH is now used in the revised TPS-1 being enclosed herewith as Annexure A-19**.***

(xxxvii) **Issue:**

Date of synchronization of the generating unit along with certificate of SLDC and pollution Control Board be filed.

Petitioner's Response:

"*The Petitioner respectfully submits that the date of synchronization along with certificate of SLDC and PCB shall be submitted post COD of the Units."*

(xxxviii) **Issue:**

Common facility agreement dated 3rd September, 2013 signed with ICICI Bank stated that "*Scheduled Commercial Operation Date (SCOD) shall mean a date which is not later than 45 months from the date of financial close of the original project cost.*" The SCOD of the project and the date of financial close of the original project cost be filed.

Petitioner's Response:

"*The Petitioner respectfully submits that the scheduled date of commissioning ("SCOD") is May, 14 as per the Information Memorandum of ICICI (Page 100) already submitted. The Petitioner seeks leave of the Commission to refer to the contents of the Information Memorandum. The Financial Closure of the Project was achieved on 06.08.2010. The 45 months period, which was an internal timeline from 06.08.2010 for SCOD, works out to May-2014, for the limited purpose of Information Memorandum."*

(xxxix) **Issue:**

Para 15.1(g) of the DPR stated that the ash of the power plant shall be utilized in adjacent cement grinding unit. The petitioner is required to file estimated revenue to be earned from sale of fly ash.

Petitioner's Response:

In reply to the query raised in paragraph 8 (v) the Petitioner respectfully submits that the revenue estimated to be earned from sale of fly ash from the power plant, would approximately be around ₹100/- per MT. However the cost incurred in the fly ash disposal system has not been factored in the said revenue amount. The actual figure of revenue earned by ash disposal, shall be submitted on realisation. In any case, it is pointed out that the use of disposed ash is not an integral or connected activity to generation. Therefore, the revenue earned from such use of ash may not be relevant for the purposes of tariff.

(XL) **Issue:**

The revised DPR dated 5th May, 2013 (para 10) provides a table for "details of Civil works – cost overrun." The project cost in some heads has increased abnormally as given below:-

Particulars	Original	Revised	Increase
Plant water system including intake pump house and Dyke for raw water reservoir	80.72	203.96	123.24
Coal handling plant	56.27	99.85	43.57
Liquid waste treatment and other Envir. requirements	3.70	30.16	26.46
Construction facilities	6.89	27.40	20.51
Other misc. items including T&D as applicable,	9.75	160.89	151.13

transportation transit insurance on suppliers & works and escalation on civil work			

The reasons for cost overrun in the aforesaid components with all supporting documents be submitted.

Petitioner's Response:

"*In reply to the query raised in paragraph 8(vi) the Petitioner respectfully submits that increase in cost under various heads of civil work has been dealt in detail in reply to point 1(viii), regarding increase in Civil Cost by 510 Cr. The Petitioner seeks leave of the Commission to refer to the contents of paragraph 17 of the reply as the desired information has already been produced therein, read with page 60 of the Information Memorandum of ICICI, already submitted with main petition, which clearly explains the reasons for increase in these cost components. In addition reference may also be made to the LE report attached herewith (Annexure- 3) for complete Report on Cost Overrun of the Project."*

(XLI) **Issue:**

In the list of document filed at S. No. 16 of Volume No. 3 of the petition, it is mentioned that "the DPR of the project prepared in April, 2008" whereas the DPR submitted at Page No. 650 to 993 was prepared in August, 2009. This ambiguity needs to be clarified.

Petitioner's Response:

"In reply to the query raised in paragraph 8(vii) the Petitioner respectfully submits that the DPR was prepared in Aug-2009. The narration as against S.no. 16 of the index, as mentioned in Volume 3 of the Petition, has been erroneously typed as April 2008 instead of August 2009. This typographical error may kindly be ignored"

11. On examination of the above mentioned reply filed by the petitioner, the Commission observed that the response of the petitioner on certain issues was lacking clarity. Vide Commission's letter No. 917 dated 31st May' 2014, the observations of the Commission on all such issues were communicated to the petitioner seeking its reply by 25th June' 2014.

12. Meanwhile, the Commission observed the following during hearing held on 27th May' 2014:

(i) Vide letter No. Coal/2013-14/13 dated 22nd April' 2014, Managing Director, M.P. State Mining Corporation Ltd. filed its reply with the Commission. In its aforesaid submission, M.P. State Mining Corporation Ltd. broadly submitted the following:

(a) The cost of coal to be produced each year shall be fixed on the recommendations of the "Cost Fixation Committee" to be constituted in terms of Clause 5.18 of the Mine Development–Cum–Operation Agreement.

(b) *The sale price of coal and the payment to Mine Development Operator (MDO) shall be determined only after recommendations of the "Cost Fixation Committee".*

(ii) By affidavit dated 13th May' 2014, M.P. Power Management Co. Ltd., Jabalpur (Respondent No. 1) filed its comments on the petition.

(iii) Counsel on behalf of the petitioner submitted that the first unit has been synchronized and the same is expected to be commissioned in June' 2014. He stated that the petitioner will be able to file the Chartered Accountant's certificate for the expenditure incurred on the project after two to three weeks.

(iv) The representatives on behalf of M.P. State Mining Corporation Ltd. stated that the basic coal price of ₹1225 per MT estimated in the petition has no basis. They indicated that pending coal cost fixation, the basic price of coal may be estimated at par with the pit-head run of mine price notified by CIL for the similar GCV band of coal.

(v) Copies of Mine Development–Cum–Operation Agreement and Coal Supply Agreement were also filed by M.P. State Mining Corporation Ltd.

13. The petitioner was directed to file its reply on the comments offered by the respondent by 20th June' 2014. It was directed that a copy of the aforesaid reply be served to the respondents also.

14. By affidavit dated 1st July' 2014, the petitioner filed its reply to the observations of the Commission communicated to it in Commission's letter dated 31st May' 2014. By the same affidavit, the petitioner filed its reply to the comments offered by Respondent No.1.The comments offered by Respondent No. 1 and the response of the petitioner on each comments are enclosed as Annexure1 of this order.

15. Vide letter No. COAL/2014-15/FN-209/113 dated 2nd July' 2014, M.P. State Mining Corporation Limited broadly submitted the following:

(i) Clause 9 of the FSA stipulates sale of coal by M.P. State Mining Corporation Ltd. (MPSMCL) to JPVL at "As Delivered Price of Coal".

(ii) Delivered Price of Coal has been defined as the sum of Base Price, a mark up of 10% on Base Price, facilitation fees payable to MPSMCL and statutory charges as applicable at the time of delivery of coal.

(iii) Base Price includes the "Production Cost" paid/ payable by M.P. Jaypee Minerals Limited (MPJML), a joint venture company of MPSMCL and JAL, to the MDO for mining of coal to be sold.

(iv) As the formation of "Cost Fixation Committee" was taking some time and in view of the urgency to dispatch coal (1.0 lac ton), it was decided to dispatch coal at the provisional rate of ₹2557.08 per ton.

(v) The Board of Directors of the MPSMCL also directed that pending finalization/ recommendations by Cost Fixation Committee, sale price of coal be fixed provisionally, based on the "Pit Head" sales price of CIL.

(vi) In compliance with the directions of the Board, sale price has been fixed provisionally at ₹1883.43 per ton with retrospective effect (Pit Head Cost ₹700/- per ton as per CIL rate).

16. During the course of hearing held on 3rd July' 2014, the Commission noted the following status:

(i) No unit achieved COD as on date and the CoD of unit 1 is expected by 31st July, 2014.

(ii) The issue regarding establishment of evacuation system beyond delivery point in terms of the provisions under PPA, is not addressed in the reply filed by the petitioner.

(iii) Detailed computation of IDC & IEDC, actual cost overrun of the plant, complete breakup of actual contingency and establishment expenses and Auditor's certificate in respect of the capital expenditure and fuel expenses as on CoD shall be submitted by the petitioner after COD of the unit/(s).

17. Issue-wise reply of the petitioner to the clarifications sought by the Commission is as given below:

(i) **Issue:**

It is observed that the cost of civil works has been revised to ₹1170 Crores (excluding Barrage) with the cost over-run of ₹ 510 Crores. It is further observed that the petitioner has not adopted separate bidding process for civil works of the project. The contract of civil works was awarded to JAL based on some other civil contract awarded to JAL by Bokaro Jaypee Cement Ltd. (BJCL). With regard to the aforesaid observations, the petitioner is required to submit the following:

Copies of the tender issued for BJCL and the orders for civil works awarded to JAL.

Response by the petitioner:

"The Petitioner/JPVL respectfully submits that the copy of the documents for Bokaro Jaypee Cement Limited (BoJCL) as listed out below have been enclosed as Annexure A-1 to the reply, which includes:

(a) The Tender Document for Civil and Structural (Fabrication & Erection),

(b) The Tender Document for Residential Complex,

(c) The Tender Document for Mechanical Fabrication & Erection and Electrical Fabrication,

The Tender Document for Erection and installation for 2.1 MTPA Cement Grinding Plant at Bokaro,(Jharkhand-India) ("BoJCL's Project") along with copy of Letter of Association ("BoJCL's LoA") granted by BoJCL to Jaiprakash Associates Limited.'

(ii) **Issue:**

How might the items/ components of civil works for a cement industry and a thermal power plant be identical and comparable?

Response by the petitioner:

"The Petitioner/JPVL respectfully submits that as per the tender documents for the BoJCL's Project and BoJCL's LoA the entire scope of civil work of JAL has been broadly categorised into four groups:

(a) Civil and Structural (Fabrication & Erection),

(b) Residential Complex- Township including roads,

(c) Mechanical Fabrication & Erection and

(d) Electrical Fabrication, Erection

The Overall scope of work of JAL included:

(a) Carrying out Civil & Structural (Fabrication & Erection Work),

(b) Residential Complex

(c) Mechanical Fabrication

(d) Erection & Electrical Fabrication

(e) Erection and installation for 2.1 MTPA Cement Grinding Plant.

In comparison, the scope of work awarded to JAL by Petitioner/JPVL for the Project's civil works involved:

(a) The excavation and filling, cast-in-situ concrete works, reinforcement, formwork and staging, embedded parts laying of rails, anchor fasteners, grouting, dismantling, chipping and making openings in PCC/RCC, pre-cast cement concrete works, detail design of structural steel fabrication and erection, masonry and allied works, modular aerated concrete paneling, sheeting and allied works, floor finishing, doors, windows and partitions, glass and glazing, water proofing, false ceiling, fencing and gates, water supply, drainage and sanitation, earthing mat, aluminium composite paneling, roads, drains, sewers,

etc. (for the Project including railway siding and Rail Tracks in wagon unloading area).

(b) Drilling & Anchoring Roads consolidation grouting, Boulder pitching & providing Filters, Porous concrete & drains, supply and erecting Hoist, Hoist bridge and columns, EOT crane etc. in Barrage area and Intake area.

(c) Execution of all Civil works of the Project including Township

(d) Fabrication and Erection of all Structural works of the Project

(e) Erection of all Equipment for the Project.

Based on the preliminary designs, the Project envisages in general, all Civil works components associated with a Thermal Power plant such as Silos, Cement Mill House, Coal Mill, Packing Plant etc. including Railway Siding..

Comparison of Scope of Civil work of BoJCL and Jaypee Nigree Thermal Power Plant: It is respectfully submitted that both plants i.e. BoJCL's Project and the Petitioner/JPVL's Nigrie TPS Project, are Industrial Projects, the former being a Cement Plant & later is a Thermal Power Plant. However, the scope of civil work of both the plant is similar, comprising of (a) excavation; (b) filling; (c) concreting; (d) reinforcement binding; (e) formwork &staging and, fabrication & erection of structural steel;(f) erection of equipment and (g) electric installations. The type of work involved for major items in both the plants is also the same i.e. both projects involve construction of material storage structures, material handling systems, mills, RCC framed buildings and structural steel buildings & sheds. Quantity of each item, however, differs based on the quantum of work in each case."

(iii) **Issue:**

On perusal of the figures tabulated in Annexure A1 to A7 of the submission, the contention that the contract to JAL for civil works of Nigrie project was awarded at equal or lower rates than the rate of contract awarded by BJCL to JAL is not correct. In many items, the unit rates for Nigrie project are higher than the unit rates for BJCL. This needs to be clarified.

Response by the petitioner:

"The Petitioner/JPVL respectfully submits that on perusal of the figures pertaining to unit rate of the Project with BoJCL's Project, it can be seen that

the Petitioner/JPVL's claim that award of civil work contract to JAL for the Project was at the rate either equal to or lower than the rate of contract awarded by BoJCL to JAL, is correct, except in few site specific cases like sand Mining, localized labour related issues, local logistic issues that inflated the township requirement and the cost. The overall impact of such negative variation is ₹5.82 Cr which is already inbuilt in the savings amount of ₹57.81 Cr. So eliminating the negative variance the overall savings gets escalated to ₹63.63 Cr., and the quantum of negative variance, as aforementioned is not even 10% of the total positive variance, which is insignificant and may kindly be ignored."

(iv) **Issue:**

To establish that the delay in completion of project has been avoided by not inviting tenders for civil works whereas, the commissioning of units is yet to be achieved leaving much behind the scheduled CoD.

Response by the petitioner:

"The Petitioner/JPVL respectfully submits that the scheduled COD of the Project as provided by the Procurer is now 31.07.2014 and as on date the Petitioner expects to achieve COD around the same time. So no delay is being envisaged by the Petitioner in achieving COD. Copy of letter allowing COD 31.07.2014 is enclosed as Annexure A-2.

The Petitioner/JPVL further reiterates that it has adopted the rates, with respect to the Civil Contract awarded by SAIL (A Government of India Undertaking) to JAL for BoJCL's Project, ignoring the time lag between the projects, only for avoiding the delay, that would otherwise have occurred in case of fresh bidding. Hence there is no delay in award of the contract as far as the Civil work is concerned. The overall delay in the project is attributed to the heavy rainfall in the region during the construction phase of the project, which has been acknowledged by the Respondent hence the SCOD has been extended by the Respondent to 31st July-2014."

(v) **Issue:**

The petitioner has now filed a copy of "final cost overrun review report" prepared by "Lahmeyer International (India) Pvt. Ltd" in July, 2013 for justification of the cost overrun of the various items of the project. The following major reasons are mentioned for increase in the project cost:

(i) Increase in the cost of civil works is due to large variations in the actual soil conditions encountered during execution with reference to the conditions predicted in the soil investigation reports.
(ii) Additional cost of constructing barrage which was not envisaged earlier
(iii) Increase in the size of raw water reservoir and township
(iv) Impact on the cost of main plant equipments due to price variation clause in the contract
(v) Increase in the cost of transmission line
(vi) Statutory variations in taxes and duties and adverse variations in the foreign currency

In view of the above, all relevant documents in support of the following be submitted:

- Soil investigation report and the actual condition of soil
- Copies of the documents for the various package contracts awarded for all items
- The reasons attributable for the increase in transmission cost
- Variations in taxes /duties and foreign currency.

Response by the petitioner:

"The Petitioner submits as under:

- ***Soil Investigation Report and Actual Condition of Soil:*** *The Petitioner/JPVL seeks leave of the Hon'ble Commissions to refer to Annexure S-18 (S.No. 35 of Volume 7), Annexure S-19 (S.No. 36 of Volume 8) and Annexure S-20, (S.No. 37 of Volume 8) of the petition dated 16-01-2014. The aforementioned annexure/documents consist of detailed Geo technical Report dated 09-03-2011, 07-06-2008 and 02-03-2010 providing the actual conditions of the soil.*

- ***Copies of the documents for the various package****: The Petitioner/JPVL respectfully submits that the total No of BOP packages* *being enormous, we are submitting few major BOP packages for your kind reference and are collectively attached as* ***Annexure A-3***

- ***Reason attributable for Increase in Transmission Cost****: The Petitioner/JPVL seeks leave of the Hon'ble Commissions to refer to submission dated 22.04.2014 (****page no 10-11****) wherein the main reason attributable to increase in the cost of transmission line have been explained in detail. The main contributors to increase in transmission line cost are :*

  i. *Increase in the length of transmission line by 11 km falling in forest area, leading to acquiring of additional land, and additional cost against compensatory afforestation and medicinal plantation.*
  ii. *Increased cost of Equipment, Civil Works along with taxes and duties due to above.*
  iii. *Use of Optical Fibre ground Wire (OPGW) in place of Ordinary Steel ground wire as directed by PGCIL.*
  iv. *Compensation given for getting the Right of Way in respect of the agricultural lands.*
  v. *Additional Consultancy charges paid to PGCIL.*

Variations in taxes/duties and foreign currency: *The Petitioner/JPVL seeks leave of the Hon'ble Commissions to refer to Information Memorandum for Cost overrun Financing. It is submitted that the prices quoted for SG and STG package contracts were exclusive of taxes and duties applicable and to be paid in India and entire taxes and duties payable in India are required to be borne by JPVL. The taxes and duties on SG and STG are estimated to be ₹716 Crore, break-up of which is as follows:*

Package	***Original tax***	***Revised tax***
SG	*297*	*415*
STG	*197*	*301*
Total – BTG	***495***	***716***

The additional increase in cost of ₹221 Cr. (₹495 Cr. to ₹716Cr.) is due to following reasons.

1. ***Increase in rates:*** *The increase in rate has an impact on Applicable Custom Duty, applicable excise duty and applicable service tax. The rate of Applicable Custom duty increased from 18.62% to 23.26% an incremental increase of 25%. The Applicable excise duty increased from 8.24% to 12.36% an increase of 50% and the applicable Service Tax increased from 10.30% to 12.36% an increase of 20%.*

2. ***Increase in Foreign Exchange Rates:***
   Further, there is additional incidence of tax on account of increase in BTG contract price due to INR price escalation (PV) and forex variation (ERV). The contract price denominated in various foreign currencies was firm, the exchange rate variations were required to be borned by the company. The USD, EURO and Japanese Yen (JPY) currencies appreciated significantly leading to escalation in the SG and STG package foreign currency denominated price. Which at present is now estimated to be ₹ 221.50 Cr (in rupee equivalent terms). The impact of appreciation of JPY has however, been partly mitigated on account of the JPY denominated ECB availed by the company from ICICI Bank (under the JBIC line of credit).”

(vii) **Issue:**

Why should the cost of land of ₹1.69 Cr for Cement Grinding Unit be included in the capital cost of the project?

Response by the petitioner:

“The Petitioner/JPVL seeks leave of the Hon’ble Commissions to refer to Information Memorandum July, 2013, also marked as Annexure A-13 with main petition dated 16.01.2014. It is submitted that the Information Memorandum gives the Total Land requirement for Project i.e. 458.93 Ha at ₹35.18 Cr, which excludes the cement grinding unit. The same Cost has been reflected under the capital cost of the Project, in the main petition dated 16-01-2014. Hence, the cost of the land utilised for the cement grinding unit i.e. 22.3 Ha valued at ₹1.69 Cr. is not included in the capital cost of the project.”

(viii) **Issue:**

LE has considered the estimated amount of ₹100 Cr. for start-up fuel till CoD. The petitioner is required to submit the date-wise monthly details along with the invoice/bills regarding consumption of start-up fuel till synchronization of each unit.

Response by the petitioner:

"The Petitioner/JPVL respectfully submits that the estimation of LE is based on the assumption that there is a time lag between the initial light up of the plant and date of oil synchronisation of each units with the grid and the estimated consumption of LDO and HFO during the period. The actual expenditure incurred on LDO and HFO during such period shall be submitted once the unit(s) attain their respective COD's."

(ix) **Issue:**

On perusal of the Lender's Engineer report for justification of the project cost overrun, it is observed that the cost overrun of ₹698 Cr. on BTG is on account of price variation, change in taxes and duties and Exchange Rate Variation. The break-up of cost overrun on BTG is mentioned as given below:

Break-up of Original and Revised BTG Cost (₹Cr.)

Particular	**Original Cost**	**Revised Cost**	**Diff.**
BTG	4032	4032	-
Price Variation	-	254.5	254.5
Taxes and Duties	494	716.1	222.1
Exchange Rate Variation	-	221.5	221.5
BOP	1240.6	1240.6	-
Total	5766.6	6464.7	698.1

The details of actual payment made for the above items along with all supporting documents be submitted.

Response by the petitioner:

"The Petitioner/JPVL respectfully submits that the actual cost overrun details on BTG shall be availed once the individual units attain COD's and the relevant cost of the plant(s) are capitalized. The details of actual payment would be submitted after Project completion, as currently only estimates/projections are available."

<u>Evacuation system:</u>

(x) **Issue:**

As per clause 4.2(ii) of the PPA, the necessary transmission infrastructure beyond the delivery point for evacuation of the contracted capacity is the procurer's obligation. The response of the petitioner on this issue has not addressed the query of the Commission. Therefore, the response on this issue be specifically submitted in light of provision under the PPA.

Response by the petitioner:

"The Petitioner/JPVL seeks leave of the Hon'ble Commissions to refer to point 12 of the affidavit dated 19.04.2014, submitted on 22.04.2014. It is submitted that after factoring for the PPA component of Power equivalent to 37.5% (30%+7.5%) or 495 MW (gross) the balance 825MW equivalent of 62.5% also needs to be evacuated. Since construction of multiple transmission line this not a practical solution considering the ROW, additional cost etc., involved, hence CTU (PGCIL) had at the time of grant of Long Term Open Access to the Petitioner, vide its letter C/ENG/SEF/TA/L/W/09/C01 dated 29th July, 2009, directed that "the dedicated part to be implemented by Long Term Open Access Applicant or generation project developer" (Copy of the letter dated 29-07-2009 is attached as Annexure A-4). The Configuration finalized by CTU was as under:

Jaiprakash Power Ventures Ltd. (1320 MW)

(a) Jaiprakash – Satna 400kV D/c (high capacity)

(b) Two nos of 400 kV bays at Satna (POWERGRID)"

(xi) **Issue:**

The petitioner is required to submit the detailed computations of IDC and IEDC as on scheduled CoD and actual CoD for both the units duly certified by the statutory Auditor. The reasons for increase in IDC and IEDC if any, from scheduled CoD upto actual CoD be also submitted.

Response by the petitioner:

"The Petitioner/JPVL respectfully submits that the detailed computation of IDC and IEDC of each unit, certified by the statutory auditors shall be submitted after the respective COD's".

Contingency and Establishment Charges:

(xii) **Issue:**

The petitioner has not filed the basis for estimation of Contingency charges. The complete break-up of actual Contingency expenses as on CoD be submitted.

Response by the petitioner:

"The Petitioner/JPVL respectfully submits that the Contingency expenses of ₹177 Cr., envisaged in the Information Memorandum at page no 67, is subject to happening of certain events/parameters like additional IDC and financing charges, exchange rate fluctuations, increase in taxes and duties etc. In case these events are not triggered, the incremental cost shall not be incurred. The Complete breakup of actual contingency expenses as on COD would be submitted after the project COD."

(xiii) **Issue:**

The complete break-up of actual Establishment expenses as on CoD be also submitted.

Response by the petitioner:

"The Petitioner/JPVL respectfully submits that the complete breakup of the establishment expenses upto COD shall be submitted after achieving the COD's for respective units."

(xiv) **Issue:**

As sought by the Commission, the petitioner has not filed the comparison of its project cost with the Sipat super thermal power station. A comparison of the capital cost with Sipat super thermal power project be filed.

Response by the petitioner:

"The Petitioner/JPVL humbly submits the cost comparison of Nigrie Project's (2x660 MW) estimated cost of completion with NTPC's Sipat TPS (3x660) as

mentioned on page 14 of CERC order dated 22-08-2013 in petition No 20/2011. The same is as under:

Capital Cost of Sipat Super Thermal Power Station, Stage - (1980 MW).			
As determined by CERC in Petition No. 28/2011, Order Dt. 22.08.2013, page 14 of 26			
			In ₹ Cr.
	Unit I	*Unit II*	*Unit III*
	As on 01.10.2011	*As on 25.05.2012*	*As on 01.08.2012*
Capital Cost on Cash Basis	*3,706.61*	*6,104.75*	*8,173.35*
Total for 3x660 Units			***17,984.71***
Pro-Rata for 2x660 Units - Without Escalation, On Cash Basis			*11,989.81*
Projected Completion Cost of Nigrie - 2014.			*10,450.00*

The above comparison is on the basis of composite costs, without negating the individual items like Barrage, Transmission Line, Railway Siding and Township etc. In addition to the above, the Petitioner/JPVL submits that, the Hon'ble Commission may also like to refer to the comparison with benchmark cost which has been provided in the affidavit dated 22.04.2014 (page 14)."

(xv) **Issue:**

With regard to weighted average rate of interest, the petitioner is required to file the certificates/statements from various lenders in support of the applicable weighted average rate of interest claimed in the petition.

Response by the petitioner:

"The Petitioner/JPVL seeks leave of the Hon'ble Commission to refer to the affidavit dated 29.04.2014. It is submitted that the sample copy of the requisite mails confirming the weighted average rate of interest, has already been submitted as Annexure A-8 with the affidavit dated 29-04-2014 as a confirmation of the applicable drawl rate on the date of drawls. It is pertinent to mention that no separate certificate is obtained from lenders in this regard."

(xvi) **Issue:**

Fuel Supply Agreement for Dongri Tal II coal mines is yet to be filed by the petitioner. The updated status in this regard along with the status of commencement of coal supply to power station be furnished.

Response by the petitioner:

"The Petitioner/JPVL respectfully submits that the FSA for Dongri Tal-II is expected to be executed shortly and would be submitted soon thereafter."

GCV and landed cost of coal claimed in the petition

(xvii) **Issue:**

The petitioner has claimed average landed price of coal as ₹2200 per MT considering ₹1225 per MT as the basic price of coal from Amelia north Mines. M.P. State Mining Corporation Ltd. has submitted that the sale price of coal and the payment to MDO (Mine Development Operator) shall be determined only after the recommendations of the "Cost Fixation Committee":

Further, the respondents, MPPMCL and the M.P. State Mining Corporation have stated that the basic coal price of ₹1225 per MT estimated in the petition has no basis. They indicated that pending coal cost fixation, the basic price of coal may be estimated at par with the pit-head run of mine price notified by CIL for the similar GCV band of coal. The response of the petitioner on the aforesaid comments by the respondents be submitted.

Response by the petitioner:

"The Petitioner/JPVL respectfully submits that the earlier submission was based on the initial estimates of the Petitioner and that the supply of the Coal from the two dedicated Coal mines at Amelia (North) and Dongri Tal II were presumed to be made through the two joint venture companies which were to be incorporated between JAL and the MP State Mining Corporation Ltd.

Petitioner/JPVL respectfully submits that at present under the changed scenario, the FSA for Amelia (North) mines has been directly executed with the MP State Mining Corporation (MPSMCL) and the supply from the MPSMCL has already started.

It is submitted that the basic price of coal was initially envisaged at ₹1225 per MT and Landed price at ₹2200 per MT. Currently Coal is being supplied by the Madhya Pradesh State Mining Corporation Ltd., (MPSMCL) and the basic price charged by the State Mining Company at ₹1624.85 per MT ₹1228 per MT, translating to an Invoice price of ₹2557 per MT. The Average railway freight from Mining Company siding to Nigrie Internal siding is approximately ₹183 per MT.

The sample copy of the invoices along with copy of railway freight is enclosed as Annexure-A-5. In addition to the above we are also enclosing the Coal Analysis report of the received Coal from Amelia (North) Blocks."

(xviii) **Issue:**
The following documents which are essentially required for determination of provisional tariff for the project be submitted:

Auditor's Certificate for capital expenditure as on CoD

Response by the petitioner:
"*The Petitioner/JPVL respectfully submits that the Auditor's Certificate for capital expenditure as on COD of Unit 1 shall be submitted after COD of Unit1 is achieved, which is expected shortly. However for grant of provisional tariff we are submitting the CA certified Capital Expenditure details as on 31st March 2014 along with stand alone Balance sheet of Nigrie TPS and Balance Sheet of JPVL (As an 31.03.2014), enclosed as Annexure-A6, for facilitating the Provisional tariff calculations.*

In addition to the above, we are also submitting the Board Resolution of JPVL dated 27-04-2013 for approval of the Annual Accounts of Nigrie Thermal Power Plant for the year 2012-13 and resolution dated 17-05-2014 for approval of the annual account of Nigrie Thermal Power Plant for the year 2013-14. The board resolution dated 27-04-2013 & 17-05-2014 are enclosed as Annexure – A7."

(xix) **Issue:**
Details of unit wise funding as on CoD

Response by the petitioner:

"The Petitioner/JPVL respectfully submits that the details of unit wise funding as on COD shall be submitted after the COD of unit-I. However the details of the cost breakup as per the requirement of para 8.2 and 8.3 of the regulation dated 12.12.2012 along with the CA certificate as at 31.03.2014 is being enclosed as Annexure A-8."

(xx) **Issue:**

Details of the infirm power supplied to grid

Response by the petitioner:

The Petitioner/JPVL respectfully submits that the details of Infirm Power shall be submitted after the commissioning of each units respectively.

(xxi) **Issue:**

CA certificate for fuel expenses for generation of infirm power

Response by the petitioner:

"The Petitioner/JPVL respectfully submits that the CA certificate for details of fuel expenses for generation of Infirm Power shall be submitted immediately after COD(s) of each unit(s)."

(xxii) **Issue:**

Details of GCV and rate of coal and oil for three preceding months etc.

Response by the petitioner:

"The Petitioner/JPVL respectfully submits that the details of GCV and Rate of Coal along with details and Rate of Oil purchased (LDO +HFO) are enclosed as Annexure A-9"

18. Vide Commission's order dated 24th July' 2014, the petitioner and the respondents were asked to explain/clarify certain issues. Issue-wise response filed by the parties is as given below:

(i) **Issue:** Regarding the civil works in the project cost, the copy of work order awarded to JAL for Bokaro Jaypee Cement Limited was sought from the petitioner.

Response of the petitioner:

A copy of the work Order awarded to JAL for Bokaro Jaypee Cement Limited is annexed as Annexure – 1.

(ii) **Issue:** The total project cost of ₹17,984.71 Crores mentioned for 3x660 MW Sipat Thermal Power Station is incorrect. As per CERC's order dated 22nd August' 2013, the total project cost of all three units of Sipat Thermal Power Station is ₹8876.34 Crores which comes out to ₹4.48 Crores per MW. The petitioner was asked to re-submit the comparison of its project cost with that of the Sipat Super Thermal Power Station.

Response:

The reworked cost comparison with 3X660 Sipat Thermal Power Station is submitted by the petitioner.

(iii) **Issue:** The FSA for Dongri Tal II was sought from the petitioner as and when it is executed.

Response:

"FSA for Dongrie Tal II shall be submitted after the same is executed."

(iv) **Issue:** Average railway freight from mining company siding to Nigrie internal siding is approximately ₹183 per MT.The sample copy of invoice for the aforesaid railway freight is not legible. A legible copy of the same was sought from the petitioner.

Response:

"A legible copy of Invoices for Railway freight is annexed as Annexure-2".

(v) **Issue:** The petitioner has not filed the GCV and grade of coal purchased from MPSMCL. The GCV of coal as per joint sampling and procedure specified in the fuel supply agreement was sought from the petitioner.

Response:

"The sample copies of joint sampling report for measured GCV are annexed as Annexure-3."

(vi) **Issue:** The complete break-up of the capital expenditure on each unit as on 30th June' 2014 and as on CoD of the units duly certified by the Chartered Accountant was sought from the petitioner.

Response:

The petitioner submitted the following two documents:

(i) Chartered Accountant's certificate dated 11.08.2014 certifying the total expenditure of ₹9944.89 Crores incurred by the petitioner for development of its Jaiprakash Nigri Super Critical Thermal Power Project from debt of ₹6916.75 Crores and its corporate resources amounting to ₹3135.91 Crores as on **31st July' 2014**.

(ii) Letter to WRLDC confirming declaration of COD of Unit 1 of Jaypee Nigri Super Critical Thermal Power Plant w.e.f. 00.00 hrs of 3rd September, 2014.

(iii) Subsequently, the petitioner submitted the certificate issued by WRLDC certifying COD of unit 1.

19. M.P. State Mining Corporation Ltd. was directed to submit the complete break-up of the sale price of coal for ₹1883.43 per MT which has been provisionally fixed by it. The basis of the facilitation fees of ₹267.30 per MT considered in the sum invoice price of ₹2557 per MT of coal was also sought from M.P. State Mining Corporation Ltd.

20. In response to the aforesaid, M.P. State Mining Corporation Ltd. submitted the following on 22nd August'2014:

(i) M.P. State Mining Corporation Ltd. has submitted the break-up of the sale price of coal for ₹1883.43 per MT considering the pit-head cost of coal as per CIL's notification. This break-up is certified by the cost accountant M/s. J.K. Kabra and Co. for FY2014-15 on 14th June' 2014. It has also submitted the break-up of provisional rate of coal ₹2557.08

per MT which was provisionally decided to dispatch coal to the petitioner.

(ii) M.P. State Mining Corporation Ltd. also informed the following:
"It is to further inform that the Draft of Coal Supply Agreement executed between M.P. State Mining Corporation Limited and Jaypee Power Venture Ltd. has been approved by the Cabinet as informed to us vide Minerals Resources Department, Government of Madhya Pradesh order No. F-19-15/2013/12/1 dated 06.10.2013.

As already informed vide our aforesaid letter dated 2.7.14 the Sale Price of Coal has been fixed provisionally at Rs. 2557.08 per ton & later on pending formation of Coal Fixation Committee, it was fixed on the basis of pit head price as per CIL notification dated 27.05.2013. Detailed breakup of sale price duly certified by M/s. J.K. Kabra & Co., Cost Accountant is enclosed.

***Facilitation fees** – As you may be kindly aware that the Corporation has formed Joint Venture Company for development of Amelia (North) Coal block. For selection of Joint Venture Partner, facilitation fees payable to the Corporation for every ton of ROM coal sold, calculated on the basic sale price at pit head was fixed as the Selection criteria. Further, as per tender, facilitation fees shall be payable in percentage of the basic sale price of various grades of coals per ton fixed by Northen Coal Field Ltd. from time to time or the price of coal sold by the JVC whichever is higher.*

M/s. Jaiprakash Associates Limited was selected as the Joint Venture Partner and the facilitation fees payable by them is as under:

S. No.	***Run of Mine (ROM) Coal Grade***	***Percentage payable as facilitation fee to MPSMCL for each tone of ROM Coal***
1	*A*	*35%*
2	*B*	*35%*
3	*C*	*35%*
4	*D*	*25%*
5	*E*	*25%*
6	*F*	*20%*
7	*G*	*20%*
8	*Below G (if any)*	*20%*

The commission payable to the Corporation by converting the above Grades on Gross Calorific Value (GCV) basis is as under:

S. No.	***Run of Mine (ROM) Coal Grade***	***Percentage payable as facilitation fee to MPSMCL for each tone of ROM Coal***
1	*G1, G2, G3, G4, G5 and G6*	*35%*
2	*G7 – G10*	*25%*
3	*Below G10 (if any)*	*20%*

Further the Coal Controller, Calcutta vide their letter dated 19.3.14 have declared the proposed provisional grade of coal for the year 2014-15 as G-11 for Seam VII Section 'Quarry-1' (copy enclosed).Thus for this grade of coal the Corporation is entitled to receive facilitation fees at 20% of the sale price of NCL or the pit head price as above."

21. M.P. Power Management Company Ltd. (Respondent No. 1) was asked to confirm whether the scheduled date of commissioning of the Nigrie project has been extended to 31st July' 2014.

    In response, Respondent No.1 submitted the following:
    "It is humbly submitted that the COD of Unit-1 was extended on 31st July, 2014 on the request of the Generator under Clause 4.16 of the PPA. Further, the Generator again stated its inability to commission the Unit on 31st July, 2014 and requested for extending the COD of Unit-1 for one more month. Thereupon, the COD of Unit-1 of Nigrie Project was extended to 31st August, 2014."

22. As per the relevant provision in PPA, the delivery point is the ex-bus the power station and it is the procurer's obligation to establish at its cost or ensure availability of necessary evacuation infrastructure beyond the delivery point through CTU /STU/any other agency. Therefore, the parties were asked to explain as to why the transmission cost be considered as the part of generation tariff of the power plant in the subject petition.

    In response to the above, Respondent No. 1 submitted the following:
    "It is humbly submitted that the Hon'ble Commission, in the Provisional Tariff Order dated 12.12.2012 for Petition No. 40/2012, have observed that such

dedicated transmission line would be a part of the generation system, if it is erected by the Generating Company and that the generation tariff would then have to be decided after taking into account the costs incurred for the construction of such dedicated transmission lines. Although the PPA provides for electricity ex-bus bar to MPPMCL, but in this case, the Petitioner have erected the transmission line from their bus bar to CTU/STU substation. It has further been observed that, in this particular case, since the Petitioner is not a transmission licensee, transmission tariff cannot be decided separately for the transmission line erected by the Petitioner. Therefore, it is humbly submitted that the cost of 400 kV transmission system constructed by the Petitioner may be included in the project cost after suitable prudence check."

23. M.P. Power Management Company Ltd. (Respondent No. 1) filed its comments to the rejoinder earlier filed by the petitioner on 01.07.2014.

COMMISSION'S ANALYSIS:

Capital Cost as on COD of Unit No. 1:

24. Regarding capital cost, Regulation 17 of MPERC (Terms and Conditions for determination of Generation tariff) Regulations, 2012 provides that,

"Capital cost for a Project shall include:

(a) the Expenditure Incurred or Projected to be incurred on original scope of work, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan - (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed, - up to the Date of Commercial operation of the Project, as admitted by the Commission, after prudent check shall form the basis for determination of Tariff.

(b) capitalized initial spares subject to the ceiling norms as specified below:

(i) *Coal-based/lignite-fired thermal generating stations - 2.5% of original Project Cost.*

(ii) *Hydro generating stations - 1.5% of original Project Cost.*

Provided that where the benchmark norms for initial spares have been published as part of the benchmark norms for capital cost under first proviso to 17.2, such norms shall apply to the exclusion of the norms specified herein.

(c) *additional capital expenditure determined under Regulation 20.*

Subject to prudent check, the capital cost admitted by the Commission shall form the basis for determination of Tariff:

Provided that, prudent check of capital cost may be carried out based on the benchmark norms specified by the Central Commission from time to time:

Provided further that in cases where benchmark norms have not been specified by the Central Commission, prudent check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of Tariff :

---------------------------------------“

25. The petitioner submitted that the investment approval of the project was accorded by its Board on 15.10.2009 at initial cost of ₹ 8100 crore including IDC and Financing Charges. The petitioner mentioned that the initial cost of the Project of ₹ 8100 Crores was estimated as per the detailed project report prepared for the project. Based on the estimated project cost, the Board has approved the estimated project cost of ₹ 8100 Crores with debt to the extent of ₹ 5670 Crores and balance ₹2430 Crores by way of Equity. The petitioner filed the copy of Board Resolution dated 15th October, 2009.

26. With regard to the original project cost of the project, clause 2 of the second amendment to memorandum of understanding dated 27th March, 2008 stated that the installed capacity of the project is enhanced from 1000 MW to 1320

MW, with the proposed investment of approximately ₹ 6000 Crores,. Clause 8.2 of the extract of Board resolution dated 15th October, 2009 indicated that the project cost of the power project was originally estimated to ₹6000 Crores. The Board's resolution further stated that "The Board approved the revised cost of ₹8100 Crores to be financed by debt – equity ratio of 70/30."

Vide Commission's letter dated 20th February, 2014, the petitioner was asked to file the break-up of original project cost of ₹ 6000 Crores initially approved for the project along with the supporting documents.

27. By affidavit dated 19th April, 2014, the petitioner submitted that the project cost of ₹6,000 Crores, was an adhoc estimation for the purpose of intimation to the Board, which was not based on any quotation etc. The BTG order was subsequently placed on L&T and L&T –MHI Boilers Private Limited (consortium of Larsen & Toubro Ltd., India and Mitsubishi Heavy Industries Ltd., ("MHI"), Japan), for Turbine & Steam Generator respectively, for the two super critical thermal power units of 660 MW each. Simultaneously the Project DPR appraised the initial Project Cost to be ₹8,035 Crores. Pursuant to placing the BTG order on 12.08.2009, ICICI Bank, lead lender, estimated the project cost at ₹8,100 Crores., with slight variations, as compared with the DPR, of 4.63 Crores in IDC, 12.83 Crores in Margin Money and 47.08 Cr in Contingency component of the Project Cost totaling to ₹65 Crores, making the overall Project Cost ₹8,100 Crores The petitioner further stated that based on such estimation, the financial tie-up and project report were prepared on the cost of ₹8,100 Crores

28. Subsequently, the petitioner submitted that the initial estimated project cost has been revised to ₹10,450 Crores, based on the recent review carried out by ICICI Bank (Lead Bank), representing an escalation of ₹2350 Crores. The Board approved the revised project cost of the Nigrie Power Project of ₹10,450 Crores with the funding of Debt to Equity in ratio of 70 : 30 i.e. from ₹7315 Crores by way of debt and ₹3135 Crores through Equity/internal accruals. The Board has also approved the additional loan of ₹1645 Crores. The petitioner also filed the copy of its Board's Resolution dated 12th August, 2013 for approval of revised project cost.

29. The component wise break-up of the project cost originally estimated in the Detailed Project Report vis-a-vis revised capital cost (envisaged by ICICI Bank) as filed by the petitioner is given below:

(₹ in Crores)

Particulars	Original	Revised	Increase
Land	29	35	06
BTG (including Taxes & Duties)	4511	5209	698
BOP (including Taxes & Duties)	1250	1241	(09)
Civil Works (including Taxes)	660	1170	510
Barrage (including Land and Taxes)	06	189	183
Transmission line	250	374	124
Railway Siding	128	128	-
IDC/ Financing cost	796	1399	603
Margin money	94	178	84
Contingency	132	177	45
Establishment charges	244	350	106
Total	**8100**	**10450**	**2350**

30. On perusal of the aforesaid original vis-a-vis revised capital cost of the project filed by the petitioner, the Commission observed that an increase of ₹2350 Crores was shown in components like Margin money, Contingency and Establishment Charges. Vide letter dated 20th February, 2014, the petitioner was asked to clarify the following in light of the MPERC (Terms and Conditions for determination of Generation tariff) Regulations, 2012:

a. The cost of various items under margin money is already claimed under working capital. Therefore, the claim of separate margin money in the capital cost needs to be explained.

b. The costs of items under contingency have already been included in different major components of the project cost.

c. The establishment charges which were originally estimated to ₹ 244 Crores have now been re-estimated to ₹350 Crores in the revised project cost.

The break-up of contingency charges, establishment charges and the requirement of all such charges over and above IDC / financing charges and the pre-commissioning expenses was also sought from the petitioner.

31. By affidavit dated 19th April, 2014, the petitioner submitted the following:

a. *The Margin Money in the revised estimate amounts to ₹ 178 Crores. This cost has been inadvertently included in the TPS forms as part of the Project Cost. The corrected TPS 5 B and other associated forms are being enclosed as Annexure A-5 for your kind perusal.*

b. *The contingency of ₹177 Crores has been provided towards Civil Works, Plant and Machinery excluding BTG, Exchange Rate Fluctuation, IDC etc. Furthermore, we confirm that these have not been factored under any other cost of the Project. The Break up of Contingency expenses are:*

Expenses	***Remarks-Subheads***	***Amount (₹ In Crores)***
Contingency	*For Civil Work*	*71*
	For Plant And Machinery except BTG	*106*
	Subtotal	***177***

c. *The Establishment Charges of 350 Crores have been estimated towards the cost incurred/to be incurred in startup fuel expenses, construction power, insurance and other additional Overheads etc. The Breakup of the Establishment Expenses are:*

Expenses	***Remarks-Subheads***	***Amount (₹ In Crores)***
Establishment	*Technical Consultancy*	*30*
	Salary	*42*
	Construction Power Charges	*34*
	Site Development	*13*
	Administrative and Miscellaneous Charges	*131*
	Start up Fuel Expenses	*100*
	Subtotal	***350***

32. In view of the above, it is observed that the petitioner has submitted that the amount of ₹178 Crores has been inadvertently included in capital cost now excluded from the capital cost. Therefore, the revised capital cost approved by BOD has come down to ₹10,272 Crores

33. With regard to the cost overrun of the project, the petitioner submitted in para 13 of the petition that the reasons for increase in cost of project are explained in details in Information Memorandum of ICICI Bank**.** The petitioner mentioned that the cost overrun is proposed to be funded in the debt-equity ratio of 70:30, leading to additional debt requirement of ₹1645 Crores and capital contribution of ₹705 Crores by JPVL. The main reasons of cost overrun submitted by the petitioner are as given below:

a. INR price escalation in context for supply of Turbine Generator and Boilers: ₹255 Crores.

b. Foreign Currency Variation under SG Contract and STG Contract: ₹222 Crores

c. The cost of land has increased by about ₹6.38 Crores from initial estimated cost of ₹28.8 Crores (0.060 Crores per ha) to ₹35.18 Crores (₹0.077 Crores per ha). Such increase in cost of land is mainly attributable to increased compensation awarded/ paid for land acquisition and additional land requirement of 3.5 hectare.

d. Civil Works: ₹455 Crores: Additional cost is on account of the following:
   - Variance in soil conditions at site from the assumptions.
   - Total of 388 nos. of flats for 80% of the technical and non-technical personnel, along with related infrastructure;
   - Ash dyke having a height of 20 meters;
   - Effluent treatment plant; and
   - Reservoir with storage capacity increased to 60 days' consumptive requirement (due to the additional allocation of water to the upstream power plants).

e. Construction of Barrage: ₹183 Crores due to construction of a gated barrage to ensure the availability of water during the lean season.

f. Transmission Line: ₹124 Crores : The length of the transmission line has increased from 140 km to 161 km. Further, approximately 11 km lies in forest land. Hence, the JPVL has to bear additional expense to the extent of ₹ 6.80 Crores for acquisition of alternate land and ₹12.97 Crores towards compensatory aforestation etc.

g. IDC & Financing Charges : ₹603 Crores on account of the following reasons:

- Increase in weighted average rate of interest for Rupee Term Loan
- Initial estimation of IDC was based on commercial operation of the project by October, 2013, as per the L1 schedule specified in the BTG contract. However, the current estimates are based on projected COD of March, 2014, for Unit-1 (as per PPA), as finalized at the time of financial closure;
- Impact of IDC on additional debt of ₹1645 Crores, proposed for part financing the cost overrun;
- Financing charges towards fees payable to various banks such as LC commission, bank charges, processing fees etc.

h. Margin Money for working capital: ₹84 Crores estimated to increase based on norms for working capital as per MPERC regulations, 2012.

i. Establishment Charges : ₹106 Crores due to increase in startup fuel expenses, price of diesel and construction power, insurance etc.
(The establishment charges include technical consultancy charges of ₹30 Crores, salary and manpower expenses of ₹42 Crores, construction power charges of ₹34 Crores, site development expenses of ₹13 Crores and administrative/miscellaneous charges of ₹131 Crores Further, start up fuel charges during the pre-commissioning/ synchronization period of 45 days have been considered at ₹100 Crores.)

j. Contingency : ₹45 Crores : primarily towards additional IDC and financing charges, exchange rate fluctuations, increase in taxes and duties etc.

34. Vide letter dated 20th February, 2014, the Commission sought justification on several issues relating to cost overrun of the project and supporting documents for justification of cost overrun of the project. By affidavit dated 17th April, 2014 the petitioner filed its response on each issue raised by the Commission and the same has been discussed in **para 10** of this order**.**

35. The Commission has observed that the figures filed in the petition are provisional and based on the current estimate of the project. Therefore, the detailed scrutiny of cost overrun shall be carried out on availability of the audited accounts while determination of final tariff of this power project.

36. By affidavit dated 30th August, 2014, the petitioner filed the CA certificate dated 11.08.2014 certifying the actual capital expenditure of ₹9944.89 Crores for both units as on 31st July' 2014. The cost break up of revised project cost and actual expenditure as on 31st July, 2014 certified by the CA is given below:

Amount in ₹ Crores

Particulars	**Revised Estimated expenditure of the project**	**Actual expenditure as on 31/07/2014 certified by the CA**
Land	35	35
BTG (including Taxes & Duties)	5209	4695
BOP (including Taxes & Duties)	1241	1094
Civil Works (including Taxes)	1170	1160
Barrage (including Land and Taxes)	189	156
Transmission line	374	385
Railway Siding	128	96
IDC/ Financing cost	1399	1871
Margin money	178	-
Contingency	177	-
Establishment charges	350	474
Total	**10450**	**9945**

37. The petitioner was asked to file the Unit wise break-up of the above expenditure certified by the Auditor. The petitioner filed the unit wise apportionment of the total expenditure certified by CA as per provisions under regulation 8.2 and 8.3 of MPERC (Terms and Conditions for determination of Generation tariff) Regulations, 2012. The details of the unit wise break–up of the above certified capital expenditure submitted by the petitioner is as given below:

Amount in ₹ Crores

Particulars	**Actual expenditure as on 31/07/2014 certified by the CA**		
	Unit 1	**Unit 2**	**Total**
Land	17.50	17.50	35
BTG (including Taxes & Duties)	2347.30	2347.30	4694.60
BOP (including Taxes & Duties)	547.03	547.03	1094.07
Civil Works (including Taxes)	580.00	580.00	1160.00
Barrage (including Land and Taxes)	77.88	77.88	155.75
Transmission line	182.41	182.41	364.81
Railway Siding	47.95	47.95	95.90

IDC/ Financing cost	935.55	935.55	1871.09
Margin money	-	-	-
Contingency	-	-	-
Establishment charges	300.97	172.74	473.71
Total	**5036.55**	**4908.32**	**9944.87**

38. The petitioner also filed the unit wise breakup of establishment charges of ₹473.71 Crores considered under aforesaid CA's certified capital expenditure as given below:

Heads of under Establishment expenses	Expenses under Unit 1 ₹ Crores	Expenses under Unit 2 ₹ Crores	Total ₹ Crores
Administrative Expenses and other overheads	146.50	146.50	293
Startup Fuel Cost	128.23	-	128.23
Consultancy Expenditure	17.77	17.77	35.53
Office Equipments and other Assets	8.47	8.47	16.94
Subtotal	**300.97**	**172.74**	**473.71**

39. In view of the above cost break up, the Commission observed that the expenditure on startup fuel for Unit No. 1 is for generation of infirm power prior to COD of the Unit No. 1. However, the petitioner has not filed the details regarding generation of infirm power and net revenue earned from sale of infirm power. Therefore, the expenditure on startup fuel is not considered in this provisional order and shall be considered while processing the final tariff petition on scrutiny of the complete details of infirm power in light of the provisions under Regulations, 2012.

40. The Commission has observed that the IDC and financing charges were approved to ₹ 1399 Crores have now increased to ₹1871 Crores as on 31st July, 2014. The COD of Unit No. 2 is yet to be achieved.

41. The Commission shall take its view on IDC on examination of the actual phasing of expenditure and normative debt equity ratio during construction period of the project. All the details filed by the petitioner are provisional / estimated and have not attained finality. Therefore, the detailed scrutiny of IDC and establishment charges shall be carried out while determining the final tariff order of this.

42. In view of the above status, the Commission has provisionally considered the capital cost of ₹**4908.32** Crores for Unit No. 1 as on 31st July, 2014 as certified by the CA after deducting the expenditure of ₹128.23 Crores on startup fuel. The details the capital cost based on the CA certificate considered in this order is as given below:

Capital Cost as on COD of Unit No. 1:

Sr. No.	**Particular**	**Amount in ₹ Crores**
1	Opening Gross Fixed Assets as per CA Certificate	5036.55
2	Less- expenditure on startup fuel	128.23
3	**Opening Gross Block**	**4908.32**
4	Additions	0.00
5	Closing Gross Block	4908.32

43. With regard to the Scheduled Commercial Operation Date of the project, clause 4.1.5 of the Power Purchase Agreement dated 5th January, 2011 stated that;

"The Company shall achieve Commercial Operation Date for the first Unit by ***March, 2014*** *and subsequent Unit of the Power Station within six Months thereafter."*

44. The petitioner informed that, vide letter dated 27th May, 2014 M.P. Power Management Company Limited extended the scheduled COD of the Unit No. 1 of the project up to 31st July, 2014. Vide letter dated 4th August, 2014, MPPMCL further extended the scheduled COD of the Unit No. 1 of the project up to 31st August, 2014.

- Scheduled COD of the Unit 1 as per PPA - 31st March, 2014,
- Actual COD of Unit No. 1 - 3rd Sept, 2014,
- Time overrun from Sch. COD in PPA - 5-months
- Subsequently, MPPMCL (the procurer in PPA) has extended COD up to **31st August, 2014.**

45. Vide letter dated 20th February, 2014, the petitioner was asked to file justification for cost and time overrun in the project along with its impact on the interest and finance charges be submitted. If the time and cost overrun was beyond the control of the generating company, the details of responsible

contractor/ vendor (s) and the liquidated damages (LD) to be recovered against different packages due to time over-run be also submitted.

46. By affidavit dated 19th April, 2014, the petitioner submitted that the impact of cost and time overrun if any, on the Interest and Finance Charges can be ascertained only after COD of both the Units. The petitioner mentioned that the details shall be submitted thereafter. The issues related to charging of LD on different packages would also be arrived at only after COD of both the units.

47. In view of the above, the Commission has observed that the details available at this stage are provisional. Therefore, the detailed scrutiny of time overrun and cost overrun if any, shall be done while determining the final tariff.

Infirm Power:

48. With regard to sale of infirm power, Regulation 19 of MPERC (Terms and Conditions for determination of Generation tariff) Regulations, 2012 provides as under:

"Infirm Power shall be accounted as Unscheduled Interchange (UI) and paid for from the regional / State UI pool account at the applicable frequency-linked UI rate:

> *Provided that any revenue earned by the Generating Company from sale of Infirm Power after accounting for the fuel expenses shall be applied for reduction in capital cost."*

49. The Unit No. 1 of Nigrie Super Critical Thermal Power Project was synchronized on 07.05.2014 and achieved COD on 3rd September, 2014. However, the details of infirm power supplied to grid and revenue earned from sale of infirm power along with actual fuel expenses are not made available at this stage. Therefore, as submitted by the petitioner, the infirm power shall be considered as per Regulation 19 of MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2012 in final tariff order.

Debt – Equity Ratio for Funding of Project Cost:

50. Regarding Debt – Equity ratio and funding of the project, Regulation 21 of MPERC (Terms and Conditions for determination of Generation tariff) Regulations, 2012 provides that;

"In case of the generating station declared under commercial operation prior to 1.4.2013, debt-equity ratio allowed by the Commission for determination of Tariff for the period ending 31.3.2013 shall be considered. For the purpose of determination of Tariff of new generating station Commissioned or capacity expanded on or after 01.04.2013, debt-equity ratio as on the Date of Commercial operation shall be 70:30. The debt-equity amount arrived in accordance with this clause shall be used for calculation of interest on loan, return on equity and foreign exchange rate variation.

Where equity actually employed is in excess of 30%, the amount of equity for the purpose of Tariff shall be limited to 30% and the balance amount shall be considered as loan. The interest rate applicable on the equity in excess of 30% treated as loan has been specified in Regulation 23. The normative repayment shall also be considered on the equity in excess of 30% treated as loan. Where actual equity employed is less than 30%, the actual equity shall be considered."

51. The petitioner submitted the following:

(i) The revised estimated project cost of ₹10,450 Crores is being funded by debt of ₹ 7315 Crores and equity of ₹3135 Crores in the ratio of 70:30.

(ii) Debt is being provided to JPVL by a consortium of banks with ICICI Bank as the Lead Bank.

(ii) The Debt is being arranged through both Rupee Term Loan for ₹4821.10 Cr through the consortium of Indian Banks as aforementioned and through External Commercial Borrowing arranged in Japanese Yen for ₹1530 Cr, from ICICI Bank Singapore Branch.

(iii) The additional Loan of ₹1645 Crores is being arranged from the aforementioned consortium of lenders (Indian Banks Only) The present Weighted Average interest rate on the debt of Rupees Term Loan is

13.82% and the ECB in Japanese Yen is at 4%. The additional Loan is being arranged at the rate of 13.75% per annum.

(iv) The details of the banks and amount sanctioned by each lender are informed as given below:

Amount in ₹ Crores

Sr. No.	Banks	Sanction Amount
1	IDFC : RUPEE TERM LOAN	300.00
2	ICICI BANK LTD - RUPEE TERM LOAN	31.10
3	SYNDICATE BANK - LOAN	200.00
4	CORPORATION BANK - LOAN	200.00
5	BANK OF BARODA - RUPEE TERMLOAN	200.00
6	PNB - RUPEE TERM LOAN	600.00
7	STATE BANK OF BIKANER & JAIPUR - LOAN	150.00
8	STATE BANK OF PATIALA - LOAN	200.00
9	ORIENTAL BANK OF COMMERCE	200.00
10	STATE BANK OF HYDERABAD - LOAN	200.00
11	INDIAN OVERSEAS BANK - LOAN	140.00
12	CENTRAL BANK OF INDIA - LOAN	500.00
13	BANK OF MAHARASHTRA - LOAN	100.00
14	UCO BANK - RUPEE TERM LOAN	350.00
15	CANARA BANK - RUPEE TERM LOAN	200.00
16	UNITED BANK OF INDIA - LOAN ACCOUNT	500.00
17	IDBI BANK LTD. - RUPEE LOAN	500.00
18	LIC - RUPEE TERM LOAN	250.00
19	ECB ICICI JPY (B)	848.90
	Total (A+B)	**5,670.00**
20	Additional Loan + ICICI	500.00
21	Additional Bank	1,145.00
	Grand total	**7,315.00**

52. As per the Auditor's certificate dated 11th August, 2014 and break-up of capital expenditure filed by the petitioner, the actual capital expenditure as on 31st July, 2014 for Unit No.1&2 is **₹9944.89 Crores.** The Auditor has mentioned that the aforesaid capital cost has been funded through the loan and equity of **₹6843.08 Crores** and **₹3101.82 Crores** respectively with debt – equity ratio of **68.8:31.2.**The balance fund of ₹144.50.crore as on 31st July'2014 is shown in the Auditor's certificate.

The breakup of the aforesaid expenditure has indicated an expenditure of ₹5036.55 Crores (including ₹128.23 crores of start up fuel) on Unit No. 1., The expenditure of ₹**4908.32 Crores which** pertains to unit No. 1 is considered after deducting the startup fuel amount of ₹128.23 Crores in this order. The expenses towards start up fuel shall be dealt with in accordance with the provisions under MPERC (Terms and Conditions for determination of generation tariff), Regulations' 2012 as and when the complete details in this regard shall be filed by the petitioner alongwith the petition for determination of final tariff in the subject matter.

53. With regard to the funding of expenditure pertaining to Unit No. 1, the Commission has considered the same debt – equity ratio ((68.81 : 31.19) as that of the total actual capital expenditure funded as on COD of Unit No. 1.

54. Based on the above, the funding of the Nigrie TPP Unit No. 1 is considered in this order as given below:

Funding as on COD of Unit No. 1:

Sr.No.	Particular	Amount in ₹ Crores
1	Gross Fixed Assets	4908.32
2	Opening Loan	3377.41
3	Opening Equity	1530.91
4	Normative Equity	1472.50
5	Excess Equity	58.41
6	Debt : equity	(68.81 : 31.19)

Annual Capacity (fixed) Charges:

55. The tariff for supply of electricity from a thermal power generating station shall comprise of capacity charge and energy charge to be derived in the manner specified in Regulations 40 and 41 of "Madhya Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations, 2012. {RG-26 (II) of 2012}." The annual Capacity (fixed) Charges consist of:

(a) Return on Equity;

(b) Interest and Financing Charges on Loan Capital;

(c) Depreciation;

(d) Operation and Maintenance Expenses;
(e) Interest Charges on Working Capital;
(f) Cost of Secondary Fuel Oil;
(g) Lease/Hire Purchase Charges;
(h) Special allowance in lieu of R&M or separate compensation allowance, wherever applicable:

a. Return on Equity:

56. Regulation 22 of the MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2012 provides as under;

"Return on equity shall be computed in rupee terms, on the paid up equity capital determined in accordance with Regulation 21.

Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per Regulation 22.3 of this Regulation:

Provided that in case of Projects commissioned on or after 1st April, 2013, an additional return of 0.5% shall be allowed if such Projects are completed within the timeline specified in ***Appendix-I*** *:*

Provided further that the additional return of 0.5% shall not be admissible if the Project is not completed within the timeline specified above for reasons whatsoever.

The rate of return on equity shall be computed by grossing up the base rate with the normal tax rate for the Year 2012-13 applicable to the Generating Company:

Provided that return on equity with respect to the actual tax rate applicable to the Generating Company, in line with the provisions of the relevant Finance Acts of the respective Year during the Tariff period shall be trued up separately.

Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)
Where t is the applicable tax rate in accordance with Regulation 22.3 of this Regulation. ------"

57. The opening equity of ₹**1530.91 Crores** as on 31st July, 2014 for Unit No. 1 as per Auditor's certificate dated 11th August, 2014 (with respect to actual capital expenditure) is considered. The equity amount actually incurred is more than the normative equity as specified in the Regulations. Therefore, the normative equity of ₹**1472.50 Crores** is considered for return on equity purpose. The balance equity amount of ₹**58.41 Crores** which is over and above the normative equity is considered as normative loan in this order and the weighted average rate of interest shall be applied on this amount as per Regulations, 2012.

58. The petitioner claimed the Base rate of Return on equity @ 16.00% including incentive of 0.5% for completion of the project within time limit. Vide letter dated 20th February, 2014 the petitioner was asked to explain the basis of claiming additional ROE along with all relevant documents in light of provisions under MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2012.

59. By affidavit dated 20th April, 2014, the petitioner submitted that the additional 0.5% ROE, over and above 15.5% as envisaged under regulations, as the approval of the Project Cost of ₹8,100 Crores. by the Board on 15-10-2009 was conditional, i.e. subject to detailed review and negotiation by the Finance Committee. The petitioner further submitted that the final approval of the Finance Committee was received on 30-03-2010. Since the 52 month period from the date of final approval is 30.07.2014, falls within the anticipated COD of the project, the additional 0.5% ROE has been calculated as per para 22.2 of the MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2012 . The petitioner filed the Copy of Resolution passed by the Finance Committee of Board of Directors in their meeting held on 30th March, 2010 in this project.

60. The unit no. 1 has achieved COD on 3rd September' 2014 which is beyond the time line specified in the Regulations, 2012. Therefore, the petitioner is

not eligible for additional return as per the provision under Regulations and the claim of the petitioner for additional RoE is not considered in light of the provisions under Regulations, 2012.

61. The petitioner filed the rate of return on equity grossing up with the MAT. Vide letter dated 20th February, 2014, the petitioner was asked to file the reason for considering MAT on Return on Equity with supporting documents

62. By affidavit dated 19th April, 2014, the petitioner submitted that the Nigrie Project is a part of petitioner's company and it pays MAT. Accordingly, MAT rate has been used to gross up with the base rate for calculating the ROE of the project.

63. In view of the above, the Commission has considered the grossing up the base rate of return with MAT in this order. The rate of return after grossing up with the MAT is worked out is **19.61**% and same is applied for calculation of return on equity in this order. Based on the above, the Return on Equity is determined as given below:

Return on equity:

Sr. No.	Particular	Unit	FY14-15	FY15-16
1	Opening Normative Equity	₹ Crores	1472.50	1472.50
2	Equity addition during the year	₹ Crores	0.00	0.00
3	Closing Normative equity	₹Crores	1472.50	1472.50
4	Average equity	₹ Crores	1472.50	1472.50
5	Base rate of Return on Equity (inc. add. Equity)	%	15.50	15.50
6	Tax rate considered (MAT)	%	20.96	20.96
7	Rate of return on equity	%	19.61	19.61
8	**Return on equity**	**₹Crores**	**288.76**	**288.76**

b. Interest and finance Charges:

64. Regulation 23 of the MPERC (Terms and Conditions for determination of Generation Tariff)Regulations, 2012 provides as under;

"*The loans arrived at in the manner indicated in Regulation 21 shall be considered as gross normative loan for calculation of interest on loan.*

The normative loan outstanding as on 1.4.2013 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2013 from the gross normative loan.

The repayment for the Year of the Tariff period 2013-16 shall be deemed to be equal to the depreciation allowed for that Year.

Notwithstanding any moratorium period availed by the Generating Company, the repayment of loan shall be considered from the first Year of commercial operation of the Project and shall be equal to the annual depreciation allowed.

The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each Year applicable to the Project:

Provided that if there is no actual loan for a particular Year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:
Provided further that if the generating station does not have actual loan, then the weighted average rate of interest of the Generating Company as a whole shall be considered.

The interest on loan shall be calculated on the normative average loan of the Year by applying the weighted average rate of interest.

The Generating Company shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the Beneficiaries and the net savings shall be shared between the Beneficiaries and the Generating Company, in the ratio of 2:1. ---------"

65. The loan amount of ₹**3377.41 Crores** for Unit No. 1 actually incurred as on 31st July, 2014 as certified by the Auditor is considered as opening loan balance as on COD. The excess equity of ₹**58.41 Crores** as on 31st July, 2014 (over and above the normative equity) is also considered as normative

loan. Therefore, the opening loan balance as on CoD of Unit No. 1 becomes ₹**3435.82 Crores** and this is considered in this order.

66. With regard to the Weighted average rate of interest on loan, vide letter dated 20th February, 2014, the petitioner was asked to file the supporting documents from each lender of the consortium of banks for applicable weighted average rate of interest claimed in the petition.

67. By affidavit dated 19th April, 2014, the petitioner submitted that the weighted average rate of interest has been calculated on the actual disbursement and rate of interest as on date of disbursement. The petitioner further submitted that as per the common loan agreement, the interest rate decided on each disbursement date separately by each lender.

68. The detailed calculations to work out the year wise weighted average rate of interest for each lender along with other details has been filed by the petitioner.

69. Accordingly, the weighted average rate of interest on loan @ 12.64 % for FY2014-15 worked out in TPS-13 and indicated in the documents filed by the petitioner is provisionally considered for calculation of interest amount for FY2014-15 and FY2015-16 in this order. Repayment equivalent to depreciation determined for the year is considered as per the provision under Regulations, 2012. Based on the above, the interest and finance charges on loan is determined as given below:

Interest charges on loan:

Sr. No.	Particular	Unit	FY14-15	FY15-16
1	Opening Loan Balance	₹ Crores	3377.41	3197.60
2	Excess equity	₹ Crores	58.41	0.00
3	Total opening loan including Excess Equity	₹ Crores	3435.82	3197.60
4	Loan addition during the year	₹ Crores	0.00	0.00
5	Repayment during the year considered	₹ Crores	238.22	238.22
6	Closing Loan Balance	₹Crores	3197.60	2959.38
7	Average Loan for the year	₹ Crores	3316.71	3078.49
8	Weighted average rate of interest	%	12.64	12.64
9	**Interest amount**	**₹ Crores**	**419.23**	**389.12**

c. Depreciation:

70. Regulation 24 of the MPERC (Terms and Conditions for determination of Generation Tariff)Regulations, 2012 provides as under;

"For the purpose of Tariff, depreciation shall be computed in the following manner:

(a) The value base for the purpose of depreciation shall be the capital cost of the assets as admitted by the Commission

(b) The approved/accepted cost shall include foreign currency funding converted to equivalent rupee at the exchange rate prevalent on the date of foreign currency actually availed.

(c) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that in case of Hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site:

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under Long-term power purchase agreement at regulated Tariff.

(d) Land other than land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(e) Depreciation shall be calculated annually based on 'Straight Line Method' and at rates specified in Appendix-II to these Regulations for the assets of the generating station:

Provided that, the remaining depreciable value as on 31st March of the Year closing after a period of 12 Years from the Date of Commercial operation shall be spread over the balance Useful life of the assets.

(f) *In case of the existing Projects, the balance depreciable value as on 1.4.2013 shall be worked out by deducting the cumulative depreciation including Advance Against Depreciation if any as admitted by the Commission upto 31.3.2013 from the gross depreciable value of the assets. The rate of Depreciation shall be continued to be charged at the rate specified in Appendix-II till cumulative depreciation reaches 70%. Thereafter the remaining depreciable value shall be spread over the remaining life of the asset such that the maximum depreciation does not exceed 90%.*

(g) *Depreciation shall be chargeable from the first Year of commercial operation. In case of commercial operation of the asset for part of the Year, depreciation shall be charged on pro rata basis."*

71. Regarding Depreciation, the opening Gross Fixed Assets of ₹**4908.32 Crores** as on 31st July, 2014 certified by the Auditor's based on actual expenditure is considered as opening GFA as on CoD of Unit No. 1. The petitioner has not filed additional capitalization in the petition. Therefore, no additional capitalization is considered up to 31st March, 2016. For the purpose of depreciation, the petitioner apportioned the soft cost of the project in the ratio of hard cost components of the project.

72. The weighted average rate of depreciation is worked out by the petitioner @ 4.85 % based on the rate of depreciation for different capital cost components as per Regulations, 2012 and the detailed break-up of cost components filed in form TPS 11 of the petition. Based on the above, the depreciation on assets is determined as given below:

Depreciation:

Sr. No.	Particular	Unit	FY14-15	FY15-16
1	Opening Gross Block	₹ Crores	4908.32	4908.32
2	Gross Block addition	₹ Crores	0.00	0.00
3	Closing Gross Block	₹Crores	4908.32	4908.32
4	Average Gross Block	₹Crores	4908.32	4908.32
5	Weighted average rate of dep.	%	4.853	4.853
6	**Depreciation amount**	**₹ Crores**	**238.22**	**238.22**
7	Accumulated depreciation at the end of the year	₹Crores	137.06	373.97

d. Operation & Maintenance Expenses:

73. Operation & Maintenance expenses are considered as per norms specified in Regulation 36.1 of MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2012. The norms for O&M as per regulations, 2012 for FY2014-15 and FY2015-16 are ₹13.98 Lakhs/MW and ₹15.09 Lakhs/MW. Based on the above, the Operation and Maintenance Expenses are determined as given below:

Operation & Maintenance expenses:

Sr. No.	Particular	Unit	FY14-15	FY15-16
1	Installed Capacity	MW	660	660
2	Per MW O&M expenses	₹ L/MW	13.98	15.09
3	Total O&M expenses	₹ Crores	**92.27**	**99.59**

e. Cost of Secondary fuel oil:

74. Regulation 38 of the MPERC (Terms and Conditions for determination of Generation Tariff)Regulations, 2012 provides as under;

Expenses on Secondary fuel oil in Rupees shall be computed corresponding to normative Specific Fuel Oil Consumption (SFC) specified in Regulation 35, in accordance with the following formula:

= SFC x LPSFi x NAPAF x 24 x NDY x IC x 10

Where,

SFC - Normative Specific Fuel Oil Consumption in ml/kWh

LPSFi - Weighted Average Landed Price of Secondary Fuel in ₹/ml considered initially

NAPAF - Normative Annual Plant Availability Factor in percentage

NDY - Number of Days in a Year

IC - Installed Capacity in MW

75. With regard to landed cost of oil, Regulation 38.2 of the MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2012 further provides as under;

"Initially, the landed cost incurred by the Generating Company on secondary fuel oil shall be taken based on actuals of the weighted average price of the three preceding months and in the absence of landed costs for the three preceding months, latest procurement price for the generating station, before the start of the Year."

76. The petitioner filed the weighted average landed cost of secondary fuel oil in form F-4a of the petition is ₹69,814 /KL. Vide letter dated 20th February, 2014 the petitioner was asked to file the cost of secondary fuel oil as per provision under Regulations, 2012. The supporting documents like copy of Invoice for each type of oil in support of the cost claimed for secondary fuel oil and weighted average rate were also sought from the petitioner.

77. By affidavit dated 19th April, 2014, the petitioner filed the copy of latest sample invoices for oil purchased during trial run of the Unit No. 1. The Commission has observed that the total cost indicated in the invoices is excluding transportation charges. The petitioner further filed the details of transportation charges along with copy of invoices / bills for transportation charges of oil separately.

78. Based on the aforesaid details filed by the petitioner, the weighted average rate of secondary fuel oil is worked out as given below:

Landed cost of Secondary fuel oil:							
Type of Oil	**Quantity**	**Rate ₹/KL**	**Amount including CST in ₹**	**Transportation Cost in ₹**	**Total Amount in ₹**	**Rate of Fuel Oil in ₹/KL**	**Weighted Avg. Rate₹/KL**
LDO	*22.00*	*62531.45*	*1403206*	*110772.00*	*1513978*	*68817*	
LDO	18.00	61821.70	1135046	46964.00	1182010	65667	
LDO	21.00	61821.70	1324221	54458.00	1378679	65651	***66,798***
HFO	16.60	41923.05	812200	64879.50	877080	52836	
HFO	20.29	41923.05	992743	78412.36	1071155	52792	
HFO	14.74	41923.05	721195	58058.07	779253	52867	**52,828**
Weighted Average Rate of Secondary Fuel Oil							**60,394**

79. Based on the above, the cost of secondary fuel oil is determined as given below:

Secondary fuel oil expenses:

Sr. No.	Particular	Unit	FY14-15	FY15-16
1	Installed Capacity	MW	660	660
2	NAPAF	%	85.00	85.00
3	Gross Generation	MU's	4914.36	4914.36
4	Normative Sp. Oil consumption	ml/kWh	1.00	1.00
5	Quantity of Sec. fuel oil	KL	4914	4914
6	Rate of secondary fuel oil	₹/KL	60394	60394
7	Cost of secondary fuel oil	₹ Crores	**29.68**	**29.68**

80. The cost of secondary fuel oil arrived at as above shall be subject to fuel price adjustment at the end of each year of tariff period in terms of the proviso to Regulation 38.2 as per the following formula*:*

SFC x NAPAF x 24 x NDY x IC x 10 x (LPSFy – LPSFi)

Where,

LPSFy = *The weighted average landed price of secondary fuel oil for the year in ₹/ml*

f. Interest on Working Capital:

81. Regarding determination of working capital of thermal power project, regulation 37.1 of the MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2012 provides as under;

The Working Capital for Coal based generating stations shall cover:

(i) Cost of coal for 45 Days for pit-head generating stations and two months for non-pit-head generating stations, corresponding to the normative availability;

(ii) Cost of secondary fuel oil for two months corresponding to the normative availability:

Provided that in case of use of more than one secondary fuel oil, cost of fuel oil stock shall be provided for the main secondary fuel oil.

(iii) Maintenance spares @ 20% of the normative O&M expenses;

(iv) *Receivables equivalent to two months of capacity charges and energy charges for sale of electricity calculated on the Normative Annual Plant Availability Factor; and*

(v) *Operation and Maintenance expenses for one month.*

82. Regarding the cost of secondary fuel oil for calculating the working capital, the cost of main fuel oil (HSD) is taken by considering the cost per KL filed by the petitioner in its additional submission. The cost of two months main oil stock at normative availability is worked out as given below:

Sr. No.	Particular	Unit	FY14-15	FY15-16
1	Installed Capacity	MW	660	660
2	NAPAF	%	85.00	85.00
3	Two months stock of main fuel oil	KL	819.06	819.06
4	Rate of main secondary fuel oil	₹/KL	52828	52828
5	Cost of two months main fuel oil	₹ Crores	**4.33**	**4.33**

83. Based on the norms specified by the Commission, two months cost for coal stock is worked out for working capital on the basis of price and GCV of coal for three preceding months prior to COD of the unit as given below:

Sr. No.	Particular	Unit	FY14-15	FY15-16
1	Station Heat Rate	Kcal/kWh	2200	2200
2	Gross Calorific Value	Kcal/kg	4200	4200
3	Annual Coal Quantity	MT	2583153	2583153
4	Two months coal stock	MT	424628	424628
5	Rate of Coal for working capital	₹/MT	2094.03	2094.03
6	Amount of two months coal stock	₹Crores	90.15	90.15

84. Receivables for working capital have been worked out on the basis of the fixed and energy charges for two months (based on primary fuel only) on normative plant availability factor as given below:

Sr. No.	Particular	Unit	FY14-15	FY15-16
1	Variable Charges – two months	₹ Crores	90.15	90.15

2	Fixed Charges – two months	₹ Crores	186.97	183.14
3	Receivables – two months	₹ Crores	277.13	273.29

85. With regard to the rate of interest on working capital, Regulation 27.1 of MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2012 provides that:

> *"Rate of interest on working capital to be computed as provided subsequently in these Regulations shall be on normative basis and shall be equal to the State Bank of India's Base Rate as on 1st of April of that year plus 3.50%.-----"*

86. The rate of interest on working capital for FY2014-15 to FY2015-16 has been taken equal to the State Bank of India's Base Rate as on 1st April of that financial Year plus 3.5%. Base Rate of SBI, effective from 07/11/2013, is 10.00%. The same has been considered to remain effective as on COD of Unit No. 1. The interest rate for FY2014-15 has been considered as 13.50% (10.00+3.50). The same rate of interest has been considered for calculation of interest on working capital for the subsequent Years also. Based on the above, the interest on working capital is determined as given below:

Interest on working capital:

Sr. No.	Particular	Unit	FY14-15	FY15-16
1	Cost of coal for two months for non pit-head power station	₹ Crores	90.15	90.15
2	Cost of fuel oil for two months	₹Crores	4.33	4.33
3	O&M Charges for one month	₹Crores	7.69	8.30
4	Maintenance Spares 20% of the O&M charges	₹Crores	18.45	19.92
5	Receivables for two months	₹Crores	277.13	273.29
6	Total working capital	₹Crores	397.75	395.99
7	Applicable rate of interest	%	13.50	13.50
8	**Interest on working capital**	**₹ Crores**	**53.70**	**53.46**

Summary of Annual Capacity (fixed) Charges:

87. Normative Annual Plant Availability Factor for recovery of annual capacity charges is 85% as per Regulation 35.2 (A) of MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2012. The Annual Capacity (fixed) charges for FY 2014-15 have been pro-rated for 210 days. Considering the above, the annual capacity (fixed) charges of Jaypee Nigrie TPP Unit No. 1 which are provisionally determined for FY 2014-15 and FY 2015-16 in this order are as given below:

Annual capacity (fixed) charges of Unit No. 1:

Sr. No.	Particular	Unit	FY14-15	FY15-16
1	Return on equity	₹ Crores	288.76	288.76
2	Interest charges on loan	₹ Crores	419.23	389.12
3	Depreciation	₹Crores	238.22	238.22
4	Operation & Maintenance expenses	₹ Crores	92.27	99.59
5	Secondary fuel oil expenses	₹ Crores	29.68	29.68
6	Interest on working capital	₹ Crores	53.70	53.46
7	Annual capacity (fixed) charges	₹ Crores	**1121.86**	**1098.84**
8	Total 210 days in operation during FY2014-15	₹ Crores	645.45	1098.84
9	30 % of the above annual capacity charges	₹ Crores	193.63	329.65
10	**95% of the above AFC allowed to be recovered by the petitioner in this order**	**₹ Crores**	183.95	313.16

88. The above-mentioned Annual Capacity (fixed) charges as provisionally allowed in this order are on normative plant availability factor (NAPAF) of the thermal generating unit. The recovery of annual capacity (fixed) charges shall be made by the petitioner in accordance with Regulations 40.2 and 40.3 of MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2012.

Energy (Variable) Charges:

89. With regard to Energy Charges (Variable charges) of thermal power station, Regulation 41 of MPERC (Terms and Conditions for determination of Generation tariff) Regulations, 2012 provides that;

- *"The energy (variable) charges shall cover main fuel costs and shall be payable for the total energy scheduled to be supplied to such Beneficiary during the calendar month on ex-power plant basis, at the specified variable charge rate (with fuel price adjustment).*

- *Energy (variable) Charges in Rupees per kWh on ex-power plant basis shall be determined to three decimal places as per the following formula:*

  For coal fired stations

ECR = (GHR – SFC x CVSF) x LPPF x 100 **/** *{CVPF x (100 – AUX)}*

Where,

AUX= Normative Auxiliary Energy Consumption in percentage.

ECR = Energy Charge Rate, in Rupees per kWh sent out.

GHR = Gross Station Heat Rate, in kCal per kWh.

SFC = Specific Fuel Oil Consumption, in ml/kWh

CVSF = Calorific value of Secondary Fuel, in kCal/ml.

LPPF =Weighted average Landed price of Primary Fuel, in Rupees per kg, per liter or per standard cubic meter, as applicable, during the month.

CVPF = Gross Calorific Value of Primary Fuel as fired, in kCal per kg, per liter or per standard cubic meter. ------------

Variable charge for the month shall be worked out on the basis of ex-bus energy scheduled to be sent out from the generating station in accordance with the following formula:

Monthly Energy Charge (Rs) =
Variable Charge Rate in Rs/kWh X Scheduled Energy (ex-bus) for the month in kWh corresponding to Scheduled Generation."

a. Gross Station Heat Rate:

90. The petitioner filed the Gross Station Heat Rate considering Maximum Turbine Cycle Heat Rate and Minimum Boiler Efficiency at designed operating parameters. The Commission observed that the Gross Station Heat Rate as claimed by the petitioner for energy charges was not as per the provisions under MPERC (Terms and Conditions for determination of Generation Tariff), Regulations '2012. Vide letter dated 20th February, 2014, the petitioner was asked to file the "Guaranteed Design Heat Rate" based on the guaranteed parameters.

91. By affidavit dated 19th April, 2014, the petitioner submitted that the Designed Heat Rate as per design specifications of L&T (supplier) is 1854 Kcal/Kwh

(for Nominal Rating) whereas, the Guaranteed Boiler Efficiency has been mentioned as 89.78% (at nominal rating-660MW). Accordingly, the Gross Station Heat Rate of the Plant is 1854/89.78% = 2065.05 Kcal/kWh. This value when multiplied by 1.065 (as per regulation 35.2 B) gives the resultant GSHR of 2200 kCal/kwh. In its aforesaid additional submission, the petitioner revised its claim for GSHR and worked out energy charges at this SHR and other normative parameters specified in Regulations, 2012.

92. In view of the above, the Commission has considered 2200 Kcal/kWh as the Gross Station Heat Rate for Unit No. 1 of Nigrie Thermal Power Project as given below:

- Turbine Cycle Heat Rate: 1854 Kcal/kWh
- Guaranteed Boiler Efficiency: 89.78%
- Gross Station Heat Rate: 1854/89.78%=2065.05 Kcal/kWh
- SHR for Tariff purpose: 2065.05 x 1.065 = 2200 Kcal/kWh

b. Landed price of Coal:

93. In para 9 of the petition, the petitioner submitted that the annual coal requirement for the Power Project is estimated to be approx. 5.11 MTPA, calculated at 85% PLF. The Coal will be sourced from two dedicated coalmines at Amelia (North) and Dongri Tal II. Amelia (North) has been allocated to Madhya Pradesh Jaypee Minerals Ltd. (MPJML), a joint venture of JAL (49% holding) and Madhya Pradesh State Mining Corporation Ltd. (51% holding). Dongri Tal II has been allocated to Madhya Pradesh Jaypee Coal Ltd. (MPJCL), a joint venture of JAL (49% holding) and Madhya Pradesh State Mining Corporation Ltd. (51% holding). The expected GCV of coal is 4200 kcal/ kg for the Coal supply from Amelia and 4800 kcal/kg for the Coal supply from Dongri Tal II.

94. The petitioner further submitted that the coal supply agreement with MPSMCL (Madhya Pradesh State Mining Corporation Limited) has been executed on 17.12.2013 for supply of 2.5 MTPA coal from Amelia North coal block. The Coal Supply agreement for supply of 2.7 MTPA coal from Dongri Tal II coal block is expected shortly. The petitioner mentioned that the Amelia

(North) has commenced production in Dec-2013 and Dongri Tal (II) is expected to commence production by July-2014.

95. In response to the Commission's queries, by affidavit dated 19th April, 2014, the petitioner submitted the following:

(i) *The Fuel Supply agreement for Dongri Tal II has not been executed and the same is expected shortly.*

(ii) The effective life of Dongri Tal-II (Phase-I) Coal Mine is 17 years whereas, the effective life of PPA is 20 years from Project COD. It is expected that well before 17 years from COD, the Phase – II of Dongri Tal –II Coal Mine shall also be commissioned and the balance requirement of the Coal for the remaining life of PPA shall be met jointly by Amelia North and Dongri Tal-II (Phase -II).

(iii) The Phase II of Dongri Tal-II is situated in forest land for which the process for obtaining necessary clearances from concerned authorities has already been initiated.

(iv) In the interest of the Project, the Dongri Tal –II Coal Mine project has been divided in two phases taking into account the fact that Forest Clearance takes considerable time.

96. In its submission dated 22nd August, 2014, M.P. State Mining Corporation Ltd. has filed the break-up of the sale price of coal for ₹1883.43 per MT considering the pit-head cost of coal as per CIL's notification. MPSMCL mentioned that this break-up is certified by the cost accountant M/s. J.K. Kabra and Co. for FY2014-15 on 14th June' 2014. It has also submitted the break-up of provisional rate of coal ₹2557.08 per MT which was provisionally decided to dispatch coal to the petitioner.

Detailed breakup for sale price of coal duly certified by M/s. J.K. Kabra & Co. Cost Accountant as submitted by MPSMCL is as under:

S. No	**Cost Heads**	**(Amount in ₹per ton)**
1	Pithead Cost as per notification dated 27.05.2013	700.00
2	Crushing, Stacking & Transportation Charges from Pithead to Delivery Point	83.37

3	MDO Margin (10%)	78.34
4	**Production Cost to MPJML (Excl. Service Tax)**	**861.71**
5	Service Tax @ 12.36%	106.51
6	**Production Cost to MPJML (Incl. Service Tax)**	**968.22**
7	Production Cost (Excl. Service Tax)	861.71
8	JVC Expenses (salary, power, siding, etc)	28.53
9	JVC Interest	137.79
10	JVC Depreciation	45.48
11	JVC Margin @ 10%	107.35
12	**Basic Sale Price to MPSMCL (Excl. Service Tax)**	**1,180.85**
13	Service Tax @ 12.36%	145.95
14	**Basic Sale Price to MPSMCL (Incl. Service Tax)**	**1,326.80**
15	Cost to MPSMCL (Before Taxes)	1,180.85
16	Unutilized portion of cenvat recovered	47.25
17	Price of Coal	1,228.10
18	Facilitation Fees	140.00
19	**Basic Sale Price of Coal**	**1,368.10**
	Taxes and levies	
20	Royalty @ 14% on Basic Sale Price	191.53
21	Stowing Excise Duty @ 10/- PMT	10.00
22	MP Forest Transit fees	7.00
23	MPGATSVA @ 5% on basic value	68.41
24	**Assessable Value**	**1,645.04**
25	Excise Duty @ 6%	98.70
26	Clean Energy cess @ 50/- PMT	50.00
27	Selling Price for MPSMCL	1,793.74
28	VAT	89.69
29	**Total Sale Price of Coal (including VAT)**	**1,883.43**

97. The Commission has observed that the aforesaid sale price of coal for ₹1883.43 / MT is based on the pit head base price of ₹700 / MT as per CIL's notification dated 27th May, 2013 and certified by the Cost Accountant as per the certificate filed by M.P. State Mining Corporation Ltd. Based on the latest invoices/bills for railway freight filed by the petitioner, the average Railway freight/coal transportation cost of ₹ 210.60/MT is considered over and above the aforesaid sale price of coal to arrive at the landed cost of coal in this order. Therefore, the Landed cost of ₹ 2094.03 per MT of coal is considered in this order.

98. The petitioner's power project is non-pit head power project. Therefore, the transit and handling losses of 0.8 % as per Regulation 41.4 of the Regulations, 2012 are considered in this order.

c. Gross Calorific Value:

99. While claiming the Energy Charges, the petitioner considered the Gross Calorific Value of 4200 Kcal/kg for coal. By affidavit dated 19th April, 2014, the petitioner submitted that the Gross Calorific Value ("GCV") has been identified as blended GCV of the coal mix to be received from the Amelia Coal Mine and Dongri Tal-II Coal Mines, The petitioner also mentioned that the actual GCV on "As Fired Basis" shall be used for billing purposes, as provided in the Regulation, 2012.

100. Vide Commission's order dated 24th July, 2014, the petitioner was directed to file the GCV of coal as per the joint sampling report and procedure specified in the fuel supply agreement.

101. By affidavit dated 6th August, 2014, the petitioner filed the sample copies of joint coal analysis report of Amelia coal block for measured GCV of coal. On perusal of the same, it is observed that the average GCV of coal is approximately 4200 Kcal/kg which in line of the GCV of coal claimed by the petitioner. Therefore, the average GCV of 4200 Kcal/kg is considered in this order for determination of energy charges.

d. Operating Parameters:

102. While calculating the energy (variable) charges, the following norms of operation for 660 MW units and above have been considered as per MPERC (Terms and Conditions for determination of Generation), Regulations' 2012:

Target Availability	85%
Station Heat Rate	2200 Kcal/kWh
Aux. Energy Consumption	6%
Sp. Oil Consumption	1 ml/kWh
Transit Loss	0.80%

103. Based on the above, the Energy Charges ex-bus for unit No.1 of the petitioner's power plant are determined as given below:

Energy Charges (Coal cost) of Nigrie Project:

Sr. No.	Particular	Unit	FY14-15 to FY15-16
1	Capacity	MW	660
2	NAPAF	%	85.00
3	Gross Station Heat Rate	kCal/kWh	2200
4	Sp. Fuel Oil Consumption	ml/kWh	1.00
5	Aux. Energy Consumption	%	6.00
6	Transit Loss	%	0.80
7	Weighted average GCV of Oil	kCal/ltr.	10,000
8	Weighted average GCV of Coal	kCal/kg	4200
9	Weighted Average price of Coal	₹/MT	2094.03
10	Heat Contributed from HFO	kCal/kWh	10
11	Heat Contributed from Coal	kCal/kWh	2190
12	Specific Coal Consumption	kg/kWh	0.5214
13	Sp. Coal Consumption including Transit Loss	kg/kWh	0.5256
14	Rate of Energy Charge	Paise/kWh	1.101
15	**Rate of Energy Charge ex bus**	**₹/kWh**	**1.171**

104. The base rate of the energy charges shall however, be subject to month to month adjustment of fuel price and GCV of main fuel. The above energy charges have been calculated for the purpose of calculation of two months' billing, which is used for calculation of interest on working capital. However, the actual billing of energy charges shall be as per the formula and other provisions detailed in Regulation 41.2 of MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2012.

Application fee and the publication expenses

105. The petitioner is allowed to recover expenses towards filing of tariff petition and the expenses incurred on publication of notices directly from the beneficiaries, on *pro rata* basis as per MPERC (Terms and Conditions for determination of generation tariff) Regulations, 2012. In addition to the above, the petitioner is also entitled to recover other charges and taxes etc., levied by statutory authorities in accordance under MPERC (Terms and Conditions for determination of generation tariff) Regulations, 2012, as applicable.

106. The above tariff is provisionally determined for unit 1 and shall be effective from its CoD i.e. 3rd September, 2014 to 31st March, 2016 based on the Auditor's Certificate and other documents placed before the Commission during proceedings held in the matter. The provisional tariff so determined in this order shall be subject to adjustment as per Regulation 15.3 of the MPERC (Terms and Conditions for determination of generation tariff) Regulations, 2012 on determination of the final tariff by the Commission after submission of the audited accounts and all other relevant details/documents and clarifications to the satisfaction of the Commission.

107. The petitioner is directed to file the final tariff petition at the earliest along with the Audited Accounts and all other required details / documents. The Unit-wise break-up of the figures in the audited accounts be also submitted by the petitioner with the final tariff petition in favor of its claims. All discrepancies and information gaps observed by the Commission in this order be eliminated while filing the final tariff petition.

108. The subject petition is for Unit No. 1 and 2 of the petitioner's power plant at Nigrie. The provisional tariff of Unit No. 2 shall be determined only after CoD of Unit-2 and submission of all relevant details and documents by the petitioner..

Ordered accordingly.

Sd/-	Sd/-	Sd/-
(Alok Gupta) **Member**	**(A. B. Bajpai)** **Member**	**(Rakesh Sahni)** **Chairman**

Date : 26th September, 2014
Place : Bhopal

Annexure -1

Comments/ suggestions by the Respondents and the response of the petitioner

Comment of MPPMCL:

1. That the Petitioner, *inter-alia,* has made following prayers before this Hon'ble Commission :

   a. *Fix/ Approve the tariff proposed by the Petitioner for supply of power to the Respondent No. 1 from the Petitioner's 1320 MW (2 x 660 MW) Coal based Power Project at , District : Singrauli (M.P.) under the respective PPAs between Petitioner and MPPMCL, in accordance with the Tariff Regulations;*

   b. *Allow recovery of provisional tariff till the determination of final tariff in the event that the Hon'ble Commission proceeds to determine the final tariff for the Power project after commissioning of the station;*

   c. *……."*

JPPVL's response

In reply to paragraph 2 the Petitioner/JPVL respectfully submits that the Petitioner/JPVL has made specific prayer which involves initial determination of Provisional tariff followed by final tariff determination and accordingly the petitioner had paid fees for both provisional tariff determination at initial stage followed by final tariff determination at a later stage.

Comment of MPPMCL

2. The Petitioner appears to have made this application primarily for Final Determination of Tariff and in the alternative for Provisional Determination and also deposited fees for both cases leaving the choice with this Hon'ble Commission. The Respondent No. 1 opposes the proposed "Final Determination" of the tariff at this stage because, as of now, only estimated financial figures are available. Therefore, it is humbly prayed that the Hon'ble Commission may proceed to determine only the "Provisional Tariff".

JPPVL's response

In reply to paragraph 3 the Petitioner/JPVL respectfully submits that the Petitioner/JPVL in addition to praying for final determination of tariff has also prayed for recovery/determination of Provisional Tariff in the interim. It is respectfully submitted that the interpretation of Respondent No. 1/MPPMCL by correlating the fees with the Tariff Determination is not in line with the provisions of Madhya Pradesh Electricity Regulatory Commission (Fees, Fines and Charges) (Revision-I) Regulations, 2010 notified on 12.03.2010. It is pertinent to note that the fees has been deposited both for Provisional tariff as well as Final Tariff. The filing fees are payable under statutory regulations to facilitate the determination of tariff by the Hon'ble Commission in discharge of its functions, and its reimbursement can't be correlated with Tariff determination. It may also be noted that the Petitioner/JPVL has requested for the provisional tariff on an urgent basis.

Comment of MPPMCL

3. It is humbly submitted that, at the time of filing this Petition, none of the Generating Units has been commissioned or has achieved COD. Capital Expenditure has not been validated through statutory audit and similarly none of the audited (or otherwise) Financial Statements are available pertaining to operational expenditure, fuel costs, etc. Therefore, it would be sufficient to undertake the exercise of determination of only the Provisional Tariff. Accordingly, "pass through" of the part of the fee deposited for "Final Determination of Tariff" (i.e., Rs. 39.60.000/-) may be allowed only when the Hon'ble Commission finally determines the Tariff.

JPPVL's response

In reply to paragraph 4 the Petitioner/JPVL respectfully submits that the requisite fees, as per the provisions of the notification dated 12.03.2010, has been paid for and the details of which are provided below :

a. Determination of the Tariff of the 660x2=1320 MW Nigrie Thermal Power Plant. (Fees paid Rs.39,60,000/-)
b. Determination of Provisional tariff for Unit 1 and Unit 2, initially (Fees paid Rs.50000+Rs.50000=Rs.100,000), till approval for final tariff

The Petitioner/JPVL respectfully submits that there is no correlation between the tariff order passed and reimbursement of fees paid as the entire amount paid by the Petitioner/JPVL of Rs. 40.60 Lacs is pass through and therefore the Petitioner/JPVL is entitled for reimbursement of the said amount.

Comment of MPPMCL

4. That, as per the project implementation plan given in Para 1 (Page No. 2 of Volume-1 of the Petition), Unit 1 and Unit 2 were scheduled to be commissioned in March 2014 and September 2014 respectively. The Petitioner may kindly be directed to give latest update on the Commissioning schedule of both the units along with expected dates of their COD. Status update may also be sought in respect of start of Coal Production from captive/ dedicated coal blocks, namely, - **Amelia North** and **Dongri Tal II**, allocated to **Madhya Pradesh State Mining Corporation Limited (MPMCL)** and operated by **Madhya Pradesh Jaypee Minerals Limited (MPJML)** and **Madhya Pradesh Jaypee Coal Limited (MPJCL)** the Joint Venture Companies, along with production rate/ quality (GCV), per ton cost of production, etc. This information is essential for applying prudence checks in respect of various cost estimates given in the instant Petition.

JPPVL's response

In reply to paragraph 5 the Petitioner/JPVL respectfully submits that the COD of the Unit 1 is expected to be achieved shortly. The Hon'ble Commission may kindly note the following developments in relation to the declaration of COD:

- The Unit 1 of the Nigrie Thermal Power Plant has been Grid synchronized on 07-05-2014 at 08.35 hours.
- The Amelia Coal block has been commissioned and the coal consignments are already reaching the Nigrie site.

The Petitioner/JPVL submits that the invoice value of the received coal stands at Rs. 2,557/-per MT and the railway freight from coal siding of Amelia till internal railway siding of Nigrie TPS is averaging at Rs.183/- per MT, totaling to Rs. 2,740 per MT as the initial landed price of the coal excluding the loading, unloading and other handling charges, involved in handling the coal from internal siding to the coal stack yard and from the coal stack yard to the coal hopper point from where the coal goes to the milling plants. The Coal Invoices and Rail freight bills, of the consignments received at site are hereby enclosed as **Annexure A-1.**

Comment of MPPMCL

5. That at Para – 9 (at Page No. 6 of Volume – 1), the Petitioner has indicated the annual requirement of Coal as approximately 5.11 MTPA and which is to be sourced from two dedicated coal mines at Amelia North and Dongri Tal II. However, the other averments made in the same para quoted below appear to be factually incorrect :

> ***"6. …………….***
>
> ***Amelia North has been allocated to Madhya Pradesh Jaypee Minerals Limited (MPJML), a joint venture of JAL (49% holding) and Madhya Pradesh State Mining Corporation Ltd. (51% holding). Dongri Tal II has been allocated to Madhya Pradesh Jaypee Coal Ltd. (MPJCL), a joint venture of JAL (49% holding) and Madhya Pradesh State Mining Corporation Ltd. (51% holding).***
>
> ***……."***

In fact, the above two Joint Venture Companies have been created to carryout Coal Mining in two Mining Blocks allocated to Madhya Pradesh State Mining Corporation Limited (MPSMCL), who is the allotee. Para 4 on Page No. 196 and Page No. 198 of Coal Supply Agreement (Volume - 1) may kindly be referred.

JPPVL's response

In reply to paragraph 6 the Petitioner/JPVL respectfully submits the following:

- That the Amelia North coal block had been allotted to MPSMCL vide Ministry of Coal vide its order no 13016/3/2003-CA/CA-1 dated 12.01.2006. In furtherance to the above, the MPSMCL initiated a bidding process for identification of a competent Joint Venture Partner, for investment in the Thermal Power Plant and for the complete utilisation of the Coal production from Amelia (North) Coal Block.

- It is pertinent to note that subsequently JAL was identified as successful bidder and JAL executed a JV agreement in 27.01.2006 covering, inter-alia, the detailed terms, conditions and other stipulations governing their mutual relationship, rights, obligation and liabilities for mining of coal from Amelia North Coal Block, through formation of a JV.

So, the submission by the petitioner under para 9 (at page no 6 of vol-1) is a derived contention. It is further submitted that since the Amelia North Coal blocks are allocated to Madhya Pradesh State Mining Corporation (MPSMCL), which in turn, has entered into a JV arrangement with JAL, forming a new company by the name of 'Madhya Pradesh Jaypee Mineral Limited'(MPJML), It is derived that the coal blocks have been allotted to MPJML, as the allotted coal blocks of Amelia, to MPSMCL, (now after formation of JV of JAL with MPSMCL), are dedicated for the captive use of producing electricity from the thermal power plant being set up at Nigrie, in pursuance of the JV Agreement.

Comment of MPPMCL

6. That the Coal Supply Agreement (Page 196 to 237, Volume-1) is silent on actual base price of coal to be supplied. It has an indirect reference to Base Price/ As Delivered Price of coal without indicating any figure.

That the Base Price of coal supplied from Amelia North mine is taken as Rs. 1225/- per ton. And the same has been used for calculating Average Landed Price of Coal Per Metric Ton, i.e., Rs. 2,200/- per metric ton (LPPF – Rs. 2.20 per Kg). (Coal Cost Calculation Sheet - Page No. 2235, Volume-9). The Petitioner be directed to provide exact/ clear-cut source/ reference of Base Price/ As delivered Price payable for supply of coal and clarify as to how the figure of Rs. 1225/- per ton has been taken.

That the Base Price is extraordinarily high for G11 grade coal when compared with Base Price of same grade coal supplied by Coal India Limited (CIL). The Base Price of G11 Grade coal declared by Western Coal Field Ltd. (WCL) is Rs. 840/- per metric ton as evident from Coal Price

Notification Dated 16-12-2013 issued by CIL. The said notification downloaded from the website of Western Coal Field Limited is annexed and is marked as **Annexure-A.**

That it is proposed for kind consideration of the Hon'ble Commission that, till the time actual commercial production starts from Amelia North coal mines and the actual audited cost of production is available, the base price of Western Coal Fields Ltd. (WCL) for the same grade (G11 grade – GCV band 4,000 KCal/Kg to 4,300 Kcal/Kg) coal, may be taken, which is at present Rs. 840/- per ton. On this Base Price, calculating on *pro rata* basis (Base price of Rs. 1225/- per Ton leading to Average Landed Price of Coal Per Metric Ton as Rs. 2,200/-), the Average Landed Price of Coal Per Metric Ton works out to Rs. 1,509/- per metric ton (LPPF – Rs. 1.51 per Kg). This figure may be used to calculate Provisional Energy Charge Rate for Unit 1.

JPPVL's response

In reply to paragraph 7-10 the Petitioner/JPVL respectfully submits the following:

(a) That the Petitioner has signed a FSA with MP State Mining Corporation Limited (MPSMCL) for supply of coal from Amelia Coal Blocks on 17-12-2013, submitted as Annexure A-12 page 196-237, volume-1 of petition submitted on 16-01-2014.

(b) That under clause 9.2 of the FSA, it has been mentioned that the supplier shall be supplying coal as per the delivered price of the Coal, which shall be decided as per the factors stipulated under the said clause.

(c) That after the execution of FSA, the base price/Invoice price shall be determined and is being determined by the State Mining Corporation, as per clause 9.2 of the FSA.

(d) That the supply of coal from Amelia coal mine has just started. The Copy of few invoices along with RR copies of received coal is being enclosed as **Annexure- A-1**.

(e) That as per the invoice price raised by the Coal Company, the base price is charged at Rs. 1624.85, and landed price to be Rs. 2557.08 per MT.

(f) That the average rail freight from the coal blocks to Nigrie site is approx Rs.183 per MT, totaling to 2557+183= Rs. 2740 per MT, excluding the loading unloading and other applicable overhead charges.

(g) That since the Petitioner/JPVL has already started receiving coal from the Coal Company at base price of Rs. 1624.85, and landed price of Rs. 2557.08 per MT, this cost along with the cost of freight has to be passed on as part of energy cost. The estimated energy cost computed by the respondent in its objections therefore, has no relevance. It is pertinent to note that Petitioner/JPVL is entitled to recover the cost of coal charged by the Coal Company on the basis of landed cost of coal. The energy cost has to be worked out having regard to the cost of the coal as invoiced after factoring for the Overhead and loading unloading charges.

(h) In this regard, it may be pointed out that the price of coal may differ from mine to mine having regard to the mining costs and other variable factors involved in the mining process. The Petitioner has already produced invoices with regard to the actual cost of fuel, which may be considered for the determination of energy charges as per Tariff Regulations.

(i) That the contention of the respondent as mentioned in point no 9 and 10 are not relevant and need not be considered in view of above clarifications.
That for calculation of provisional Energy Charge the LPPF be assumed at Rs. 2.740 per Kg based on the present Landed Cost of the Coal, without taking the impact of the additional overheads.

Comment of MPPMCL

7. The Coal Supply Agreement of only Amelia North coal mine is attached with the petition, where the production is likely to be commenced in near future. Production from Dongri Tal –II coal mines is long away from now as many approvals/clearances are pending. The quantity of 2.5 MTPA coal from Amelia north coal mine is not sufficient to run both units. The Petitioner would have to buy coal from open market at a much higher cost. Hon'ble Commission is also not inclined to accept the use of other sources of high cost coal for supply of power to the Respondent which would be a burden to the end consumers in the state. It is therefore, humbly requested that while arranging coal from other sources, prior consent of Respondent should be obtained by the Petitioner. The consent shall be conveyed depending upon the demand matrix at the time and fixed charge, as applicable, shall be paid to the Petitioner.

JPPVL's response

In reply to paragraph 11 the Petitioner/JPVL respectfully submits the following:

(a) That the Respondent No.1/MPPMCL is correct as far as it mentions that the Coal Supply agreement has been executed only for Amelia North Coal Mine. As regards the second part, wherein it is mentioned that the production is likely to commence in near future, it is submitted that the production from Amelia North Coal block has already commenced and dispatch of the said coal has already started.

(b) That regarding the second part of the statement pertaining to the other coal block at Dongri Tal-II, the Petitioner/JPVL respectfully submits that the effective life of Dongri Tal-II (Phase-I) Coal Mine (situated entirely on non-forest land) is 17 years, whereas the effective life of PPA is 20 years from Project COD. It is expected that well before 17 years from COD, the Phase – II of Dongri Tal –II Coal Mine (situated on Forest Land) shall also be commissioned and the balance requirement of the Coal for the remaining life of PPA shall be met jointly by Amelia North and Dongri Tal-II (Phase-II)respectively. It is pertinent to note that the process for obtaining necessary clearances has already been initiated for Dongri Tal-II. In the interest of the Project, the Dongri Tal –II Coal Mine project has been divided in two phases taking into account the fact that Forest Clearance takes considerable time.

(c) That the Petitioner humbly reiterates that the entire coal requirement for Unit-1 and Unit-2 of the Project shall be jointly met by the supplies from Amelia North coal blocks and Dongri Tal –II (Phase –I) for next seventeen years, by the end of which the supplies from Dongri Tal-II, Phase-II shall also be commissioned for meeting the balance requirement of the Coal for the remaining life of PPA. Therefore the contention by Respondent No 1, regarding the requirement of the Petitioner, to procure higher cost coal from open market, is unfounded., therefore the submission with regard to taking of prior consent for such procurement needs to be rejected.

Comment of MPPMCL

8. That, on Page No. 3 of Volume-1 in Para 5, the estimated **Capital Cost of the Project** has been indicated as **Rs. 10,450 Cr.**. This translates to **Rs. 7.92 Cr Per MW**, which appears to be abnormally high even for a green field project when compared with CERC Benchmark Hard Cost of **Rs. 5.01 Cr Per MW** prescribed for a **2 x 660 MW** Greenfield Project vide **CERC Order No. L-1/103/CERC/2012 Dtd. 04-06-2012**. The Petitioner may kindly be directed to give a breakup/ tabulation of Hard Cost and other Costs incurred/ estimated to be incurred for carrying out prudence check.

JPPVL's response

In reply to paragraph 12 regarding the comparison of the Petitioner/JPVL's cost of Project with Benchmark Capital Cost, the Petitioner/JPVL submits that the Bench Mark Capital Cost for 2x660 MW Super Critical Project (based on 2011 indices as Base) is 5.01 Cr per MW, as per the CERC Order No. L1/103/CERC/2012, dated 04-06-2012 providing the Benchmark Capital Cost (Hard Cost) for TPS.

It is further submitted that CERC has provided a clarification on Benchmark Capital Cost, for Thermal Power Stations with Coal as Fuel vide its aforementioned order, under Issue No. 6, para No. 11.2 and the relevant extracts of the same have been reproduced below for ready reference :-

> "However, to calculate the likely cost of similar package for another project, the fixed Component needs to be linked to escalation in WPI for the intervening period, which may be provided..."

In view of the above, the indicated capital cost (hard cost) per MW of Rs. 5.01 Crs. for 2x660 MW Super Critical Project based on 2011 Index as base, needs to be escalated based on WPI Index and brought forward to January, 2014. The table hereunder shows that the Bench Mark capital cost of Rs. 5.01 Crs./ MW translates, into a project cost (hard cost) of Rs. 6,613.20 Crs. as on December, 2011, which after applying the escalation factor based on WPI Index, works out to Rs. 7,524 Crs. translating into Rs. 5.70 Crs. / MW. WPI Index of 2013-14 is 178.90 and relevant documentary proof of Ministry of Commerce is annexed as **Annexure-A-2.**

The WPI Index as at Dec-2011	157.3
The WPI Index as at Jan-14	178.9
Inflation factor	1.14
Bench Mark Capital Cost for 660x2 MW based on Indices of Dec-2011 (Rs Crs../MW)	5.01
Project cost at Bench Mark Capital (Rs. in Crs.)	6613.2
Escalation allowed upto Jan-14 (Rs. In Cr.)	7,524
New Benchmark as at Feb-2014 indices shall be (Rs Crs./MW)	5.70

It is submitted that the hard cost for the Petitioner/JPVL's 2x660 MW Jaypee Nigrie Super Thermal Power Project, in terms of CERC Order dated 04.06.2012 for Bench Mark capital cost, works out as under, by removing expenses / estimates on account of Margin Money, IDC, Railway Siding, Transmission Line, Barrage, Township and Taxes, which were not considered by CERC while Bench Marking the capital cost (Hard Cost) of thermal power projects. The table herein below shows that the total estimated project completion cost of Rs. 10,450 Crs. translates into hard cost of Rs. 7,349.74 Crs. which in turns works out to Rs. 5.57 Crs. / MW.

For Calculating Bench Mark Capital Cost compliance	Value in Crores
Project Cost	10,450.00
Less:	
Margin Money	(-)178.00
IDC	(-)1,399.00
Railway Siding Expenses	(-) 128.00
Transmission Line Exp	(-)374.00
Barrage Exp	(-)189.00
Township Expenses	(-)116.26
Taxes	(-)716.00
TOTAL Capital Cost	**7,349.74**
Cost per MW	5.57

In view of the above the estimated completion cost of the Petitioner/JPVL's project is well within the Bench Mark capital cost indicated by CERC for 2x660 MW Thermal Project.

In addition to the above the Petitioner/JPVL would like to submit the estimated completion cost of some other thermal projects wherein some cases 660 MW Machines have been used. The data being enumerated herein below is from various unauthenticated sources and is being submitted only for indicatory purpose.

SL	Name of Project	Capacity (MW)	Estimated Project Cost	Project Cost Per/MW	Year of Estimation
I	NTPC – Solapur	1320	11,600	8.79	2011
Ii	NTPC – BarethiSTPP	1320	11,268	8.54	2012
Iii	NTPC – DSTPP Stage	1600	12,850	8.03	2010
Iv	NTPC – Khargone STPP	1320	10,458	7.92	2011
V	NTPC – GSTPP (Stage –I)	1600	12,639	7.90	2010
Vi	NPGCPL	1980	14,868	7.51	2012

Comment of MPPMCL

9. That, on Page No. 16 of Volume-1 in Para 19(g), the justification has given sought to be given in respect of increase in **Interest During Construction (IDC)** and Financing Charges to the tune of Rs. 603 Cr. over the initial estimated amount of Rs. 796 Cr., leading to a final figure of Rs. 1,399 Cr. and the increase is about 76% which is abnormally high. The Petitioner has given following reasons for this increase :

a. Increase in average interest rates by 1% from 11.5% to 12.5% - However, the overall impact due to this is not quantified.

b. Increase in IDC has been attributed to shifting of COD – Not quantified separately

c. Impact of IDC on additional debt of Rs. 16.45 Billion proposed for financing Cost Overrun – Actual figure not provided

It is submitted that the Petitioner may kindly be directed to provide figures for each head. It is also submitted that increase in the values under this head due to time overrun after Scheduled Commercial operation Date (SCOD) may not be allowed.

JPPVL's response

In reply to para 13, the Petitioner/JPVL, respectfully submits that for the increase in IDC and Financing Cost, by Rs. 603 Cr., the following table provides the individual breakup of all figures as mentioned on Page No. 17 in Para 19(g) of petition dated 16-01-2014:

Particulars		**As per Original estimation Rs.8100 Cr.**			**As per Revised Estimation Rs.10400 Cr.**				
	Total Funding	**Upto Mar-13**	**Apr13 to Sep-13**	**Total**	**Upto Mar-13**	**Apr13 to Sep-13**	**Oct 13-Jun-14**	**Total**	**Difference**
IDC Calculation	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**
RTL	4,821.10	611.93	167.68	**779.61**					
ECB of JPY 1530 Cr.	848.90				579.06	331.37	299.29	**1,209.72**	430.11
Additional Debt	1,645.00					8.62	59.00	*** 67.62**	67.62
Finance Charges		15.61		**15.61**	120.88			**120.88**	105.27
Total	**7315.0**	**627.54**	**167.68**	**795.22**	**699.94**	**339.99**	**358.29**	**1,398.22**	**603.00**

(a) The increase in IDC of Rs.430.11 Cr is contributed by

- **Increase in average rate of interest** of the Term Loan from 11.5% to 12.5% resulted in increase in IDC of (579.06+331.37-779.01)= Rs.130.82 Cr. (Kindly see the figures highlighted with * marks in the first row of the above table, Columns -4,5,6)

(b) **Increase in the Project Cost** from Rs. 8100 Cr. to Rs. 10400 Cr., additionally contributed Rs. 67.62 Cr to the IDC shown under 2nd row of Column 8, highlighted by * mark.

(c) The increase in IDC due to increase in Finance Charge of Rs. 105.27 Cr., can't be directly attributed to aforementioned factors. It is the difference between the finance charges actually paid and finance charges initially estimated.

Comment of MPPMCL

10. That, on Page No. 16 of Volume-1 in Para 19(i), the Petitioner has given justification in respect of increase in Establishment Charges by Rs. 106 Cr. due to increases in various heads. Increase in following heads may be partly attributable to time overrun, therefore the details of increase beyond benchmark completion period may be asked and that part deserves to be disallowed :

a. Salary and manpower expenses
b. Administrative/ Miscellaneous Charges

JPPVL's response

In reply to paragraph 14 pertaining to the comparison of the Petitioner/JPVL's Increase in establishment cost, the Petitioner/JPVL humbly submits that the establishment charges of 350 Cr. have been estimated towards the cost incurred/to be incurred in start-up fuel expenses, construction power, insurance and other additional Overheads etc. The Breakup of the Establishment Expenses are given below:

Expenses	Remarks-Subheads	Amount (Rs. In Cr.)
Establishment	Technical Consultancy	30

	Salary	42
	Construction Power Charges	34
	Site Development	13
	Administrative and Miscellaneous Charges	131
	Start up Fuel Expenses	100
	Subtotal	**350**

It is further submitted that the initial estimated cost of Rs.244 Cr increased to Rs.350 Cr., (an increase in Rs.106 Cr.), which can be attributed primarily to the current estimation of the start-up fuel expenses of Rs. 100 Cr., not estimated earlier. This cost consists of the cost of fuel, both primary and secondary, estimated to be incurred during testing phase of the plant lighting up and also COD of respective units.

Comments of MPPMCL

11. That on Page 12 (Volume-1) and 2236 (Volume-9) – **Gross Station Heat Rate (GHR)** is indicated as **2317 Kcal/Kg**. It appears to have been calculated by taking boiler efficiency as 85%. But **Boiler Efficiency** is given as **89.78%** in Page 2211, Volume – 9.

Calculation for GHR
From Page 1202/Vol-5 (Annexure-C)
Guaranteed Turbine Cycle Heat Rate (Economical) : 1850 Kcal/KWh

From Page 1402/ Vol-6 (Annexure-C)

Boiler Efficiency : 89.78%

Unit Heat Rate = (Turbine Heat Rate)/(Boiler Efficiency)
= 1850/ 0.8978 Kcal/KWh
= 2061 Kcal/KWh

As per Regulation **35.2 (B)** of **MPERC (T&C of Determination of Tariff)(R-II) Regulations 2012**

Gross Station Heat Rate = 1.065 x Design Heat Rate
= 2195 KCal/KWh

(This is lower by 5.27 % when compared to GHR of 2317 KCal/KWh considered by the Petitioner)

<u>Impact on Energy Charge Rate (ECR)</u>

As per **Regulation 41** of **MPERC (T&C of Determination of Tariff)(R-II) Regulations 2012**

ECR ={(GHR-SFCxCVSF)xLPPFx100}/{CVPFx(100-AUX)}

Substituting the appropriate values in the formula :

GHR =2195 KCal/KWh
LPPF = Rs. 1.51 per Kg (Please see Para – 10)

ECR = {(2195-1x10)x1.51x100}/{4200x(100-6)}
= **0.8357 Rs./KWh**

(Therefore, ECR will be **lower** by about **45 paise** when compared to ECR of 1.2856 Rs./KWh calculated on the basis of figures given by Petitioner)

JPPVL's response

In reply to paragraph 15 pertaining to calculated GSH of 2317 kCal/kg, the Petitioner/JPVL humbly submits that the Guaranteed Designed Heat Rate ("**GDHR**") was arrived at by dividing the Maximum Turbine Cycle Heat Rate (1854) by Minimum Boiler Efficiency (85%) and multiplying the result by 1.065 (as per regulation 35.2 B).

However the Designed Heat Rate as per design specifications of L&T is 1854 Kcal/Kwh (for Nominal Rating) whereas the Guaranteed Boiler Efficiency of LMB has been mentioned as 89.78% (at nominal rating-660 MW). This gives the GSH of the Plant as 1854/89.78% = 2065.05. This value when multiplied by 1.065 (as per regulation 35.2 B), gives the resultant GSH for Tariff purpose equal to 2200 kCal/kwh (rounded off). This corrected GSH is now used in the revised TPS-1 being enclosed herewith as Annexure**-A-3**

Comments of MPPMCL

12. Cost of common facilities are to be apportioned in both Units as per **Regulation-8** of **MPERC (T&C of Determination of Tariff)(R-II) Regulations 2012**. Therefore, while determining Provisional Tariff, cost of Common Facilities should be apportioned accordingly. The relevant part of the Regulation is quoted below :

"8. Methodology for Determination of Tariff and True-up :

………

8.3. For the purpose of Tariff, the capital cost of the Project shall be segregated into stages and by distinct Units forming part of the Project. Where the Stage-wise, Unit-wise break-up of the capital cost of the Project is not available and in case of on-going Projects, the common facilities shall be apportioned on the basis of the capacity of the Units. ………………………"

JPPVL's response

In reply to paragraph 16 the Petitioner/JPVL humbly submits that it is submitting the CA certificate, for the cost incurred on the project upto 31.03.2014. The apportionment of common facility expenses as per the provisions of regulation 8.2 and 8.3 are also enclosed along with CA Certificate as **Annexure-A-4 (Colly)**

Comments of MPPMCL

13. That the Petitioner has annexed at Page No. 994, Volume – 5, a Letter obtained from **Development Consultants Pvt. Ltd. (DCPL)** Dated 05-05-2013 (Captioned as **"Revised DPR"** at Item No. 18 in List of Documents shown at Cover Page of Volume – 5). The contents of this letter, however, reveal that the intent and purpose of this letter is primarily to attempt to give justification for Increase in Cost in various heads. However, in most of the parts, the justification is vague or at best rudimentary.

JPPVL's response

In reply to paragraph 17 the Petitioner/JPVL humbly submits that the said letter is just an indication on the basis of which the IDBI bank has prepared a Detailed Project Information Report dated Jul-2013, which has already been submitted as Annexure A-13 to the petition dated 16.01.2014 and another LE Cost overrun Report dated July 2013 is being enclosed as **Annexure-A-5.**

The Petitioner humbly request the Hon'ble Commission to peruse the detailed reports as the same provide information regarding the incremental cost with reason thereof.

Comments of MPPMCL

14. That, at Point No. 5. on Page No. 1008, Volume - 5, justification is sought to be given for increase in the cost of Transmission Line by **Rs. 124.3 Cr.** on originally estimated cost of **Rs. 250 Cr.,** i.e., an increase by **50%,** while the length of the line is increased just by 21 km, i.e., from 140 km to 161 km, i.e., just by 15%. To justify the sharp increase, the Consultant has provided some narrative along with a list of 7 items (a to g) under which the increase was supposed to have resulted without giving item-wise breakup.

JPPVL's response

In reply to paragraph 18 pertaining to the increase in transmission expenses, the Petitioner/JPVL humbly submits that as per the initial estimates in the DPR, the Cost of EHV Transmission Lines for power evacuation to PGCIL Sub Station was estimated at Rs.250Cr. and thereafter pursuant to the detailed route survey, the following additional requirement was envisaged:

(a) The actual line length of transmission line to be constructed for evacuation of Power from the project at 400 kV level to PGCIL's sub-station at Satna, Madhya Pradesh, was initially envisaged at 140 km from the project site. After detailed route survey, length of the transmission Line increased from 140 Km to 161 Km. It is further submitted that out of this increase of 21 Km line length, 11 Km falls in Forest Area, due to which an additional Cost of Rs.**6.8 Cr**., for acquisition of alternate Land and Rs.**12.97** Cr. towards compensatory afforestation and medicinal plantation (Refer Annexure 4.4 of LE Report enclosed as **Annexure-A-5)** is estimated to be incurred.

(b) It is further submitted that there was also an increase in cost on account of the use of Optical Fibre Ground Wire (**"OPGW"**) in place of Ordinary steel ground wire for Phase Measuring Unit(**"PMU"**). The use of OPGW could not have been avoided as the same was directed to be used by PGCIL. A Detailed explanation of the said increase has been given in the Project Information Memorandum (**page65**) already submitted as **Annexure**-**A-13** page number from 1019 to 1123 along with petition dated 16-01-2014. The Cost of preparation of DPR for transmission line by PGCIL (0.19Cr.),Route Survey of Transmission line ((0.22 Cr.) Field quality Services (2.53 Cr.) and Optical Ground Wire (4.17 Cr.), Consultancy for OPGW(0.19Cr.) all adding to an additional cost of Rs. **7.30** Cr. Further the Right of Way (ROW)Compensation incurred an additional cost of Rs.**7** Cr. The breakup of increase in transmission line cost is as under:-

(All figures in Cr.)

Particulars	**Original**	**Revised**	**Variance**	**Remarks**
Transmission Line	250	293	43	Increased cost of Equipment, Civil Works & increased Taxes & Duties etc.
Increase in length of Line	-	44	44	Proportionate cost of increased Length of line by approx 21 Kms
Sub Total	**250**	**337**	**87**	
Optical Ground Wire	-	4	4	PGCIL Direction to use Optical Ground Wire (OPGW) as compared to earlier provision of Galvanised Steel wire.
PGCIL Consultancy	-	6	6	Not provided earlier.
Land Compensation / Medicinal Plantation / Right of Way		27	27	Alternative afforestation / Land Compensation / Medicinal Plantation / ROW
Total	**250**	**374**	**124**	

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Comments of MPPMCL

15. That, at Item No. 8. Page No. 1009, Volume -5, increase in **Interest During Construction (IDC)** is simply attributed to *"revised cost of Project and means of financing and present rates of interest, the IDC has been recomputed."*

JPPVL's response

In reply to paragraph 19 the Petitioner/JPVL seeks leave of the Hon'ble Commission to refer to the explanation given under paragraph 17 of this Petition.

Comments of MPPMCL

16. Similarly, at Item No. 10, Page No. 1010, Volume -5, increase in Overhead Construction Cost is sought to be justified. Annexure-I shows the "**Details of Civil Works Cost Overrun"** in a tabular form. Increase against each item is given figuratively, then an overall increase of **Rs. 6589.02 Million (Rs. 658.902 Cr.)** has been shown over Originally estimated Cost of **Rs. 6601.55 Million (Rs. 660.155 Cr.),** which is almost doubling of the cost. However, a common justification is provided for all items concerned, as quoted below :

> ***"10. <u>Over Head Construction Cost :</u>***
> *The reasons for higher overhead construction cost are on account of updated project timeframe, revised updated estimates of startup fuel expenses, diesel, construction power rates, insurance, travel expenses etc.. Cost of infrastructure in the remote area also adds to the overload.*
>
> *Annexure- 1 : Details of Civil Works – Cost Overrun*
> *……………………………………………………………..*
> *…………………………………………………….."*

In view of such a large increase in Cost of Civil Works, the Petitioner may please be directed to provide Item Wise justification for increase in Cost, clearly showing the calculations reflecting increase, if any, in quantum work of various heads due to design change, showing increase, if any, per unit rates, increase due to time overrun, etc., so that effective prudence check is possible by the Hon'ble Commission.

That on Page No. 1030, Volume- 5, Cost of Civil Work is shown to increase from Rs. 6.6 Billion to Rs. 11.70 Billion, IDC/ Financing Cost is shown to increase from Rs,. 7.96 Billion to 13.99 Billion, Cost of BTG is shown to increase from Rs. 45.11 Billion to Rs. 52.09 Billion, Establishment Charges increased from 2.44 Billion to 3.5 Billion. The Hon'ble Commission is humbly prayed to carry out suitable prudence check on all these increases.

JPPVL's response

In reply to paragraph 20 and 22 the Petitioner/JPVL respectfully submits that the increase in the estimation of the cost of civil works from Rs. 660 Crs. to Rs. 1170 Crs. is primarily on account of the following:

(a) Additional excavation, backfilling and PCC for foundation of various plant components on account of actual soil/rock conditions encountered, which were required to be carried out in order to sustain heavy loads of machinery and structures;

(b) Increase in storage capacity of water reservoir and additional provision of HDPE lining;

(c) Additional works in township to provide appropriate amenities to working staff,

(d) Additional Works/Qty for ash dyke, effluent treatment system as per MOEF requirement

(e) Escalation in contracted rates for civil works due to inflation (factored in through CPI and WPI) during the implementation period as per the escalation formula provided in the contract; and

(f) Increase in cost of material i.e. cement and steel on account of additional quantities and price inflation.

This issue has been discussed and explained by ICICI Bank in the Project Information Memorandum for the reappraisal of project cost at Rs. 10,450 Crs., on page nos. 59 to 62. The Petitioner seeks leave of the Hon'ble Commission to rely on the contents of the PIM which forms part of the main petition along with documents that have been filed with the petition in support of the factors enlisted above. Additionally this issue is also covered at length in the Lenders Engineer's Report from Page no 7 to page no 16. (Enclosed as **Annexure A-5**). The reasons for increase in Civil Cost are summarized below in tabular format:

Particulars	Original	Revised	Variance
Power Generating Block	245	329	84
Water system	26	99	73
Waste water Treatment Plant	4	4	
Coal Handling Plant	57	114	57
Pipe cum Cable Rack	5	19	14
Chimney	23	63	40

Reservoir	54	148	94
Township	102	175*	73
Ash Handling System	14	14	--
Others (misc)	120	125	5
WCT and transit insurance etc	10	25	15
Additional Service Tax		55	55
Total	**660**	**1170**	**510**

Comments of MPPMCL

17. That on Page No. 999 – Volume – 5, the Turbine configuration is shown as a combined HP/IP Turbine and 2 LP Turbines with 2 condensers which is a post DPR modification. The DPR envisaged Turbine configuration as 1 HP Turbine, 1 IP Turbine and 1 LP Turbine. The Petitioner may kindly be directed to explain that –

a. What is the selection criteria?
b. In what way new configuration is better/ efficient/ economical?

JPPVL's response

In reply to Para 21, the Petitioner /JPVL respectfully submits that The sizing and configuration of steam turbine cylinders i.e. HP, IP, LP and combination thereof, offered by reputed manufacturers against tender, depends on their specific design philosophy taking into consideration their best experience of provenances of different modules and reliability of the complete assembly, efficiency and standardization in reducing the manufacturing cycle time and manufacturing cost. This configuration therefore varies from manufacturer to manufacturer.

The Petitioner further submits that against tender enquiry which does not specifically calls for particular configuration of different turbine cylinders, manufacturers / suppliers is free to offer their own configuration meeting the specification requirement and also competitiveness with other vendors on the evaluated parameters on heat rate and cost etc.. In case of Nigrie STPP M/s L&T – MHI quoted the combination of combined HP, IP cylinders and 2 LP cylinders which was meeting the specification requirement and was therefore acceptable.

The Petitioner further submits that at the time of preparation of DPR it is not known on which manufacturer and as per which configuration the turbine will be offered. Therefore a general statement on combination of cylinders i.e. one HP, one IP and one LP was mentioned.

As regards efficiency of each combination of cylinder configuration as mentioned above, heat rate of combination of one HP, one IP and one LP has offered by some manufacturers and a combined HP-IP and 2 LP offered by L&T – MHI and which is being installed at Nigrie STPP are comparable.

The Petitioner/JPVL respectfully submits that the increase in the estimation of IDC and Financing Cost Increase is primarily on account of the following:

(a) Increase in Average Rate of Interest for RTL (Weighted Average RTL @13.82% and Combined Weighted average rate including FCL @ 12.47%) during implementation period as compared to original sanction of 11.5%.

(b) The IDC calculation as estimated originally were based on COD by Oct-2013 as per L1 schedule specified in the BTG contract, whereas now commissioning schedule is May-2014.

(c) The additional impact of IDC on additional debt of 1645 Cr.

The Petitioner/JPVL further submits that the increase in BTG expenses of 698 Cr can be attributed to three factors i.e. (a) the change is on account of price variation,(Rs. 254.50 Crs); (B) increase in taxes and duties,(Rs. 222.10 Crs.) and (C) exchange rate variation (Rs. 221.50 Crs.),aggregating to Rs. 698.10 Crs. The detailed explanation for this increase in estimation is provided in the LE Report on cost overrun dated July, 2013, (page no. 17 to 19 of the) enclosed as Annexure-A-5.

The Petitioner/JPVL further submits that the Establishment Charges of 350 Cr. has been estimated towards the cost incurred/to be incurred in start up fuel expenses, construction power, insurance and other additional Overheads etc. The breakup of the establishment expenses are provided below:

Expenses	**Remarks-Subheads**	**Amount (Rs. In**

		Cr.)
Establishment	Technical Consultancy	30
	Salary	42
	Construction Power Charges	34
	Site Development	13
	Administrative and Miscellaneous Charges	131
	Start up Fuel Expenses	100
	Subtotal	**350**

Comments of MPPMCL

18. That the prudence check by Hon'ble Commission is also prayed in respect of the calculations of Return on Equity (ROE). As per Tariff Regulation 2012, incentive of 0.5% is disallowed as STG order was placed in August 2009. Therefore, Project completion time is beyond 52 months.

JPPVL's response

In reply to paragraph 23 the Petitioner/JPVL respectfully submits that the calculation of the 52 weeks shall be reckoned from the date of approval of the Finance Committee (in their Meeting held on 30-03-2010). Mere placement of order of STG order doesn't construe the project start date.

It is further submitted that the approval of the Project Cost of Rs. 8,100Crs., by the Board on 15.10.2009 was conditional, i.e. subject to detailed review and negotiation by the Finance Committee. The final approval of the Finance Committee was received on 30.03.2010. The Project start date is construed as the date of approval by the finance committee of the Board which happened on 30-03-2010 and the 52 week from the start date ends on 31st Jul-2014.

So accordingly the Petitioner, has calculated the ROE at 16%, by adding 0.5% on 15.5% as envisaged under para 22.2 of the MPERC regulation dated 12.12.2012. The Copy of Minutes of Finance Committee dated 30th March, 2010 are enclosed as **Annexure A-6.**

Comments of MPPMCL

19. That it is observed from the documents/ information submitted, that **Civil, Structural & Architectural Work of Plant and Township (including**

Railway Siding and MGR) contract has been awarded to **M/s Jaiprakash Associates Ltd.** for total Contract Price of Rs. 361.79 Cr. (Page -1550, Clause- 5.1, Volume- 7). This is a **"Related Parties"** transaction. Also, huge Cost Overrun has been noticed in this contract, as brought out in para 20. Therefore, it is humbly prayed that :

a. The documents showing Statutory Compliance and Central Government approval in terms of **Section 297** of **Companies Act 1956** may kindly be sought from the Petitioner.

b. Also, the basis of contract finalization, as to whether it was on the basis of Open Tender/ Limited Tender etc., may kindly be sought from the Petitioner for ensuring methodology adopted for transparent price discovery and ensuring **"Arms Length"** concept mandatorily applicable to **"Related Party"** transactions.

JPPVL's response

In reply to paragraph 24 the Petitioner/JPVL respectfully submits that pursuant to entering the contract for carrying out the civil works, a Board meeting was held whereby, the requisite entry providing the details of the aforementioned contract, was made in the Register of Contracts, by the Board of Directors as per the requirement of provisions of Section 301 of the Companies Act 1956, applicable to such related Party Contracts.

It is further submitted that the civil works contract awarded by the Petitioner/JPVL to JAL is based on the civil contract awarded by Bokaro Jaypee Cement Limited ("**BoJCL**") which is a joint venture company of JAL and Steel Authorities of India Limited ("**SAIL**"). The contract has been awarded on an arm's length basis and no concessions have been allowed to JAL in terms of rates or the quality of work. In fact, the rates concluded for the civil works contract are based on the civil contract awarded by Bokaro Jaypee Cement Limited ("**BoJCL**") which is a joint venture company of JAL and Steel Authorities of India Limited ("**SAIL**"). BoJCL invited tenders for construction of Civil Works activities for Bokaro Cement Plant in Aug-2008 and the tender documents were issued to the following parties:-

(a) M/s BSBK Pvt Ltd
(b) M/s Simplex Infrastructures Ltd.,

(c) M/s Jaiprakash Associates Ltd.,
(d) M/s B.L.Kashyap& Sons Ltd.

It is further submitted that the rates of JAL were found to be lowest among all the aforementioned bidders and subsequently the tender was awarded to JAL in Nov-2008. The award of civil work for the Nigrie Project was made in the month of May, 2010 which was 18 month later than the award of civil work by BoJCL to JAL. It is pertinent to mention that the present contract for carrying out civil works at the Nigrie Project was awarded to JAL at the rate equal to or less than the rate at which contract was awarded by BoJCL to JAL for civil works at their cement plant, i.e without considering/factoring the impact on account of inflation for the time gap between the two contracts (18 months).We are further enclosing a compiled statement (enclosed as **Annexure-A-7)** indicating a comparison as under:-

Cost incurred (Rs. 361.79 Cr.) on itemized quantities of the project, at the awarded rate to JAL for the Nigrie Civil works, with the Cost that would have been incurred (Rs. 419.60 Cr.), had the award of contract been done, at BoJCL rate on the same BOQ.

The Comparison shows that there is a savings of Rs. 57.81 Cr. due to award of Contract to JAL at the prices lower than the BoJCL rates. It is further pointed out that in comparing the Nigrie Contract with the BoJCL Contract, various items like Cement and Steel worth Rs. 298.08 Cr., supplied by the Petitioner to JAL for the execution of the civil work of the Project, has not been taken into account in the above calculations, as both contracts (BoJCL and Nigrie Civil Works) provide for free supply of Cement and Steel.

It is further submitted that a new competitive bidding process would have delayed the construction by at least six months and also could have resulted in further increasing the capital cost. That apart, it is submitted that the Petitioner has tried (and possibly succeeded) in getting the most competitive rates for the civil works. Therefore, the award of the contract to JAL through a negotiated route, as opposed to the competitive bidding route, may not be relevant. In any case, the Petitioner/JPVL is not bound in law to award the contract for civil works only through a bidding procedure. Given the fact that the hard cost of the Project is well in line with the norms provided by the CERC and comparatively at a lesser cost than other projects with similar configuration, there is no occasion to raise an objection about the fact that the Petitioner has not resorted to competitive bidding for the award of civil work.

In view of the above, it is submitted that the rates given to JAL for civil work were fair, reasonable and the lowest in the market at the time of award of the said contract.

Comments of MPPMCL

20. Also two Joint Venture Companies, namely, **Madhya Pradesh Jaypee Minerals Limited (MPJML)** and **Madhya Pradesh Jaypee Coal Limited (MPJCL),** have been formed for making investments, development and mining of Coal from dedicated Coal mines, i.e., **Amelia North** and **Dongri Tal II** respectively. **Jaiprakash Associates Limited (JAL)** has **49%** equity holdings in both and made substantial investments in the Project as **Mine Developer and Operator (MDO)**. Therefore, this arrangement may also be termed as a Related Party Transaction. Therefore, the Petitioner may be directed to furnish Statutory Compliance in this respect and furnish full details of Price of Coal agreed to be paid to the **MPSMCL** produced from these two mines.

JPPVL's response

In reply to paragraph 25 the Petitioner/JPVL seeks leave of the Hon'ble Commission to refer to paragraph 9 above, regarding the procedure followed in JV formation. It is pertinent to mention that subsequent to the formation of JV, the Petitioner/JPVL had made the necessary compliance under the Companies Act and had made the necessary disclosure of the two JVs namely, Madhya Pradesh Jaypee Minerals Ltd., (For Amelia) and MP Jaypee Coal Limited (For Dongri Tal-II), as Associate Companies, under Note 36, of Page 62, under Consolidated Notes to the financial statement for the year ended 31.03.2013, in the Annual Report 2013 of JPVL. Copy of the Annual Report of JPVL enclosed as **Annexure-A-8**

The Petitioner further submits that as mentioned under point number 7, the supply of the Coal from Amelia North Coal blocks has already started from MPSMCL, which is a state Government Company of Government of Madhya Pradesh and as such doesn’t come under the definition of related Party as defined under Companies Act.

Comments of MPPMCL

21. That at this stage the Respondent No. 1 has made above preliminary observations on the basis of documents/ information made available by the Petitioner. The Respondent craves liberty to amend, alter and add to the points or make further submissions as may be required at a later stage.

The Respondent humbly prays that the Hon’ble Commission may kindly condone any inadvertent omission, error etc. in this submission.

JPPVL’s response

The Petitioner/JPVL respectfully submits that paragraph 26 and 27 are not in dispute and therefore requires no reply.