

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 437/GT/2014

Coram:

**Shri A.S. Bakshi, Member
Dr. M. K. Iyer, Member**

**Date of Hearing: 24.10.2016
Date of Order : 17.01.2017**

In the matter of

Revision of tariff of Indira Gandhi Super Thermal Power Project Stage- I (3x500 MW) for the period from 5.3.2011 to 31.3.2014-Truing up of order dated 6.5.2015 in Petition No. 229/2010.

And in the matter of

Aravali Power Company Private Limited
NTPC Bhawan, Core-7, SCOPE Complex,
7, Institutional Area, Lodhi Road,
New Delhi-110003

.....Petitioner

Vs

1. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-IV,
Panchkula, Haryana-134109

2. Tata Power Delhi Distribution Company Ltd
(erstwhile North Delhi Power Ltd)
Grid Substation, Hudson road,
Kingsway Camp, Delhi-110009

3. BSES Rajdhani Power Ltd.,
BSES Bhawan,
Nehru Place, New Delhi-110019

4. BSES Yamuna Power Ltd.
Shakri Kiran Building,
Karkardooma, Delhi-110092

...Respondents

Parties present:

For Petitioner: Shri M G Ramachandran, Advocate, APCPL
Ms Anushree Bardhan, Advocate, APCPL
Shri K P S Gujral, APCPL



Shri A Basu Roy, NTPC
For Respondents: Shri Vishal Anand, BRPL & BYPL
Shri Rahul Kinra, BRPL & BYPL
Ms Ranjana Roy, Advocate, TPDDL
Shri Pushkar Taimni, Advocate, TPDDL

ORDER

This petition has been filed by the petitioner, Aravali Power Company Private Limited (APCPL) for revision of tariff of Indira Gandhi Super Thermal Power Project, Stage-I (3 x 500 MW) ('the generating station') for the period from 5.3.2011 to 31.3.2014 after truing up exercise in terms of clause (1) of Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 ('the 2009 Tariff Regulations').

2. The petitioner, Aravali Power Company Private Limited (APCPL) is a Joint venture company incorporated under the Companies Act, 1956 with NTPC holding 50% share and 25% shares each being held by Haryana Power Generation Company Ltd (HPGCL) and Indraprastha Power Generation Company Ltd (IPGCL), respectively and has set up Indira Gandhi Super Thermal Power Project (IGSTPP) ("the generating station") with a total capacity of 3 x 500 MW in Jhajjar District of the State of Haryana. The dates of commercial operation of these units of the generating station are as under:

	Date of commercial operation
Unit-I	5.3.2011
Unit-II	21.4.2012
Unit-III	26.4.2013

3. The Commission vide order dated 6.5.2015 in Petition No. 229/2010 had approved the annual fixed charges of the generating station for the period from the actual COD of Unit-I (5.3.2011) to 31.3.2014 considering the opening capital cost of ₹308912.38 lakh as



on COD of Unit-I. Accordingly, The annual fixed charges (pro-rata) allowed in order dated 6.5.2015 are as under:-

(₹ in lakh)

	2010-11 (5.3.2011 to 31.3.2011)	2011-12	2012-13 (1.4.2012 to 20.4.2012)	2012-13 (21.4.2012 to 31.3.2013)	2013-14 (1.4.2013 to 25.4.2013)	2013-14 (26.4.2013 to 31.3.2014)
Return on Equity	1062.57	17957.27	983.96	29009.38	2127.47	39710.98
Interest on Loan	1725.23	22587.62	1197.81	35158.18	2456.01	45595.59
Depreciation	977.04	13208.07	723.73	23014.30	1718.62	32115.89
Interest on Working Capital	295.87	4080.46	223.58	13300.84	967.22	18485.24
O&M Expenses	508.19	7265.00	420.82	14518.36	1112.33	21935.12
Secondary fuel oil cost	120.32	1631.04	89.13	3074.90	222.82	6531.74
Total fixed charges	4689.23	66729.45	3639.03	118075.96	8604.46	164374.58

4. Aggrieved by the said order dated 6.5.2015, the petitioner filed review petition (12/RP/2015) on various issues and the Commission after hearing the parties vide order dated 9.2.2016, admitted the prayer of the petitioner on the matters namely,

- a) "wrong adjustment of revenue from sale of infirm power"
- b) "non-consideration of additional capitalization between commercial operation date of different units".

5. Also, the prayer of the petitioner as regards "Non-consideration of Part of loan amount for IDC" was allowed as under:-

"35.However, considering the fact that there is no compounding of interest on the amount of ₹1302.94 crore, the same will be considered at the time of revision of tariff based on truing up exercise in terms of Regulation 6 (1) of the 2009 Tariff Regulations. The petitioner is also granted liberty to submit all relevant information in Form 9A/ 9B along with reconciliation of figures while considering the truing up petition as stated above."

6. Thereafter the Commission in order dated 27.6.2016 disposed of the review Petition No.12/RP/2015 by allowing the prayer of the petitioner on the said issues. The Commission in the said order dated 27.6.2016 also observed as under:-

"13. It is observed that the petitioner has filed Petition No. 437/GT2014 for truing up of tariff of the generating station for the period from 5.3.2011 to 2014 and the same is pending for consideration by the Commission. Moreover, the petitioner has been granted liberty in para 35 of the order dated 6.5.2015 to submit certain



information. In this background, we consider it prudent to revise the tariff of this generating station considering the issues allowed in this order at the time of truing up of tariff in terms of Regulation 6(1) of the 2009 Tariff Regulations.”

7. Regulation 6 of the 2009 Tariff Regulations provides as under:

"6. Truing up of Capital Expenditure and Tariff

(1) The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up.

Provided that the generating company or the transmission licensee, as the case may be, may in its discretion make an application before the Commission one more time prior to 2013-14 for revision of tariff."

8. The petitioner has sought revision of tariff based on the actual additional capital expenditure incurred from COD of 1st Unit to 31.3.2014 in accordance with clause (1) of Regulation 6 of the 2009 Tariff Regulations. The Commission in the said order dated 6.5.2015 had decided that the delay of 1.5 months for Unit-I, 12 months for Unit-II and 21 months for Unit-III in the commissioning of the units is due to factors entirely attributable to the petitioner and that the entire cost due to time overrun has to be borne by the petitioner. It was also decided that the liquidated damages and insurance proceeds on account of the said delay received could be retained by the petitioner.

9. The petitioner was also directed to submit the following additional information in the relevant paras of the order dated 6.5.2015 :

“(i) Fresh petition along with actual additional capital expenditure incurred from the COD of the generating station (26.4.2013) to 31.3.2014 duly reconciled with books of accounts and certified by Auditor;

(ii) Certification as to all the assets of the Gross Block as on 31.3.2011, 31.3.2012, 31.3.2013 and 31.3.2014 are in use. In case any asset has been taken out from service, the same shall be indicated along with the date of putting the asset in use, the date of taking out the asset from service, along with the depreciation recovered;

(iii) The details of infirm power generated from the date of synchronization of different units and the revenue earned (excluding the cost of fuel) from infirm power. Certificate to the effect that the revenue earned from infirm power (excluding the cost of fuel) from synchronization of different Units till COD of the said units has been adjusted in capital cost, duly certified by Auditor.”



10. In response, the petitioner has submitted the additional information vide affidavit dated 31.5.2016. Accordingly, the capital cost and the annual fixed charges claimed by the petitioner vide affidavit dated 31.5.2016 are as under:

(₹ in lakh)

	Unit-I as on COD 5.3.2011	Unit-I & Unit-II as on COD of Unit-II 21.4.2012	Station as on COD of Unit-III 26.4.2013
Capital cost as per order dated 6.5.2015	308912.38	527967.46	713134.16
Add: IDC as per order dated 9.2.2016	4991.50	21725.70	50214.65
Add: Infirm power allowed in the order dated 9.2.2016	276.59	3228.40	5447.18
Add: Civil Package allowed in the order dated 9.2.2016	0.00	1350.64	6397.74
Add: Notional IDC	1524.98	1524.98	2276.98
Total capital cost claimed	315705.45	555797.18	777470.71

Annual Fixed Charges

(₹ in lakh)

	2010-11 (5.3.2011 to 31.3.2011)	2011-12	2012-13 (1.4.2012 to 20.4.2012)	2012-13 (21.4.2012 to 31.3.2013)	2013-14 (1.4.2013 to 25.4.2013)	2013-14 (26.4.2013 to 31.3.2014)
Depreciation	13540.06	14130.78	14731.66	25940.13	26300.59	37749.09
Interest on Loan	23725.58	24143.47	24416.26	39678.38	38762.81	53884.46
Return on Equity	14693.18	19169.74	19955.02	32697.83	33485.58	46728.67
Interest on Working Capital	4343.03	4473.67	4517.29	14686.66	14746.71	20739.47
O&M Expenses	6870.00	7265.00	7680.00	15360.00	16240.00	23548.00
Secondary fuel oil cost	1626.61	1631.07	1626.61	4423.80	4423.80	7012.02
Total	64798.46	70813.73	72926.83	132786.81	133959.49	189661.72

11. The petitioner was directed to submit additional information vide the Record of Proceedings in hearing dated 6.9.2016, and the same has been complied with by the petitioner vide affidavit dated 16.9.2016. The respondents BSES Rajdhani Power Ltd. (BRPL) and BSES Yamuna Power Ltd. (BYPL) have filed their replies. We now proceed to examine the claims of the petitioner based on the submissions of the parties and the documents available on record, on prudence check, as discussed in the subsequent paragraphs.



Capital Cost

12. Regulation 7(2) of the 2009 Tariff Regulations as amended on 21.6.2011 provides as under:

“(2) The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff:

Provided that in case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out based on the benchmark norms to be specified by the Commission from time to time:

Provided further that in cases where benchmark norms have not been specified, prudence 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..”

13. As stated, the Commission vide order dated 6.5.2015 in Petition No. 229/2010 had approved the capital cost of ₹308912.38 lakh, ₹527967.46 lakh and ₹713134.16 lakh including IDC, financing charges and ERV adjustments as on COD of Unit-I, Unit-II and Unit-III respectively. The break-up of the capital cost allowed in the said order are as under:

	(₹ in lakh)		
	Unit-I as on COD	Unit-I & Unit-II as on COD of Unit-II	Station as on COD of Unit-III
Capital cost excl. IDC	280512.23	481206.49	645979.14
IDC	25781.50	44108.32	64486.37
Notional IDC	2632.65	2632.65	2632.65
FERV	(-) 14.00	20.00	36.00
Opening Capital Cost incl. IDC	308912.38	527967.46	713134.16

14. The petitioner has claimed capital cost based on the admitted capital cost as on COD of each of the units, in Commission's order dated 6.5.2015 in Petition No. 229/2010 and the actual capital expenditure (on cash basis) for the period 26.4.2013 to 31.3.2014. Thus, the capital cost claimed by the petitioner is summarized as under:



(₹ in lakh)

	Unit-I as on COD 5.3.2011	Unit-I & Unit-II as on COD of Unit-II 21.4.2012	Station as on COD of Unit-III
Capital cost allowed vide order dated 6.5.2015	308912.38	527967.46	713134.16
Add: IDC allowed vide order dated 9.2.2016	4991.50	21725.70	50214.65
Add: Infirm power allowed vide order dated 9.2.2016	276.59	3228.40	5447.18
Add: Civil Package allowed vide order dated 9.2.2016	0.00	1350.64	6397.74
Add: Notional IDC	1524.98	1524.98	2276.98
Total capital cost claimed	315705.45	555797.18	777470.71
Additional capital expenditure from 26.4.2013 to 31.3.2014			33658.17
Closing capital cost			811129.29

15. It is observed that the opening capital cost of ₹308912.38 lakh as on COD of Unit-I (5.3.2011), ₹527967.46 lakh as on COD of Unit-II (21.4.2012), and ₹713134.16 lakh as on COD of Unit-III (26.4.2013) includes an amount of ₹25781.50 lakh as IDC & FC and normative IDC of ₹2632.65 lakh, ₹44108.32 lakh as IDC & FC and normative IDC of ₹2632.65 lakh and ₹64486.37 lakh as IDC & FC and normative IDC of ₹2632.65 lakh respectively in order dated 6.5.2015. The petitioner has revised its claim for capital cost as on COD of each unit after treatment of IDC and infirm power as the same has been approved by the Commission, even though the same was only admitted in order dated 9.2.2016. The petitioner has also accounted for the amount corresponding to civil package and notional IDC which however, were not approved by the Commission in order dated 6.5.2015 and also in the subsequent order dated 9.2.2016, in addition to the total admitted capital cost as on COD to arrive at the capital cost of ₹315705.45 lakh, ₹555797.18 lakh and ₹777470.71 lakh as on COD of Unit-I, Unit-II and Unit-III respectively. The petitioner vide affidavit dated 31.5.2016, has submitted as below:



“9. The petitioner had sought review of the said order dated 6.5.2015 submitted vide affidavit dated 22.06.2015 and 15.7.2015 (review petition no 12/RP/2015) relating to certain issues.

Hon’ble Commission was pleased to admit the review petition on three issues vide order dated 09.02.2016 as:

(i) Wrong deduction of escalation in Main Plant Civil Packages;

(ii) Wrong adjustment of revenue from sale of infirm power

(iii) Non-consideration of additional capitalization between commercial operation date of different units for computation of tariff.

In compliance to above order dated 09.02.2016, petitioner has taken effect of these three items on tariff. Hon’ble Commission may be pleased to take the same on record.

10. In the said order dated 09.02.2016, on issue of Non-consideration of Part of loan amount for IDC, Hon’ble Commission has observed that

Quote

“However, considering the fact that there is no compounding of interest on the amount of Rs 1302.94 crore, the same will be considered at the time of revision of tariff based on truing up exercise in terms of Regulation 6 (1) of the 2009 Tariff Regulations. The petitioner is also granted liberty to submit all relevant information in Form 9A/ 9B along with reconciliation of figures while considering the truing-up petition as stated above.”

Unquote

In compliance to above, petitioner has considered total IDC disallowed by Hon’ble commission vide order dated 6.05.215 in absence of working of IDC by Commission for the loan amount of 1302.94 cr. Hon’ble Commission may be pleased to take the same on record.

11. In this matter, it is submitted that the revised Cost Estimate (RCE-1) of the Project through affidavit dated 22.04.2015 has already been submitted to Hon’ble Commission and is once again placed at Annexure-6. Hon’ble Commission may be pleased to take the same on record.”

16. Accordingly, the petitioner has revised the capital cost considering the ‘Wrong deduction of escalation in Main Plant Civil Packages, Wrong adjustment of revenue from sale of infirm power, Non-consideration of additional capitalization between commercial operation date of different units, IDC and notional IDC’ disallowed in the order dated 6.5.2015 for computation of tariff.

17. It is observed that even though three issues (‘Wrong deduction of escalation in Main Plant Civil Packages, Wrong adjustment of revenue from sale of infirm power, Non-consideration of additional capitalization between commercial operation date of different



units) were admitted in the review petition by order dated 9.2.2016, it was clarified in order dated 27.6.2016 that the claim of the petitioner towards Main Plant Civil package was not allowed by order dated 9.2.2016 and hence not considered in the order dated 27.6.2016. Accordingly, only the claims towards (a) wrong adjustment of revenue from sale of infirm power and (b) non-consideration of additional capitalization between COD of different units have been considered in this order.

18. The petitioner vide affidavit dated 31.5.2016 has submitted the Auditor Certificate in justification of the gross block, actual cash expenditure, and the un-discharged liabilities as on COD of each unit. The petitioner has also submitted the details of the actual additional capital expenditure incurred during 2013-14 and the liabilities discharged during the said period.

IDC, FC and FERV

19. The details of IDC & FC, normative IDC and FERV allowed by the Commission vide order dated 6.5.2015 are as under:

(₹ in lakh)			
	Unit-I as on COD	Unit-I & Unit-II as on COD of Unit-II	Station as on COD of Unit-III
IDC	25781.50	44108.32	64486.37
Normative IDC	2632.65	2632.65	2632.65
FERV	(-)14.00	20.00	36.00

20. It is observed that the Commission, while restricting the IDC & FC and normative IDC up to the approved dates of 21.1.2011, 21.4.2011 and 21.7.2011 respectively for Unit-I, Unit-II and Unit-III had allowed normative IDC for all the 3 units up to 31.3.2011 as the details pertaining to notional IDC were not available at that point in time. The relevant portion of the Commission's order is extracted as under:

"45. The petitioner has claimed notional IDC of `4475.65 lakh as on COD of Unit-I of the generating station. The claim of the petitioner has been examined and the following is observed:



(a) The petitioner has claimed notional IDC from the first quarter of 2007-08 and the first draw of the actual loan was made in the fourth quarter (14.2.2008) of 2007-08. The petitioner has worked out the notional IDC for first three quarters of 2007-08 by considering the rate of interest @ 10.75% per annum, applicable to the first draw of loan. But, there was no draw of actual loan for the generating station as well as the petitioner company as a whole before 14.2.2008. Hence, there was no weighted average rate of interest available to work out the normative IDC before actual draw of the loan (14.2.2008). Therefore, no IDC has been allowed before the actual draw of the loan.

(b) As the IDC has been restricted up to 21.1.2011, 21.4.2011 and 21.7.2011 for Unit – I, Unit–II and Unit –III respectively, the normative IDC has also been restricted up to these dates for the said units. However, due to the non submission of information by the petitioner, the normative IDC has been worked out up to 31.3.2011 for all the three units. This is subject to revision as per information to be submitted by the petitioner at time of truing-up of tariff in terms of Regulation 6 of the 2009 Tariff Regulations.”

21. Accordingly, the petitioner was directed to submit relevant information pertaining to normative IDC up to the approved dates of 21.1.2011, 21.4.2011 and 21.7.2011 respectively for Unit-I, Unit-II and Unit-III.

22. As regards IDC, the Commission vide order dated 6.5.2015 had disallowed, IDC pertaining the loan amount of ₹130294 lakh, observing as under:

“40. It is noticed that the petitioner, instead of paying the interest accrued every month was drawing fresh loan equivalent to the interest amount, each and every month, in order to settle the interest payment. Out of the total loan of ₹5950.46 crore, with last draw made on 28.3.2014, the loan amounting to ₹1302.94 crore was drawn to settle the interest amount payment which has resulted in compounding of interest. The petitioner has also claimed the interest on such loan amounting to ₹1302.94 crore as IDC. As per agreement with lender PFC, the petitioner was required to pay the interest but due to its inability of the petitioner to pay the interest monthly, the petitioner has drawn fresh loan to settle the interest liability. Thus, the loan amount of ₹1302.94 crore drawn for payment of interest has not been considered while working out IDC.”

23. Thereafter, the Commission vide order dated 9.2.2016 had approved the IDC on the disallowed loan of ₹130294 lakh with the following observations:

“As certain discrepancies were noted in the information between expenditure claimed and as reflected in Form 9A/9B, need for reconciliation between the figures certified by Chartered Accountant and to those appearing in balance sheet, the loan amount of ₹1302.94 crore which was drawn to settle the interest was not considered while working out the IDC. Since the decision on this count is based on the materials submitted by the petitioner and considered by the Commission, the submission of the petitioner that there is error apparent on record is not acceptable. However, considering the fact that there is no compounding of interest on the amount of ₹1302.94 crore, the same will be considered at the time of revision of tariff based on truing up exercise in terms of



Regulation 6 (1) of the 2009 Tariff Regulations. The petitioner is also granted liberty to submit all relevant information in Form 9A/ 9B along with reconciliation of figures while considering the truing-up petition as stated above.”

24. The Commission had directed the petitioner to submit the details of unit-wise allocation of IDC and in response, the petitioner vide affidavit dated 31.5.2016 has submitted that in absence of working of IDC by the Commission in order dated 6.5.2015, the entire IDC disallowed by the Commission has been considered for the purpose of capital cost. As regards normative IDC, the petitioner has claimed the entire normative IDC disallowed by the Commission in the order dated 6.5.2015.

25. The submissions of the petitioner as regards of notional IDC, IDC & FC is examined as under:

- (a) Notional IDC- The petitioner has not submitted additional details in respect of notional IDC up to 21.1.2011, 21.4.2011 and 21.7.2011 respectively for Unit-I, Unit-II and Unit-III respectively. Accordingly, normative IDC of ₹2632.65 lakh as considered in order dated 6.5.2015 has retained.
- (b) IDC & FC-The Commission in order dated 9.2.2016 had allowed the IDC on the loan amount of ₹130293.75 lakh, which was disallowed vide order dated 6.5.2015. Further, the unit-wise allocation submitted by the petitioner is same as that considered in order dated 6.5.2015. Accordingly, IDC corresponding to the loan amount of ₹130293.75 lakh is allowed and allocated to each unit in the same proportion (gross IDC to IDC allocated to a particular unit) as done in order dated 6.5.2015. Accordingly, the allowable IDC & FC is worked out as below:

Units	IDC allowed up to	IDC (in Rs. lakh)
Unit-I	21.1.2011	28663.98
Unit-II	21.4.2011	49230.38
Unit-III	21.7.2011	72317.93

Accordingly, the total IDC & FC allowed up to COD of Unit-III works out to ₹72317.932 lakh. Also, the normative IDC of 2632.65 lakh allowed up to 31.3.2011 is same as approved in the order dated 6.5.2015.

- (c) Short term FERV –The petitioner's claim of FERV is in order and hence allowed.



Sale of Infirm power

26. As stated, the sale of infirm power was adjusted by the Commission in the review order dated 27.6.2016 and the capital cost was revised accordingly. The relevant portion of the order is extracted as under:

“9. The petitioner has pointed out that the pre-commissioning expenses indicated in row 5.1 of Form-5B are the net pre-commissioning expenses i.e. after adjustment of revenue earned from sale of infirm power which is as per Accounting Policy of the Company. It is further observed from the audited financial statements furnished by the petitioner that the revenue earned from infirm power has been adjusted in the capital cost. The non consideration of the audited financial statements furnished by the petitioner, while passing the order dated 6.5.2015, is in our view an error apparent on the face of the record and the same is required to be corrected. Accordingly, the adjustment of (-) ₹276.59 lakh as on COD of unit-I, ₹3228.40 lakh as on COD of unit-II and ₹5447.18 lakh made on account of revenue earned from infirm power in the table under para 37 of the order dated 6.5.2015 is revised as under:”

27. The Respondents, BRPL and BYPL have submitted that the petitioner has not furnished the details of infirm power sold before the date of commissioning of plant and have urged that the revenue earned through the same be adjusted in the capital cost of the project.

28. We have examined the matter. In response to the directions of the Commission dated 8.3.2016, the petitioner vide affidavit dated 31.5.2016 has submitted the Auditor certificate dated 21.3.2016 indicating that the revenue earned by the petitioner from sale of infirm power from the date of synchronization of each unit has been adjusted in the capital cost of the project. Accordingly, the sale of infirm power amounting to ₹276.59 lakh as on 5.3.2011, ₹3228.40 lakh as on 21.4.2012 and ₹5447.18 lakh as on 26.4.2013 is considered for adjustment in the capital cost on COD of each unit.

Additional Capital Expenditure between COD of units

29. As regards the non-consideration of additional capitalization between commercial operation date of different units of the generating station for computation of tariff as



submitted by the petitioner. The Commission vide order dated 27.6.2016 had observed as under:-

"12. We have examined the matter. It is noticed that the petitioner by affidavit dated 15.7.2015 has raised the additional issue regarding the non consideration of additional capitalisation between the COD of the different units of the generating station in addition to certain other issues raised in affidavit dated 22.6.2015. Since these documents were filed prior to the hearing of the matter "on admission" the Commission after hearing the petitioner on 10.9.2015 admitted certain issues, including this issue of non consideration of additional capitalisation between the COD of the different units of the generating station as raised in affidavit dated 15.7.2015. The Commission having admitted this issue on 10.9.2015, submission of that the respondent that the same should not be permitted cannot be accepted. In our view, the non consideration of Form 1A and Form 5-B of the affidavit dated 15.11.2013 (in original petition) in order dated 6.5.2015, wherein, the additional capitalisation between the COD of the different units of the generating station was submitted by the petitioner, in is an error apparent on the face of the order and the same is required to be corrected, in the interest of justice. Accordingly, review of order dated 6.5.2015 on this ground is allowed.

13. It is observed that the petitioner has filed Petition No. 437/GT2014 for truing up of tariff of the generating station for the period from 5.3.2011 to 2014 and the same is pending for consideration by the Commission. Moreover, the petitioner has been granted liberty in para 35 of the order dated 6.5.2015 to submit certain information. In this background, we consider it prudent to revise the tariff of this generating station considering the issues allowed in this order at the time of truing up of tariff in terms of Regulation 6(1) of the 2009 Tariff Regulations."

30. Clause (1) of Regulation 9 of the 2009 Tariff Regulations provides as under:

*"9. **Additional Capitalisation.** (1) The capital expenditure incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*

- (i) Undischarged liabilities;*
- (ii) Works deferred for execution;*
- (iii) Procurement of initial capital spares within the original scope of work, subject to the provisions of regulation 8;*
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and*
- (v) Change in law.*

Provided that the details of works included in the original scope of work along with estimates of expenditure, undischarged liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff."

31. In terms of the order of the Commission dated 27.6.2016 in Petition No. 12/RP/2015, the affidavit dated 15.11.2013 is considered. The summary of claim of the



petitioner in respect of the expenditure between the COD of units on estimated basis as submitted in Form-1(A) and 5(B) vide affidavit dated 15.11.2013 in Petition No. 229/2010 is as below:

Additional capital expenditure in respect of	Period	Amount (₹in lakh)
Unit-I	5.3.2011 to 31.3.2011	554.00
Unit-I	1.4.2011 to 31.3.2012	27052.00
Unit-I	1.4.2012 to 20.4.2012	0.00
Unit-I & II	21.4.2012 to 31.3.2013	13393.00
Unit-I & II	1.4.2013 to 25.4.2013	39.00

32. Subsequently, the expenditure between the COD of units as claimed by the petitioner vide affidavit dated 31.5.2016 in this petition is as below:

S.No.	Head of work / equipment	From COD of Unit-I (5.3.2011) to 31.3.2011)	1.4.2011 to 31.3.2012	21.4.2012 to 31.3.2013	1.4.2013 to 25.4.2013
		Unit-I	Unit-I	Unit-I & II	Unit-I & II
1	Cost of Land & Site Development				
1.1	Land	0.00	1662.00	199.00	3.00
1.3	Preliminary Investigation & Site development	0.00	17.00	127.70	0.00
	Total Land & Site Development	0.00	1679.00	326.70	3.00
2	Plant & Equipment				
2.1	Steam Generator Island	0.00	4623.89	511.00	0.00
2.2	Turbine Generator Island	0.00	2812.38	377.55	0.00
2.3	BOP Mechanical				
2.3.1	External water supply system	0.00	101.08	0.00	0.00
2.3.2	CW system	0.00	168.45	25.72	0.00
2.3.3	DM water Plant	0.00	139.73	2.48	0.00
2.3.4	Clarification plant	7.59	375.81	0.00	0.00
2.3.5	Ash Handling System	0.00	878.38	987.55	10.85
2.3.6	Coal Handling Plant	0.00	2998.53	733.74	0.00
2.3.7	Rolling Stock and Locomotives	0.00	41.00	0.00	0.00
2.3.8	MGR / Rail Line	210.21	1370.56	0.00	0.00
2.3.9	Air Condition & Ventilation System	0.00	254.74	0.00	0.00
2.3.10	Fire fighting System	57.21	380.38	0.00	0.00
2.3.11	HP/LP Piping*	0.00	736.58	33.33	0.00



2.3.12	Assets not owned by Company	0.00	0.00	0.00	0.00
2.3.13	Workshop Lab	0.00	0.00	0.00	0.00
	Total BOP Mechanical	275.00	7445.25	1782.82	10.85
2.4	BOP Electrical				
2.4.1	Switch Yard Package	258.33	910.62	165.85	0.00
2.4.2	Transformers Package	0.00	2887.95	274.67	0.00
2.4.3	Switch gear Package	0.00	288.42	71.08	0.00
2.4.4	Cables , Cable facilities & grounding	1.53	(-) 285.68	459.86	17.93
	Total BOP Electrical	259.87	3801.30	971.47	17.93
2.5	C & I Package (incl. instrumentation cable)	0.00	478.29	155.82	0.00
	Total Plant & Equipment including taxes & Duties	534.87	19161.10	3798.66	28.78
3	Initial spares	0.00	2407.60	3971.05	0.00
4	Civil Works				
4.1	Main plant/Adm. Building	0.00	574.01	1463.27	0.00
4.2	CW system	0.00	651.74	332.30	0.00
4.3	Cooling Towers	0.00	692.05	145.33	0.00
4.4	Ash disposal area development	0.00	114.05	410.90	0.00
4.5	Township & Colony	18.85	992.21	682.46	6.72
4.6	Temp. construction & enabling works	0.00	147.12	34.24	0.00
4.7	Lining of Canal	0.00	0.01	14.42	0.00
4.8	Chimney	0.00	29.68	0.00	0.00
	Total Civil works	18.85	3200.86	3082.92	6.72
5	Construction & Pre-Commissioning Expenses				
5.1	Tools & Plant	0.00	1215.52	84.23	0.00
	Total Construction & Pre-Commissioning Expenses	0.00	1215.52	84.23	0.00
6	Overheads				
6.1	Establishment	0.00	0.00	369.14	0.00
6.2	MBOA	0.00	(-) 739.07	430.42	0.00
6.2	Design & Engineering	0.00	92.49	0.00	0.00
	Total Overheads	0.00	(-) 646.58	799.57	0.00
7	Total Additional capital expenditure	553.72	24609.91	12063.12	38.50
	Total (incl. IDC, FC, FERV & Hedging Cost)	553.72	27017.51	13376.12	38.03

33. The above claim of expenditure is summarised below:

Additional capital expenditure in respect of	Period	Amount (₹in lakh)
Unit-I	5.3.2011 to 31.3.2011	553.72
Unit-I	1.4.2011 to 31.3.2012	27759.07
Unit-I	1.4.2011 to 31.3.2012	(-)741.56



Unit-I	1.4.2012 to 20.4.2012	0.00
Unit-I & II	21.4.2012 to 31.3.2013	13376.12
Unit-I & II	1.4.2013 to 25.4.2013	38.03

34. A minor difference is observed in the claims submitted vide affidavit dated 15.11.2013 and in the present petition which is on account of rounding off of the decimals. Further, the net expenditure claimed during the period from 1.4.2011 to 31.3.2012 has reduced from ₹27052.00 lakh to ₹27017.51 lakh. It is observed that the claim for additional capital expenditure between the COD of units is towards items like land, plant & machinery, civil works, BOP mechanical, BOP electrical, C&I package, pre-commissioning expenses, MBOA, capital spares etc. It is observed that the expenditure is incurred on actual basis and is in respect of works/assets which are within the original scope of work of the project. Further, these are essential items of expenditure towards the completion of the project. Accordingly, the additional capital expenditure between the COD of units is approved on prudence check in terms of Regulation 9(1)(i) and 9(1)(ii) of the 2009 Tariff Regulations.

Capital Cost as on COD

35. Based on the above observations, the capital cost after considering the admitted IDC & FC, FERV and deduction of un-discharged liabilities is worked out and allowed as under:

(₹ in lakh)

	2010-11 (5.3.2011 to 31.3.2011)	2011-12 (1.4.2011 to 31.3.2012)	2012-13 (1.4.2012 to 20.4.2012)	2012-13 (21.4.2012 to 31.3.2013)		2013-14 (1.4.2013 to 25.4.2013)		2013-14 (COD of Unit III)		Total Capital cost of the station on 26.4.2013
	Unit I	Unit I	Unit I	Unit I	Unit II	Unit I	Unit II	Unit I & II	Unit III	Unit I, II, III
Opening Capital Cost (Excl. IDC)	280512.23 [^]	312625.17	339642.67	339642.67	172967.93 [^]	340362.52	209162.41	549562.96	152669.90 [^]	702232.86
Add: Adjustment due to sale of infirm power	276.59	0.00	0.00	0.00	2951.81	0.00	0.00	0.00	2218.78	2218.78
Add: IDC	28663.98	0.00	0.00	0.00	20566.40	0.00	0.00	0.00	23087.55	23087.55



	2010-11 (5.3.2011 to 31.3.2011)	2011-12 (1.4.2011 to 31.3.2012)	2012-13 (1.4.2012 to 20.4.2012)	2012-13 (21.4.2012 to 31.3.2013)		2013-14 (1.4.2013 to 25.4.2013)		2013-14 (COD of Unit III)		Total Capital cost of the station on 26.4.2013
	Unit I	Unit I	Unit I	Unit I	Unit II	Unit I	Unit II	Unit I & II	Unit III	Unit I, II, III
allowed										
Add: Normative IDC*	2632.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Add: Short term FERV loss/(gain)	-14.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	36.00	36.00
Additional capital exp.	553.72	27017.51	0.00	719.84	12656.28	26.08	11.95	0.00	0.00	0.00
Closing Capital cost	312625.17	339642.67	339642.67	340362.52	209162.41	340388.60	209174.36	549562.96	178012.23	727575.20

^the opening capital cost excluding IDC is same as that allowed in order dated 6.5.2015

**The interest on normative loan allowed as on COD of the generating station is to be treated as income in the Financial Statements i.e. Profit and Loss A/c and Balance Sheet of the petitioner as the same forms part of capital cost for the purpose of tariff determination.*

Actual Additional Capital Expenditure from 26.4.2013 to 31.3.2014

36. The Commission vide order dated 6.5.2015 has allowed the total projected additional capital expenditure of ₹22990.00 lakh for the period 2013-14 in terms of Regulation 9(1)(i) and 9(1)(ii) of the 2009 Tariff Regulations as under:

	(₹ in lakh)
Work/ equipment	26.4.2013- 31.3.2014
Land	375
Steam Generator Island	6725
Turbine Generator Island	3536
BoP Mechanical	4075
BoP Electrical	2453
C&I package	359
Civil works	5467
Total	22990

37. By order dated 6.5.2015, the petitioner was directed to submit the details of the actual capital expenditure and the de-capitalisation from COD of the generating station till 31.3.2014. The relevant para of order dated 6.5.2015 is extracted below:-

"52. Accordingly, on prudence check, we allow the additional capitalization of the said expenditure claimed in terms of Regulation 9(1)(i) and 9(1)(ii) of the 2009 Tariff Regulations. The petitioner is directed to furnish the details of the actual additional capital expenditure and the de-capitalization from COD of the generation station till 31.3.2014, duly reconciled with the books of accounts, at the time of truing-up of



tariff of the generating station in terms of Regulation 6 of the 2009 Tariff Regulations."

38. In compliance with the above, the petitioner vide affidavit dated 31.5.2016 has submitted the details duly reconciled with the books of accounts. The break-up of the actual additional capital expenditure claimed by the petitioner is detailed as under:

(₹ in lakh)		
S.N.	Works/Items	26.4.2013 to 31.3.2014
1	Cost of Land & Site Development	
1.1	Land	770.00
1.2	Rehabilitation & Resettlement (R&R)*	
1.3	Preliminary Investigation & Site development	0.00
	Total Land & Site Development	770.00
2	Plant & Equipment	
2.1	Steam Generator Island	6247.00
2.2	Turbine Generator Island	8570.00
2.3	BOP Mechanical	
2.3.1	External water supply system *(MU pipe)	0.00
2.3.2	CW system	17.22
2.3.3	DM water Plant	6.00
2.3.4	Clarification plant	3.38
2.3.5	Chlorination Plant	0.00
2.3.6	Fuel Handling & Storage system	0.00
2.3.7	Ash Handling System	1351.00
2.3.8	Coal Handling Plant	1881.00
2.3.9	Rolling Stock and Locomotives	94.00
2.3.10	MGR / Rail Line	293.03
2.3.11	Air Compressor System	0.00
2.3.12	Air Condition & Ventilation System	47.30
2.3.13	Fire fighting System	76.00
2.3.14	HP/LP Piping*	145.16
2.3.15	Assets not owned by Company	548.14
2.3.16	Workshop Lab(incl. pp)	33.33
	Total BOP Mechanical	4495.56
2.4	BOP Electrical	
2.4.1	Switch Yard Package(incl. Tr. Line)	55.00
	De-capitalisation of start up line	0.00
	Net after de-capitalisation	0.00
2.4.2	Transformers Package	422.06
2.4.3	Switch gear Package	106.00
2.4.4	Cables , Cable facilities & grounding	834.00
2.4.5	Lighting	0.00
2.4.6	Emergency D.G. set	0.00
	Total BOP Electrical	1417.06
2.5	C & I Package (incl. instn. cable)	17.00
	Total Plant & Equipment including taxes & Duties	20746.62



S.N.	Works/Items	26.4.2013 to 31.3.2014
2.6	Taxes and Duties (Incl in Packages)	
2.6.1	Custom Duty	0.00
2.6.2	Other Taxes & Duties	0.00
	Total Taxes & Duties	0.00
	Total Plant & Equipment	20746.62
3	Initial spares	5877.87
4	Civil Works	
4.1	Main plant/Adm. Building	286.87
4.2	CW system	894.43
4.3	Cooling Towers	2.74
4.4	DM water Plant	0.00
4.5	Clarification plant	0.00
4.6	chlorination plant	0.00
4.7	Fuel Handling & Storage system	0.00
4.8	Coal Handling Plant (incl. mech)	0.00
4.9	MGR & Marshalling Yard	0.00
4.1	Ash Handling System (Incl. in mech)	0.00
4.11	Ash disposal area development	70.10
4.12	Fire fighting System	0.00
4.13	Township & Colony	1564.44
4.14	Temp. construction & enabling works	68.66
4.15	Lining of Canal	0.60
4.16	Chimney	103.24
	Total Civil works	2991.08
5	Construction & Pre- Commissioning Expenses	
5.1	Erection Testing and commissioning	0.00
5.2	Site supervision	0.00
5.3	Operator's Training	0.00
5.4	Construction Insurance	0.00
5.5	Tools & Plant	103.00
5.6	Start up fuel	0.00
	Total Construction & Pre- Commissioning Expenses	103.00
6	Overheads	
6.1	Establishment	873.11
6.2	MBOA	218.91
6.2	Design & Engineering	18.58
6.3	Audit & Accounts	0.00
6.4	Contingency	0.00
	Total Overheads	1110.60
7	ACE excluding IDC & FC	31599.17
8	IDC, FC, FERV & Hedging Cost	
8.1	Interest During Construction (IDC)	2059.00
	Total IDC, FC, FERV & Hedging Cost	2059.00
	TOTAL	33658.17

39. The Respondents, BRPL and BYPL have requested that the petitioner be directed to furnish the details of the pre-commissioning expenses.



40. The matter has been examined. The COD of the generating station is 26.4.2013 and the cut-off date of the generating station in terms of the 2009 Tariff Regulations is 31.3.2016. The petitioner has claimed additional capital expenditure of ₹33658.17 lakh for the period from 26.4.2013 to 31.3.2014 towards items like land, plant & machinery, civil works, capital spares etc. The petitioner has submitted the item wise claim of total additional capital expenditure inclusive of the liabilities discharged during the period. It is observed that the additional capital expenditure is inclusive of liabilities discharged for ₹13046.00 lakh. It is further observed that the pre-commissioning expenses claimed by the petitioner are based on the actual expenditure and the actual additional capital expenditure incurred by the petitioner is in respect of above said works/assets which are within the original scope of work of the project and the same had also been allowed by order dated 6.5.2015 on projected basis. Considering the fact, the total actual additional capital expenditure claimed for the period from 26.4.2013 to 31.3.2014 is in respect of actual execution of the above works. Based on the above, the total additional capital expenditure ₹33658.17 lakh in 2013-14 in respect of the items/asset indicated in the table in para 38 above is allowed, on prudence check, after exclusion of liabilities in terms of Regulation 9(1) (i) and (ii) of the 2009 Tariff Regulations.

Initial Spares

41. As regards the capitalization of initial spares, the Commission in order dated 6.5.2015 had allowed the capitalization of ₹6858.98 lakh (as on COD of Unit-III) towards initial spares, as claimed by the petitioner. The petitioner in this petition has claimed initial spares of ₹5877.87 lakh from COD (26.4.2013) to 31.3.2014. Thus, the total initial spares up to 31.3.2014 work out to ₹12736.85 lakh which constitutes 1.67% (approx) of the capital cost of ₹761233.37 lakh as on 31.3.2014. Since the expenditure on initial spares is within the ceiling limit of 2.5% of the capital cost as specified under Regulation 8 of the 2009 Tariff Regulations, the same is allowed to be capitalized.



42. The petitioner vide affidavit dated 31.5.2016 has submitted the reconciliation statement of the actual additional capital expenditure from 26.4.2013 to 31.3.2014 with the books of accounts as detailed under:

	(₹ in lakh)
	26.4.2013 to 31.3.2014
Opening Gross block	824725
Closing Gross block	852075
Addition during the period	27350
Amount of liabilities in Additional capital expenditure	6740
Additional capital expenditure (cash basis)	20611
Add: liabilities discharged during the period	13046
Net Additional capital expenditure	33658

Liabilities

43. The petitioner was directed vide order dated 6.5.2015 to submit the details of undischarged liabilities duly certified by the Auditor. The relevant para of the said order is extracted below:-

"42. The details of undercharged liabilities duly certified by the Chartered Accountant do not match with the liabilities given in the Balance Sheet of the respective years of the petitioner company. Though, for the purpose of tariff, certified details submitted by the petitioner have been considered, the petitioner is directed to submit the necessary clarification/reconciliation statement at the time of truing up of tariff in terms of Regulation 6 of the 2009 Tariff Regulations...."

44. The petitioner has submitted the audited details of liabilities vide affidavits dated 31.5.2016 and 16.9.2016. The undischarged liabilities as on 31.3.2014 as submitted by the petitioner is ₹40966.16 lakh. Further, the liabilities in the additional capital expenditure claimed from 26.4.2013 to 31.3.2014 amount to ₹6740 lakh. The petitioner has also claimed discharge of liabilities on actual basis for ₹13046 lakh in 2013-14 and the same is allowed under Regulation 9(1)(i) of the 2009 Tariff Regulations.

45. Based on the above discussions, the actual additional capital expenditure allowed for the period from 26.4.2013 to 31.3.2014 is summarized as under:



(₹ in lakh)

		Liabilities discharged	Additional capital expenditure allowed	Total
1	Cost of Land & Site Development			
1.1	Land	766.13	3.87	770.00
	Total Land & Site Development	766.13	3.87	770.00
2	Plant & Equipment			
2.1	Steam Generator Island	5999.67	247.33	6247.00
2.2	Turbine Generator Island	3528.23	5041.77	8570.00
2.3	BOP Mechanical			
2.3.1	External water supply system *(MU pipe)	0.00	0.00	0.00
2.3.2	CW system	16.56	0.66	17.22
2.3.3	DM water Plant	2.52	3.48	6.00
2.3.4	Clarification plant	0.05	3.33	3.38
2.3.5	Chlorination Plant	0.00	0.00	0.00
2.3.6	Fuel Handling & Storage system	0.00	0.00	0.00
2.3.7	Ash Handling System	431.48	919.52	1351.00
2.3.8	Coal Handling Plant	646.78	1234.22	1881.00
2.3.9	Rolling Stock and Locomotives	0.00	94.00	94.00
2.3.10	MGR / Rail Line	0.00	293.03	293.03
2.3.11	Air Compressor System	0.00	0.00	0.00
2.3.12	Air Condition & Ventilation System	32.69	14.61	47.30
2.3.13	Fire fighting System	62.57	13.43	76.00
2.3.14	HP/LP Piping*	110.79	34.37	145.16
2.3.15	Assets not owned by Company	0.00	548.14	548.14
2.3.16	Workshop Lab(incl pp)	0.00	33.33	33.33
	Total BOP Mechanical	1303.44	3192.12	4495.56
2.4	BOP Electrical			
2.4.1	Switch Yard Package(incl Tr. Line)	33.92	21.08	55.00
2.4.2	Transformers Package	347.52	74.54	422.06
2.4.3	Switch gear Package	122.17	-16.17	106.00
2.4.4	Cables , Cable facilities & grounding	420.28	413.72	834.00
2.4.5	Lighting	0.00	0.00	0.00
2.4.6	Emergency D.G. set	0.00	0.00	0.00
	Total BOP Electrical	923.89	493.17	1417.06
2.5	C & I Package (incl instn. cable)	10.87	6.13	17.00
	Total Plant & Equipment	11766.11	8980.51	20746.62
3	Initial spares	246.98	5630.89	5877.87
4	Civil Works			
4.1	Main plant/Adm. Building	0.00	286.87	286.87
4.2	CW system	0.00	894.43	894.43
4.3	Cooling Towers	1.15	1.59	2.74
4.4	Ash disposal area development	70.10	0.00	70.10
4.5	Fire fighting System	0.00	0.00	0.00
4.6	Township & Colony	6.82	1557.62	1564.44
4.7	Temp. construction & enabling	70.33	-1.67	68.66



		Liabilities discharged	Additional capital expenditure allowed	Total
	works			
4.8	Lining of Canal	0.00	0.60	0.60
4.9	Chimney	0.00	103.24	103.24
	Total Civil works	148.40	2842.68	2991.08
5	Construction & Pre-Commissioning Expenses			
5.1	Erection Testing and commissioning	0.00	0.00	0.00
5.2	Site supervision	0.00	0.00	0.00
5.3	Operator's Training	0.00	0.00	0.00
5.4	Construction Insurance	0.00	0.00	0.00
5.5	Tools & Plant	0.00	103.00	103.00
5.6	Start up fuel	0.00	0.00	0.00
	Total Construction & Pre-Commissioning Expenses	0.00	103.00	103.00
6	Overheads			
6.1	Establishment	0.00	873.11	873.11
6.2	MBOA	100.19	118.72	218.91
6.2	Design & Engineering	18.58	0.00	18.58
6.3	Audit & Accounts	0.00	0.00	0.00
6.4	Contingency	0.00	0.00	0.00
	Total Overheads	118.76	991.84	1110.60
7	Annual fixed charges excluding IDC & FC	13046.38	18552.79	31599.17
8	IDC, FC, FERV & Hedging Cost			
8.1	Interest During Construction (IDC)	0.00	2059.00	2059.00
	Total IDC, FC, FERV & Hedging Cost	0.00	2059.00	2059.00
	TOTAL	13046.38	20611.79	33658.17

46. Accordingly, the capital cost allowed for the purpose of tariff for the period 26.4.2013 to 31.3.2014 is as under:

	(₹ in lakh)
	2013-14 (26.4.2013 to 31.3.2014)
Opening Capital Cost	727575.20
Add: Additional capital expenditure	33658.17
Closing Capital Cost	761233.37
Average Capital Cost	744404.28



Debt-Equity Ratio

47. Regulation 12 of the 2009 Tariff Regulations provides as under:

“(1) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff.

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

Explanation.- The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure of the generating station or the transmission system.

(2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.

(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.

48. Considering the details of the cumulative cash expenditure as submitted at Form-14A along with net loan position as on COD of the generating station, the debt-equity ratio as on the COD of Unit-I, Unit-II and Unit-III works out to 70:30, 71.67:28.33, 70:30 respectively. As such, the actual debt-equity ratio has been considered where the actual equity deployed is less than 30% and debt-equity ratio of 70:30 has been considered where the actual equity deployed is more than 30% for the purpose of tariff, in terms of Regulation 12 of the 2009 Tariff Regulations.

Return on Equity

49. Return on equity has been worked out considering the base rate of 15.50% and the MAT rate applicable to petitioner for respective years in terms of Regulation 15 of the



2009 Tariff Regulation. The Return on Equity for 2010-11 has not been grossed up as no tax has been paid against the same. For the balance period, the MAT rate for the respective years has been considered for grossing up. Accordingly, return on equity has been worked out after accounting for actual additional capital expenditure as under:

(₹ in lakh)

	2010-11 (5.3.2011 to 31.3.2011)	2011-12	2012-13 (1.4.2012 to 20.4.2012)	2012-13 (21.4.2012 to 31.3.2013)	2013-14 (1.4.2013 to 25.4.2013)	2013-14 (26.4.2013 to 31.3.2014)
Notional Equity-Opening	93621.43	93787.55	101892.80	101892.80	161360.35	161371.12
Addition of Equity due to additional capital expenditure	166.12	8105.25	0.00	59467.55	10.78	63501.12
Normative Equity-Closing	93787.55	101892.80	101892.80	161360.35	161371.12	224872.25
Average Normative Equity	93704.49	97840.18	101892.80	131626.58	161365.74	193121.69
Return on Equity (Base Rate) %	15.500	15.500	15.500	15.500	15.500	15.500
Tax Rate for the year (%)	0.000	20.008	20.008	20.008	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	15.500	19.377	19.377	19.377	19.610	19.610
Return on Equity(Pre Tax) (Annualised)	14524.20	18958.49	19743.77	25505.28	31643.82	37871.16

Interest on loan

50. In terms of Regulation 16 of the 2009 Tariff Regulations, Interest on loan has been worked out as under:

- a. The gross normative loan as per the debt equity ratio as arrived above (para 52) as on respective COD of units has been considered.
- b. Addition to normative loan on account of additional capital expenditure approved above has been considered.
- c. Average net loan is calculated as average of opening and closing.
- d. The weighted average rate of interest has been worked out on the basis of the actual loan portfolio of respective year applicable to the project and attached as Annexure-1

51. The necessary calculation for interest on loan is as under:



(₹ in lakh)

	2010-11 (5.3.2011 to 31.3.2011)	2011-12	2012-13 (1.4.2012 to 20.4.2012)	2012-13 (21.4.2012 to 31.3.2013)	2013-14 (1.4.2013 to 25.4.2013)	2013-14 (26.4.2013 to 31.3.2014)
Gross opening loan	218450.01	218837.62	237749.87	237749.87	388164.58	388191.84
Cumulative repayment of loan upto previous year	0.00	990.07	14446.04	15244.71	34624.13	36363.36
Net Loan Opening	218450.01	217847.54	223303.83	222505.17	353540.45	351828.48
Addition due to additional capital expenditure	387.60	18912.26	0.00	150414.71	27.25	148169.28
Repayment of loan during the year	990.07	13975.06	798.67	19379.43	1739.23	29014.38
Adj. due to de-capitalisation during the year / period	0.00	519.09	0.00	0.00	0.00	0.00
Net Repayment	990.07	13455.96	798.67	19379.43	1739.23	29014.38
Net Loan Closing	217847.54	223303.83	222505.17	353540.45	351828.48	470983.38
Average Loan	218148.78	220575.69	222904.50	288022.81	352684.46	411405.93
Weighted Average Rate of Interest of loan (%)	10.7508	10.8252	10.8383	10.8393	10.8399	10.8488
Interest on Loan (Annualised)	23452.72	23877.77	24159.14	31219.71	38230.55	44632.46

Depreciation

52. The petitioner has claimed depreciation considering the weighted average rate of depreciation of 4.2851%, 4.2915%, 4.6117%, 4.6207%, and 4.7525% for the periods 2010-11, 2011-12, 1.4.2012 to 20.4.2012, 21.4.2012 to 31.3.2013, 1.4.2013 to 25.4.2013 and 26.4.2013 to 31.3.2014 respectively.

53. The rate of depreciation is in order and has been considered for the purpose of tariff calculation. Further, proportionate adjustment has been made to the cumulative depreciation on account of de-capitalization of assets. Accordingly, depreciation has been worked out as under:



(₹ in lakh)

	2010-11 (5.3.2011 to 31.3.2011)	2011-12	2012-13 (1.4.2012 to 20.4.2012)	2012-13 (21.4.2012 to 31.3.2013)	2013-14 (1.4.2013 to 25.4.2013)	2013-14 (26.4.2013 to 31.3.2014)
Opening Capital Cost	312071.45	312625.17	339642.67	339642.67	549524.93	549562.96
Add: Additional Capital Expenditure	553.72	27017.51	0.00	209882.26	38.03	211670.40
Closing Capital Cost	312625.17	339642.67	339642.67	549524.93	549562.96	761233.37
Average Capital Cost	312348.31	326133.92	339642.67	444583.80	549543.95	655398.16
Depreciable value @ 90%	237504.62	249163.95	260574.10	354931.77	449305.41	544226.75
Balance depreciable value	237504.62	235779.61	233250.59	313032.56	386903.33	456431.97
Rate of Depreciation (%)	4.2851	4.2851	4.2915	4.6117	4.6207	4.7525
Depreciation (Annualised)	13384.34	13975.06	14575.70	20502.87	25392.71	31147.79
Less: Cumulative Depreciation reduction due to de-capitalization	0.00	35.89	0.00	0.00	0.00	0.00
Cumulative depreciation (at the end of the period)	990.07	14929.24	15727.91	35107.34	36846.56	65860.94

O & M Expenses

54. O & M expenses as claimed by the petitioner and allowed for the purpose of tariff in order dated 6.5.2015 in Petition No. 229/2010 has been allowed as under:

(₹ in lakh)

2010-11 (5.3.2011 to 31.3.2011)	2011-12	2012-13 (1.4.2012 to 20.4.2012)	2012-13 (21.4.2012 to 31.3.2013)	2013-14 (1.4.2013 to 25.4.2013)	2013-14 (26.4.2013 to 31.3.2014)
6870.00	7265.00	7680.00	15360.00	16240.00	23548.00



Interest on Working Capital

Fuel Components in Working Capital

55. The petitioner was directed to submit the details of fuel data for the preceding three months from COD of each unit duly audited and certified by the Statutory Auditor. The relevant para of order dated 6.5.2015 is extracted below:-

"73. The fuel data furnished by the petitioner is not legible / readable. However, there is lot of variation in the cost of coal claimed by the petitioner and those worked out and allowed by the Commission. However, for prudence check of the fuel data, the fuel components in working capital shall be trued up at the time of revision of tariff based on truing-up exercise in terms of Regulation 6 of the 2009 Tariff Regulations, based on the price and GCV of domestic / imported/ e-auction coal and secondary fuel oil. Accordingly, the petitioner is directed to furnish fuel data for the preceding three months from COD of units/ station, price and GCV of domestic/imported/e-auction coal and secondary fuel oil, duly audited and certified by the statutory auditors, at the time of truing-up of tariff of the generating station for the said period."

56. The petitioner in Form-13B of the affidavit 31.5.2016 has submitted the GCV of coal procured and burnt for the preceding one month of February 2011 for Unit-I, for the months of January 2012 and February 2012 for Unit-II and for the months of January 2013, February 2013 and March 2013 for Unit-III. In the said affidavit, the petitioner has submitted the price of coal procured and burnt for the preceding 3 months of December 2010, January 2011 and February 2011 for Unit-I, for the months of January 2012, February 2012 and March 2012 for Unit-II and for the months of January 2013, February 2013 and March 2013 for Unit-III. As regards oil data, the petitioner has submitted GCV of secondary fuel oil for the preceding 3 months for all the Units and price of oil for the month of December 2010 prior to COD of Unit-I, February 2012 for Unit-II and for the month of February, 2013 prior to COD of Unit-III of the generating station duly audited and certified. Based on this, the petitioner has claimed the cost for fuel components in working capital as under:



	(₹ in lakh)					
	(5.3.2011 to 31.3.2011)	2011-12	2012-13 (1.4.2012 to 20.4.2012)	2012-13 (21.4.2012 to 31.3.2013)	2013-14 (1.4.2013 to 25.4.2013)	2013-14 (26.4.2013 to 31.3.2014)
Cost of Coal for 2 months	13232.35	13268.60	13232.35	40784.84	40784.84	58833.17
Cost of Main Secondary Fuel Oil for 2 months	271.10	271.85	271.10	737.30	737.30	1168.67

57. We have examined the matter. The fuel components in the working capital, has been worked out based on the fuel data for the respective three months prior to COD of each units/generating station as furnished by the petitioner. Also, the price of coal for Unit-I based on the preceding one month data for February 2011 as submitted by the petitioner has been covered.

(i) Unit-I (5.3.2011 to 20.4.2012): Coal cost and GCV for the preceding months of January, 2011 and February, 2011 (the coal cost for the month of December, 2010 has not been considered in the absence of data on break-up of imported / domestic coal). The cost for secondary fuel oil for the month of December, 2010 has been considered for computation of fuel components and ECR in working capital as the petitioner has not procured oil during the months of January, 2011 and February, 2011.

(ii) Unit-I & Unit-II (21.4.2012 to 25.4.2013): Coal cost and GCV for the preceding months of January, 2012 and February, 2012 has been considered as the generating station was under shutdown in the month of March, 2012. The petitioner has furnished the secondary fuel oil data for the preceding month of February 2012 prior to COD of Unit-II and the same has been considered for computation of fuel components in working capital.

(iii) Units-I to III (generating station) (26.4.2013 to 31.3.2014): Coal cost and GCV for the preceding three months, i.e., January 2013, February, 2013 and March, 2013 and secondary fuel oil data for the month of February, 2013 has been considered. The



petitioner has not procured any secondary fuel oil during January, 2013 and March, 2013 for computation of fuel components in working capital.

58. Accordingly, the fuel components in the working capital (annualised), are worked out as under:

<i>(₹ in lakh)</i>						
	2010-11 (5.3.2011 to 31.3.2011)	2011-12	2012-13 (1.4.2012 to 20.4.2012)	2012-13 (21.4.2012 to 31.3.2013)	2013-14 (1.4.2013 to 25.4.2013)	2013-14 (26.4.2013 to 31.3.2014)
Cost of Coal – 2 months	11729.10	11761.23	11729.10	40779.47	40779.47	58825.42
Cost of secondary fuel oil – two months	271.10	271.85	271.10	737.30	737.30	1168.67

Maintenance Spares

59. The Maintenance spares in the working capital as allowed in order dated 6.5.2015 is allowed as under:

<i>(₹ in lakh)</i>						
	2010-11 (5.3.2011 to 31.3.2011)	2011-12	2012-13 (1.4.2012 to 20.4.2012)	2012-13 (21.4.2012 to 31.3.2013)	2013-14 (1.4.2013 to 25.4.2013)	2013-14 (26.4.2013 to 31.3.2014)
Maintenance Spares (Annualised)	1374.00	1453.00	1536.00	3072.00	3248.00	4709.60

O & M Expenses for 1 month

60. Based on O & M expense norms, the year-wise O & M expenses for the generating station of allowed for calculation of working capital in order dated 6.5.2015 is allowed as under:

<i>(₹ in lakh)</i>					
2010-11 (5.3.2011 to 31.3.2011)	2011-12	2012-13 (1.4.2012 to 20.4.2012)	2012-13 (21.4.2012 to 31.3.2013)	2013-14 (1.4.2013 to 25.4.2013)	2013-14 (26.4.2013 to 31.3.2014)
572.50	605.42	640.00	1280.00	1353.33	1962.33



Receivables

61. Receivables have been worked out on the basis of two months of fixed and energy charges and allowed as under:

(₹ in lakh)

	2010-11 (5.3.2011 to 31.3.2011)	2011-12	2012-13 (1.4.2012 to 20.4.201 2)	2012-13 (21.4.2012 to 31.3.2013)	2013-14 (1.4.2013 to 25.4.2013)	2013-14 (26.4.2013 to 31.3.2014)
Variable Charges (two months)	11729.10	11761.23	11729.10	40779.47	40779.47	58825.42
Fixed Charges (two months)	10642.14	11638.57	11992.33	18535.24	21766.76	27398.82
Total	22371.24	23399.80	23721.42	59314.71	62546.23	86224.25

62. SBI PLR has been considered on all the above components of working capital for the purpose of calculating interest on working capital. Accordingly, the rate of interest for the respective periods, along with the Interest on Working Capital calculation is summarized below:

(₹ in lakh)

	2010-11 (5.3.2011 to 31.3.2011)	2011-12	2012-13 (1.4.2012 to 20.4.2012)	2012-13 (21.4.2012 to 31.3.2013)	2013-14 (1.4.2013 to 25.4.2013)	2013-14 (26.4.2013 to 31.3.2014)
Cost of coal- 2 months	11729.10	11761.23	11729.10	40779.47	40779.47	58825.42
Oil stock-2 Months	271.10	271.85	271.10	737.30	737.30	1168.67
O & M expenses- 1 Month	572.50	605.42	640.00	1280.00	1353.33	1962.33
Maintenance Spares	1374.00	1453.00	1536.00	3072.00	3248.00	4709.60
Receivables- 2 months	22371.24	23399.80	23721.42	59314.71	62546.23	86224.25
Total Working Capital	36317.93	37491.30	37897.62	105183.48	108664.33	152890.27
Rate of Interest (%)	11.00	11.00	11.00	13.50	13.50	13.20
Interest on Working Capital	3994.97	4124.04	4168.74	14199.77	14669.68	20181.52



Normative Annual Plant Availability Factor

63. The Normative Annual Plant Availability factor of 85% has been considered for the purpose of tariff.

Annual Fixed Charges

64. Accordingly, the annual fixed charges allowed for the period 5.3.2011 to 31.3.2014 is summarized as under:

	(₹ in lakh)					
	2010-11 (5.3.2011 to 31.3.2011)	2011-12	2012-13 (1.4.2012 to 20.4.2012)	2012-13 (21.4.2012 to 31.3.2013)	2013-14 (1.4.2013 to 25.4.2013)	2013-14 (26.4.2013 to 31.3.2014)
Depreciation	13384.34	13975.06	14575.70	20502.87	25392.71	31147.79
Interest on Loan	23452.72	23877.77	24159.14	31219.71	38230.55	44632.46
Return on Equity	14524.20	18958.49	19743.77	25505.28	31643.82	37871.16
Interest on Working Capital	3994.97	4124.04	4168.74	14199.77	14669.68	20181.52
O&M Expenses	6870.00	7265.00	7680.00	15360.00	16240.00	23548.00
Secondary fuel oil cost	1626.61	1631.07	1626.61	4423.80	4423.80	7012.02
Total	63852.84	69831.44	71953.96	111211.43	130600.56	164392.94

Note: (1) All figures are on annualised basis. (2) All figures under each head have been rounded. The figure in total column in each year is also rounded. As such, the sum of individual items may not be equal to the arithmetic total of the column

65. The difference in the annual fixed charges determined by order dated 6.5.2015 and those determined by this order shall be adjusted in accordance with Regulation 6(6) of the 2009 Tariff Regulations.

66. The petitioner has set up a 400 kV D/C (65.66 km/ckt.) transmission line (COD 1.3.2011) connecting the 400 kV IGSTPP, Jhajjar to 400/220 kV Mundka Sub-station at Delhi constructed by Delhi Transco Limited, for evacuation of power generated from IGSTPP to respondents (Delhi discoms). The transmission charges for the period from COD of Unit-I of the generating station up to the date of grant of transmission license (5.3.2011 to 6.11.2013) had been determined vide order dated 6.5.2015 in Petition No.



229/2010, based on the audited expenditure on 5.3.2011, which was same as on COD of the line i.e. 1.3.2011.

67. It is observed that the petitioner has filed a separate Petition No. 439/TT/2014 for revision of transmission tariff of 400 kV D/C Jhajjar-Mundka transmission line for the period from COD i.e. 1.3.2011 to 31.3.2014, after true-up exercise as the same is pending. Accordingly, transmission charges for the said line will be determined by a separate order.

68. Petition No. 437/GT/2014 is disposed of in terms of the above.

Sd/-
(Dr. M.K.Iyer)
Member

Sd/-
(A. S. Bakshi)
Member



DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2009-14)*(in lakh)*

	Loan deployed as on COD	Interest Rate	Additions during the tariff period	Total
PFC Drawal -1	455068.00	10.81%	0.00	455068.00
PFC Drawal -2	0.00	10.81%	3500.00	3500.00
PFC Drawal -3	0.00	10.81%	3697.18	3697.00
PFC Drawal -4	0.00	10.81%	5000.00	5000.00
PFC Drawal -5	0.00	10.80%	5000.00	5000.00
PFC Drawal -6	0.00	10.78%	4263.23	4263.00
PFC Drawal -7	0.00	10.77%	5000.00	5000.00
PFC Drawal -8	0.00	10.88%	5000.00	50.00
PFC Drawal -9	0.00	10.97%	4428.05	4428.00
PFC Drawal -10	0.00	11.12%	4373.10	4373.00
PFC Drawal -11	0.00	11.05%	5000.00	5000.00
PFC Drawal -12	0.00	10.98%	4402.64	4403.00
PFC Drawal -13	0.00	10.82%	1500.00	1500.00
PFC Drawal -14	0.00	10.81%	2603.62	2604.00
PFC Drawal -15	0.00	10.82%	1500.00	1500.00
PFC Drawal -16	0.00	10.78%	1200.00	1200.00
PFC Drawal -17	0.00	10.80%	2341.60	2342.00
PFC Drawal -18	0.00	10.93%	2372.56	2373.00
PFC Drawal -19	0.00	11.05%	1750.36	1750.00
PFC Drawal -20	0.00	11.22%	1500.00	1500.00
PFC Drawal -21	0.00	11.17%	2406.22	2406.00
PFC Drawal -22	0.00	11.26%	1500.00	1500.00
PFC Drawal -23	0.00	11.30%	2764.11	2764.00
PFC Drawal -24	0.00	11.25%	5000.00	5000.00
PFC Drawal -25	0.00	11.27%	5000.00	5000.00
PFC Drawal -26	0.00	11.31%	2532.56	2533.00
PFC Drawal -27	0.00	11.38%	2451.76	2452.00
PFC Drawal -28	0.00	11.30%	2460.03	2460.00
PFC Drawal -29	0.00	11.17%	1705.03	1705.00
PFC Drawal -30	0.00	11.15%	1721.20	1721.00
PFC Drawal -31	0.00	11.17%	3000.00	3000.00
PFC Drawal -32	0.00	11.00%	1771.47	1771.00
PFC Drawal -33	0.00	10.98%	3000.00	3000.00
PFC Drawal -34	0.00	10.87%	1632.10	1632.00
PFC Drawal -35	0.00	10.55%	1660.22	1660.00
PFC Drawal -36	0.00	10.66%	1755.29	1755.00
PFC Drawal -37	0.00	10.71%	1607.59	1608.00
PFC Drawal -38	0.00	10.45%	1785.80	1786.00
PFC Drawal -39	0.00	10.61%	5000.00	5000.00



	Loan deployed as on COD	Interest Rate	Additions during the tariff period	Total
PFC Drawal -40	0.00	10.65%	1715.72	1716.00
PFC Drawal -41	0.00	10.61%	1289.40	1289.00
PFC Drawal -42	0.00	10.43%	1787.92	1788.00
PFC Drawal -43	0.00	11.27%	4000.00	4000.00
PFC Drawal -44	0.00	11.15%	2500.00	2500.00
PFC Drawal -45	0.00	11.31%	2500.00	2500.00
PFC Drawal -46	0.00	11.27%	12000.00	12000.00
PFC Drawal -47	0.00	11.22%	1000.00	1000.00
	4550.68		139978.76	595046.00

**WEIGHTED AVERAGE RATE OF INTEREST ON LOAN DURING 2009-14
TARIFF PERIOD**

(₹ in lakh)

	2010-11 (05.03.2011 to 31.03.2011)	2011-12 (01.04.2011 to 31.03.2012)	2012-13 (01.04.2012 to 20.04.2012)	2012-13 (21.04.2012 to 31.03.2013)	2012-13 (01.04.2013 to 25.04.2013)	2013-14 (26.04.2013 to 31.03.2014)
Gross loan - Opening	455068.00	467265.00	541155.00	541155.00	571259.00	573046.00
Cumulative repayments of Loans up to previous year	0.00	0.00	0.00	0.00	18633.00	28161.00
Net loan - Opening	455068.00	467265.00	541155.00	541155.00	552625.00	544885.00
Add: drawal(s) during the Year	12197.00	73890.00	0.00	30104.00	1788.00	22000.00
Less : Repayment(s) of Loans during the year	0.00	0.00	0.00	18633.00	9528.00	28912.00
Net loan - Closing	467265.00	541155.00	541155.00	552625.00	544885.00	537973.00
Average Net Loan	461166.00	504210.00	541155.00	546890.00	548755.00	541429.00
Rate of Interest on Loan on annual basis	10.751%	10.825%	10.838%	10.839%	10.840%	10.849%
Interest on Loan	49579.00	54582.00	58652.00	59279.00	59484.00	58738.00

