CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 206/GT/2013
with
Petition No.272/GT/2014

Coram:
Shri Gireesh B. Pradhan, Chairperson
Shri A.K. Singhal, Member
Shri A.S. Bakshi, Member

Date of Hearing: 13.01.2015
Date of Order: 22.01.2016

IN THE MATTER OF

Petition No. 206/GT/2013

Revision of tariff of Kahalgaon Super Thermal Power Station, Stage-II (1500 MW) for the period from 1.4.2009 to 31.3.2014 after the truing up exercise, based on actual capital expenditure incurred for the period 2009-12 and projected capital expenditure for 2013-14

AND

IN THE MATTER OF

Petition No. 272/GT/2014

Revision of tariff of Kahalgaon Super Thermal Power Station, Stage-II (1500 MW) for the period from 1.4.2009 to 31.3.2014 after the truing up exercise, based on actual capital expenditure incurred for the period 2009-14

AND

IN THE MATTER OF

NTPC Ltd,
NTPC Bhawan,
Core-7, SCOPE Complex,
7, Institutional Area,
Lodhi Road, New Delhi-110003 ……**Petitioner**

Vs

1. West Bengal State Electricity Distribution Company Ltd
Vidyut Bhawan, Block-DJ,
Sector-II, Salt Lake
Kolkata – 700091

2. Bihar State Power (Holding) Company Ltd,
(*erstwhile Bihar State Electricity Board*)
Vidyut Bhawan, Bailey Road
Patna – 80 0021

3. Jharkhand Vidyut Vikas Nigam Ltd
(*erstwhile Jharkhand State Electricity Board*)
Engineering Building, HEC, Dhurwa,
Ranchi - 834004

4. Grid Corporation of Orissa Ltd.,
Janpath, Bhubaneswar-751 022

5. Power Department,
Govt of Sikkim, Kazi Road,
Gangtok, Sikkim–737101

6. Madhya Pradesh Power Trading Company Ltd
Shakti Bhawan, Rampur
Jabalpur-482 008

7. Maharashtra State Electricity Distribution Company Limited
Prakashgard, Bnadra (East)
Mumbai-400 051

8. Gujarat Urja Vikas Nigam Ltd
Sardar Patel Vidyut Bhawan,

9. Uttar Pradesh Power Corporation Ltd
Shakti Bhavan, 14, Ashok Marg,
Lucknow – 226001

10. Power Development Department,
Government of J& K,
Civil Secretariat, Srinagar

11. Power Department
Union Territory of Chandigarh
Addl. Office Building
Sector 9D, Chandigarh

12. Punjab State Power Corporation Ltd
The Mall, Patiala-147001

13. Himachal Pradesh State Electricity Board
Vidut Bhavan, Kumar House
Shimla-171004

14. Jaipur Vidyut Vitran Nigam Ltd
Vidyut Bhawan, Janpath,
Jaipur – 302 205

15. Ajmer Vidyut Vitran Nigam Ltd,
Old Power House, Hatthi Bhatta, Jaipur Road,
Ajmer – 305001

16. Jodhpur Vidyut Vitran Nigam Ltd
New Power House, Industrial Area,
Jodhpur – 342003

17. Chhattisgarh State Power Distribution Company Ltd
Sundernagar, Dhangania
Raipur-492013

18. Haryana Power Purchase Centre
Shakti Bhawan, Sector VI,
Panchkula - 134019

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

20. BSES-Yamuna Power Ltd
Shakti Kiran Building, Karkardooma,
Delhi- 110072

21. Tata Power Delhi Distribution Company Ltd
NDPL House,
Hudson Lines, Kingsway Camp,
Delhi-110009

22. Uttrakhand Power Corporation Ltd
Urja Bhawan, Kanwali Road,
Dehradun – 248001

23. Electricity Department,
Administration of Daman and Diu,
Daman-396 210

24. Electricity Department,
Administration of Dadra Nagar Haveli
Silvassa., Via VAPI. …..**Respondents**

Present:

Shri Ajay Dua, NTPC
Shri A. Basu Roy, NTPC
Shri R.B. Sharma, Advocate, BRPL & GRIDCO
Shri Himanshu Shekhar, Advocate, JSEB
Shri Anurag Naik, MPPMCL

ORDER

Petition No. 206/GT/2013 has been filed by the petitioner for revision of the tariff determined by order dated 13.4.2012 in Petition No. 282/2009 in respect of Kahalgaon Super Thermal Power Station, Stage-II (1500 MW) ('the generating station') for the period 2009-14, after truing-up exercise based on the actual additional capital expenditure incurred for the period 2009-12 and projected capital expenditure for 2012-14 in accordance with the proviso to Regulation 6(1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 ('the 2009 Tariff Regulations').

2. During the pendency of the above petition, the petitioner has filed Petition No. 272/GT/2014 for revision of tariff in respect of the generating station for the period 2009-14

after truing-up exercise based on the actual additional capital expenditure incurred during the period 2009-14 in accordance with Regulation 6(1) of the 2009 Tariff Regulations.

3. The generating station with a capacity of 1500 MW comprises of three units of 500 MW each. The dates of commercial operation of the different units of the generating station are as under:

	Date of commercial operation
Unit-I	1.8.2008
Unit-II	30.12.2008
Unit-III/Generating Station	20.3.2010

4. The Commission by order dated 13.4.2012 in Petition No. 282/2009 had determined the tariff of the generating station for the period 2009-14 considering the capital cost of ₹314673.82 lakh. Aggrieved by the said order, the petitioner filed Review Petition 11/RP/2012 and the Commission by order dated 8.2.2013 allowed the said review petition and the capital cost and annual fixed charges of the generating station for 2009-14 determined by order dated 13.4.2012 was revised as under:

Capital Cost

(₹ in lakh)

	2009-10		**2010-11**	**2011-12**	**2012-13**	**2013-14**
	1.4.2009 to 19.3.2010	**20.3.2010 to 31.3.2010**				
Opening capital cost	314673.82	472136.77	473542.77	512256.77	537106.77	563570.77
Add: Projected Additional Capital Expenditure	0.00	1406.00	38714.00	24850.00	26464.00	1000.00
Closing capital cost	**314673.82**	**473542.77**	**512256.77**	**537106.77**	**563570.77**	**564570.77**
Average capital cost	**314673.82**	**472839.77**	**492899.77**	**524681.77**	**550338.77**	**564070.77**

Annual Fixed Charges

(₹ in lakh)

	2009-10		**2010-11**	**2011-12**	**2012-13**	**2013-14**
	1.4.2009 to 19.3.2010	**20.3.2010 to 31.3.2010**				
Return on Equity	22166.57	33308.25	34721.34	36960.16	38767.51	39734.84
Interest on Loan	13946.01	20036.87	20366.91	20890.42	21302.35	21121.55
Depreciation	16196.08	24316.93	25348.56	26983.03	28302.50	29008.70
Interest on Working Capital	6231.52	9468.86	9587.08	9761.78	9884.66	9987.58
O&M Expenses	13000.00	18850.00	19923.00	21068.50	22272.00	23548.00
Cost of secondary fuel oil	1451.72	3663.13	3663.13	3673.17	3663.13	3663.13
Total	**72991.90**	**109644.04**	**113610.02**	**119337.05**	**124192.16**	**127063.80**

5. Clause (1) of 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."

6. The petitioner has filed these petitions in accordance with Regulation 6(1) of the 2009 Tariff Regulations for revision of tariff of the generating station for the period 2009-14 after truing-up exercise. The petitioner has considered the capital cost based on the capital cost admitted as on 31.3.2009 and the actual capital expenditure incurred (on cash basis) during the years 2009-10 to 2013-14. Accordingly, the capital cost and the annual fixed charges claimed by the petitioner in the petitions are as under:

Capital Cost

(₹ in lakh)

	2009-10 (1.4.2009 to 19.3.2010)	**2009-10 (20.3.2010 to 31.3.2010)**	**2010-11**	**2011-12**	**2012-13**	**2013-14**
Opening capital cost	314673.82	476276.92	478432.92	505020.94	521937.34	544374.05
Add: Additional Capital Expenditure	3480.00	2156.00	26588.02	16916.40	22436.72	5418.69
Closing capital cost	**318153.82**	**478432.92**	**505020.94**	**521937.34**	**544374.05**	**549792.75**
Average capital cost	**316413.82**	**477354.92**	**491726.93**	**513479.14**	**533155.70**	**547083.40**

Annual Fixed Charges

(₹ in lakh)

	2009-10 (1.4.2009 to 19.3.2010)	**2009-10 (20.3.2010 to 31.3.2010)**	**2010-11**	**2011-12**	**2012-13**	**2013-14**
Return on Equity	22289.14	33626.31	34240.42	35343.80	36698.17	38538.20
Interest on Loan	13789.33	20457.58	21095.38	23029.00	22866.92	22140.38
Depreciation	16319.23	24582.19	25373.47	26458.44	27497.14	27995.43
Interest on Working Capital	6233.37	9489.79	9592.75	9761.73	9857.35	9962.75
O&M Expenses	13000.00	18850.00	19923.00	21068.50	22272.00	23548.00
Cost of secondary fuel oil	1451.72	3663.13	3663.13	3673.17	3663.13	3663.13
Total	**73082.79**	**110669.00**	**113888.16**	**119334.64**	**122854.71**	**125847.89**

7. The petitioner has also filed additional information in compliance with the directions of the Commission and has served copies of the same on the respondents. Reply to the petition has been filed by the respondents, UPPCL, GRIDCO, BRPL, JSEB and MPPTCL and the petitioner has filed its rejoinder to the said replies. Based on the submissions of the parties and the documents available on record, we proceed to examine the claim of the petitioner in the petitions above, on prudence check, as stated in the subsequent paragraph

Capital Cost

8. The last proviso to Regulation 7 of the 2009 Tariff Regulations, as amended on 21.6.2011, provides as under:

> *"Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2009 duly trued up by excluding un-discharged liability, if any, as on 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14, as may be admitted by the Commission, shall form the basis for determination of tariff."*

Capital cost as on 1.4.2009

9. The petitioner has claimed the capital cost of ₹314673.82 lakh as on 1.4.2009, which was worked out and approved after deducting the un-discharged liabilities of ₹16808.00 lakh (as against amount of ₹16807.54 lakh on actual basis) from the admitted capital cost of ₹331481.82 lakh as on 31.3.2009. However, considering the capital cost of ₹331481.82 lakh allowed as on 31.3.2009 and the corresponding un-discharged liabilities of ₹16807.54 lakh, the allowable capital cost as on 1.4.2009 works out to ₹314674.28 lakh, which has been considered for the purpose of tariff.

Additional Capital Expenditure

10. Regulation 9 of the 2009 Tariff Regulations, as amended on 21.6.2011, 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) Un-discharged 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;*

(iii) 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, un-discharged liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff.

(2) The capital expenditure incurred on the following counts after the cut-off date may, in its discretion, be admitted by the Commission, subject to prudence check:

(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;

(ii) Change in law;

(iii) Deferred works relating to ash pond or ash handling system in the original scope of work;

(iv) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) including due to geological reasons after adjusting for proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation; and

(v) In case of transmission system any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement of switchyard equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system:

Provided that in respect sub-clauses (iv) and (v) above, any expenditure on acquiring the minor items or the assets like tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2009.

(vi) In case of gas/liquid fuel based open/ combined cycle thermal generating stations, any expenditure which has become necessary on renovation of gas turbines after 15 year of operation from its COD and the expenditure necessary due to obsolescence or non-availability of spares for successful and efficient operation of the stations.

Provided that any expenditure included in the R&M on consumables and cost of components and spares which is generally covered in the O&M expenses during the major overhaul of gas turbine shall be suitably deducted after due prudence from the R&M expenditure to be allowed.

(vii) Any capital expenditure found justified after prudence check necessitated on account of modifications required or done in fuel receipt system arising due to non-materialisation of full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station.

(viii) Any un-discharged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date, after prudence check of the details of such deferred liability, total estimated cost of package, reason for such withholding of payment and release of such payments etc."

11. The additional capital expenditure allowed vide order dated 13.4.2012 in Petition No.282/2009 is as under:

(₹ in lakh)

Head of work/ Equipment	2009-10		2010-11	2011-12	2012-13	2013-14	Total
	1.4.2009 to 19.3.2010	20.3.2010 to 31.3.2010					
Projected additional capital expenditure corresponding to asset/work	0	1406	30509	19494	22083	1000	74492
Discharge of un discharged liabilities actual for the year 2010-11and projected for the period 2011-13	0	0	8205	5356	4381	0	17942
Total	**0**	**1406**	**38714**	**24850**	**26464**	**1000**	**92434**

12. The projected additional capital expenditure allowed by Commission order dated 13.4.2012 were mainly in respect of works deferred for execution and initial spares under Regulation 9(i) (ii) (iii) and for works towards Ash dyke/Ash handling system under Regulation 9(1)(i) and 9(2)(iii) of the 2009 Tariff Regulations.

Additional capital expenditure from 1.4.2009 to 19.3.2010 (COD of Unit-III)

13. The petitioner has claimed additional capital expenditure of ₹3480.00 lakh on account of discharge of liabilities for the period from 1.4.2009 to 20.3.2010. In consideration of the liabilities discharged (rounded upto two place decimal), the admissible additional capital expenditure works out to ₹3480.12 lakh and the same is considered for the purpose of tariff.

Capital Cost as on 20.3.2010 (COD of Unit-III)

14. The petitioner has claimed capital cost of ₹476276.92 lakh as on 20.3.2010 (COD of Unit-III) as against the capital cost of ₹472136.77 lakh approved by Commission's order dated 8.2.2013 in R.P. No.11/RP/2012.The details of the claim as detailed under:

(₹ in lakh)

Capital cost as on 1.4.2009	314673.82
Add: Additional capital expenditure claimed during the period from 1.4.2009 to 19.3.2010 (COD of Unit-III)	3480.00
Capital cost as on 19.3.2010 (*prior to additional capitalization as on COD of Unit-III)*	318153.82
Add: Additional capitalization as on 20.3.2010 (₹176692.21 lakh additions as per audited financial statements on accrual basis, between the COD of Units-II & III *less* ₹19213.11 lakh corresponding un-discharged liabilities)	157479.10
Less: Reduction in capital cost due to IDC disallowed	1428.00
Add: Notional IDC capitalized as on COD of Unit-III	3891.00
Add: Short Term FERV on contracts	(-) 1819.00
Capital cost as on 20.3.2010 (COD of Unit-III)	**476276.92**

15. As stated, the Commission vide order dated 8.2.2013 in Review Petition No. 11/RP/2012 had approved the capital cost of ₹472136.77 lakh as on 20.3.2010. This capital cost was approved considering the opening capital cost of ₹314673.82 lakh as on 1.4.2009, the additional capitalization as on COD of Unit-III (on cash basis) amounting to ₹160879.95 lakh, Reduction of IDC on account of FIFO-Average method of repayment amounting to ₹1597.99 lakh, Short-Term FERV charged to P&L amounting to (-) ₹1819.00 lakh. However, the normative IDC over and above the actual IDC was directed to be considered at the time of truing-up of tariff of the generating station. The claim of the petitioner is examined as under:

(a) As against the petitioner's claim for capital cost of ₹314673.82 lakh as on 1.4.2009, an amount of ₹314674.28 lakh has been allowed as on 1.4.2009 as above. As against the petitioner's claim for additional capital expenditure of ₹3480.00 lakh for the period from 1.4.2009 to 20.3.2010 (COD of Unit-III), an amount of ₹3480.12 lakh has been considered as above.

(b) The petitioner has claimed additional capital expenditure of ₹157479.10 lakh as on 20.3.2010 (COD of Unit-III) after reduction of un-discharged liabilities of ₹19213.11 lakh from the value of gross block addition between the COD of Unit-II to Unit-III amounting to ₹176692.21 lakh. This claim of the petitioner is in order and hence allowed.

(c) As regards the reduction in capital cost on account of converting IDC based on average method of repayment as against the FIFO method of repayment, it is noticed that the petitioner has claimed reduction of the capital cost by ₹1428.00 lakh. Since the Commission by order dated 8.2.2013 has considered this matter and had disallowed amount of ₹1597.99 lakh under this head, the same has been considered.

(d) The petitioner's claim for capitalization of ₹3891.00 lakh towards Notional IDC as on 20.3.2010 (COD of Unit-III), the same has not been allowed as the provisions of 2009 Tariff Regulations do not provide for the same. However, in terms of clause (a) of Regulation 7 of 2009 Tariff Regulations, the normative IDC over and above the actual IDC has been worked out as ₹2615.55 lakh, considering the quarterly cumulative cash expenditure position, debt-equity ratio and actual IDC and accordingly allowed for the purpose of tariff.

(e) Short term FERV charged to revenue: The petitioner has claimed amount of (-) ₹1819.00 lakh corresponding to the short term exchange rate variation charged to Profit and Loss account as per AS-11. Since, capitalization of FERV up to the COD of the generating station is admissible, the petitioners claim is allowed under this head.

16. Based on the above discussions, the admissible capital cost as on 20.3.2010 (COD of Unit-III) is worked out as ₹474832.05 lakh (inclusive of initial spares for ₹3521.00 lakh).

Additional capital expenditure from 20.3.2010 to 31.3.2014

17. The petitioner's claim for actual additional capital expenditure during the period from 20.3.2010 to 31.3.2014 is as under:

(₹ in lakh)

Head Of Work/ Equipment	**2009-10**		**2010-11**	**2011-12**	**2012-13**	**2013-14**
	1.4.2009 to 19.3.2010	**20.3.2010 to 31.3.2010**				
Total Additional capital expenditure	-	2156.00	20135.00	13011.00	19136.00	3197
Total De-capitalization	-	-	-	-	-	(-) 0.481
Discharge of Liabilities	3480.00	-	6453.00	3905.00	3301.00	2222.00
Total Additional Capital Expenditure	**3480.00**	**2156.00**	**26588.00**	**16916.00**	**22437**	**5419.00**

18. The break-up of additional capital expenditure claimed by the petitioner is detailed as under:

(₹ in lakh)

	Activity	**Allowed in Order dated 13.4.2012**	**Actual Capital Expenditure**					**TOTAL**
			2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**	
A1	**Works deferred for execution & procurement of initial spares – under the original scope of work**							
1	Land & Infrastructure	3464.00	-	557.00	165.00	1122.00	25.00	1869.00
2	Main Plant Superstructure	5346.00	-	456.00	945.00	3718.00	215.00	5334.00
3	Admin & service building	70.00	-	20.0	-	249.00	3.00	272.00
4	Chimney	50.00	-	8.00	-	-	3.00	11.00
5	Permanent Township	5158.00	-	276.00	162.00	4957.00	331.00	5726.00
6	Construction tools and plants	1464.00	-	0.00	323.00	813.00	271.00	1407.00
7	Steam Generator	6321.00	-	2182.00	1583.00	-	-	3765.00
8	Turbine Generator	1278.00	-	0.00	3787.00	1834.00	-	5621.00
9	Control & Instrumentation	31.00		-	-	-	- 3.00	3.00
10	Coal Transportation system	39927.00	-	15891.83	4359.00	3227.20	685.00	24163.03
11	Coal handling system	578.00	-	58.00	-	450.00	0.00	508.00
12	Water & cooling system	1027.00	-	0.00	39.00	0.00	1.00	40.00
13	Service and general station equipments.	251.00	-	57.00	-	-	-	57.00
14	Electrical Systems	341.00	-	-	-	33.13	85.00	118.13
15	Satellite system	345.00	-	0.00	8.00	315.00	3.00	326.00
16	MBOA & Misc.	514.00		408.00	297.00	409.00	115.00	1229.00
17	Township meter packaging, External electrification, boundary fencing, EPABX, Capital	-	2155.50	-	-	-	-	2156.00

	spares etc.							
	Subtotal (A1) works deferred for	66195.00	2156.00	19913.83	11668.00	17127.33	1740.00	**52605.16**
A2- Ash Dyke/Ash Handing System								
18	Ash Dyke	4000.00	-	0.00	-	2008.00	1458.00	3466.00
19	Ash Handling System	2628.00	-	221.00	1343.00	-	-	1564.00
20	AWRS & Treatment System	263.00	-	-	-	-	-	-
	Sub-total (A2)	**6891.00**	**-**	**221.00**	**1343.00**	**2008.00**	**1458.00**	**5030.00**
A	Total Additional Capital Expenditure (A1+A2)	73086.00	2156.00	20134.83	13011.00	19135.33	3198.00	57635.16
B	De-capitalization	-	-	-	-	-	-	-
	Revenue items De-capitalization	-	-	-	-	-	(-) 0.48	(-) 0.48
C	Discharge of liabilities (B)	15812.00	-	6453.00	3905.00	3301.00	2222.00	15881.00
	Total (A+B = C)	**88898.00**	**2156.00**	**26588.02**	**16916.40**	**22436.72**	**5418.69**	**72822.87**

19. As against the projected additional capital expenditure of ₹74492.00 lakh allowed vide order dated 13.4.2012 in Petition No 282/2009, the actual additional capital expenditure claimed by the petitioner at the time of truing-up under Regulation 6 (1) of the 2009 Tariff Regulation for the period 2009-14 is ₹57635.16 lakh.

20. The actual additional capital expenditure claimed by the petitioner has been examined in the subsequent paragraphs.

21. The Commission in its order dated 13.4.2012 had allowed projected additional capital expenditure of ₹1406.00 lakh in 2009-10 (20.3.2010 to 31.3.2010).The petitioner has now claimed actual additional capital expenditure of ₹2155.50 lakh in 2009-10 for items like Township meter packaging, External electrification, boundary fencing, EPABX, Capital spares etc. The cut-off date of the generating station is 31.3.2013. As the expenditure claimed by the petitioner in respect of works deferred for execution and initial spares are within the original scope of work and is upto the cut-off date of the generating station, the same is allowed to be capitalized in terms of Regulation 9(1) (ii) and Regulation 9(1)(iii) of the 2009 Tariff Regulations.

Land and Infrastructure

22. The Commission in its order dated 13.4.2012 had allowed projected additional capital expenditure of ₹3464.00 lakh during 2009-14 towards Land & Infrastructure. The petitioner vide affidavit dated 11.8.2014 in Petition No. 272/GT/2014 has now claimed actual additional capital

expenditure of ₹1869.00 lakh under Regulation 9 (1) (ii) of the 2009 Tariff Regulations. In justification of the claim the petitioner has submitted that an amount of ₹1870.00 lakh has been capitalized by the cut-off date as against the approved expenditure of ₹3464.00 lakh. The petitioner has also submitted part of the work under this head consists of land and associated civil works like road etc. for MGR and for linked mines. It has also submitted that the mines are yet to be developed by ECL and the matter has been taken up by the petitioner with ECL and MoP, GoI for expeditious development. The petitioner has stated that considering the status of mines, the works related for MGR lines has also been taken up matching with the development of the mines. The petitioner has added that deferring the expenditure matching with the development of mines shall benefit the beneficiaries by avoiding pre-loading in the tariff. The petitioner has further submitted that an expenditure of ₹25.00 lakh in 2013-14 claimed after the cut-off date is towards the final payment for works capitalized by cut-off date. Accordingly, the petitioner has prayed for allowing the expenditure and grant liberty to claim said works on completion and capitalization. The respondent UPPCL has submitted that the petitioner may be directed to capitalized MGR as and when mines are developed and coal is available for transportation by MGR. The respondent GRIDCO and BRPL have submitted that the balance amount cannot be incurred during the period 2009-14 and the liberty sought by the petitioner for inclusion in the tariff period 2014-19 would not be permissible as the same is required to be decided as per the provisions of the 2014 Tariff Regulations. The respondent has also stated that the expenditure of ₹25.00 lakh claimed under Regulation 9 (2) (viii) cannot be allowed as the same has been executed after the cut-off date. Similar submissions have been made by respondent MPPCL. The respondent TPDDL has submitted that all items which could not be capitalized by the petitioner cannot be permitted to be capitalized and is liable to be rejected. In response the petitioner vide its rejoinder affidavit dated 24.11.2014 has clarified that the petitioner has sought liberty to approach the Commission to consider the expenditure as and when incurred under the applicable tariff regulations. It has also stated that the expenditure of ₹25.00 lakh is towards final payment for works capitalized by the cut-off date (31.3.2013) and therefore is in the nature of liability and is permissible under Regulation 9 (2) (viii).

23. We have examined the matter. Considering the fact that the expenditure of ₹1844.00 lakh (i.e ₹557.00 lakh in 2010-11, ₹165.00 lakh in 2011-12 and ₹1122.00 lakh in 2012-13) is in respect of works deferred for execution and is within the cut-off date of the generating station, the same is allowed under Regulation 9(1)(ii) of the 2009 Tariff Regulations. The expenditure of ₹25.00 lakh is towards deferred liabilities in 2013-14 and hence the same is allowed under Regulation 9(2)(viii) of the 2009 Tariff Regulations. The petitioner has submitted that it has deferred the expenditure on MGR system matching with the development of mines and has sought liberty for capitalizing the expenditure as and when incurred under the applicable tariff regulations. In line with the observations contained in para 44 of this order, the petitioner is granted liberty to approach the Commission for capitalization of MGR and the same shall be dealt as per prevailing regulations.

Main Plant Superstructure

24. As against the projected additional capital expenditure of ₹5346.00 lakh allowed for the period 2009-14 vide Commission's order dated 13.4.2012, the petitioner has claimed additional capital expenditure ₹5334.00 lakh of which ₹5119.00 lakh (₹456.00 lakh in 2010-11, ₹945.00 lakh in 2011-12 and ₹3718.00 lakh in 2012-13) claimed under Regulation 9(1) (ii) i.e works deferred for execution and the additional capital expenditure of ₹215.00 lakh in 2013-14 under Regulation 9(2)(viii) of the 2009 Tariff Regulations. In justification of the same, the petitioner has submitted as under:

> *"These works were allowed by Hon'ble Commission vide order dated 13.4.2012. all works amounting to ₹51.19 crore were completed by the cut-off date except a portion of works related to structural painting & civil works of workshop building. A small portion of work relating to structural painting had to be off loaded due to continued poor performance on part of the contractor M/s. HSCL and re-awarded to M/s. Shalimar paints in January 2013. This consequently led to completion of this work amounting to ₹2.15 crore in April 2013. The works related to finishing works of O&M workshop amounting to ₹100 lakh are in progress and shall be capitalized in 2014-15. Hon'ble Commission may be pleased to allow the expenditure and grant liberty to claim the said works."*

25. The respondent BRPL & GRIDCO have submitted that the balance amount cannot be incurred during the period 2009-14 and the liberty sought by the petitioner for inclusion in the tariff period 2014-19 would not be permissible as the same is required to be decided as per the

provisions of the 2014 Tariff Regulations. It has also submitted that the power to relax under Regulation 44 of the 2009 Tariff Regulations can be invoked for technical and procedural considerations. The respondent MPPCL has submitted that the provisions of the 2009 Tariff Regulations do not provide for consideration of additional capitalization in respect of works after the cut-off date and hence the claim of the petitioner may be rejected. In response the petitioner vide its rejoinder has clarified that an amount of ₹5119.00 lakh has been capitalized by the cut-off date except the portion of the work related to structural painting, which was off loaded and re-awarded in January 2013 and completed immediately after the cut-off date.

26. We have examined the matter. In view of the submissions of the petitioner, the expenditure of ₹5119.00 lakh is allowed under Regulation 9(1)(ii) of the 2009 Tariff Regulations. However, the expenditure of ₹215.00 lakh claimed in 2013-14 under Regulation 9(2) (viii) & 9 (1) read with Regulation 44 of the 2009 Tariff Regulations has not been considered as it appears that the said expenditure pertains to deferred works under 9(1) (ii) of the 2009 Tariff Regulations. Moreover, the petitioner has not specified the sub category of Regulation 9(1) and the bifurcation of the amount under Regulation 9(2) and 9(1). The petitioner had sufficient time period of 3 years from the COD to the cut-off date of the generating station in order to execute these works. Having failed to do so, the petitioner cannot in our view, seek the invocation of Regulation 44 for relaxation of the provisions of the 2009 Tariff Regulations for capitalization of said expenditure. Accordingly, the claim of the petitioner for capitalization of ₹215.00 lakh in 2013-14 i.e. after the cut-off date is not allowed.

Administration & Service building

27. As against the projected additional capital expenditure of ₹70.00 lakh allowed by Commission's order dated 13.4.2012, the petitioner has claimed additional capital expenditure of ₹269.00 lakh (₹20.00 lakh in 2010-11 and ₹249.00 lakh in 2012-13) under Regulation 9(1)(ii) and ₹3.00 lakh in 2013-14 under Regulation 9(2)(viii)) of the 2009 Tariff Regulations. In justification of the claim the petitioner has submitted that it had inadvertently omitted to project the expenditure towards the air conditioners of service building and administrative building, as originally envisaged in the scope of work, in the tariff petition filed on projected basis. It has also

submitted that said works were completed and an amount of ₹249.00 lakh has been capitalized in 2012-13 i.e. cut-off date and an amount of ₹3.00 lakh has been capitalized in 2013-14 as balance final payments towards works executed upto the cut-off date. Accordingly, the petitioner has prayed for allowing the expenditure and grant liberty to claim said works on completion and capitalization. The respondents BRPL & GRIDCO have submitted that the balance amount of ₹3.00 lakh executed after the cut-off date is not permissible under the 2009 Tariff Regulations. The respondent MPPCL has submitted that the additional capital expenditure on the air conditioning of the building may be disallowed as the same has been incurred without the approval of the Commission.

28. We have examined the matter. In consideration of the justification furnished by the petitioner and since the air conditioning of the building has been envisaged in the original scope of work, we are inclined to consider the submissions of the petitioner and allow the capitalization of the expenditure of ₹272.00 lakh including ₹3.00 lakh towards balance final payments during 2010-14 under Regulation 9 (1) (ii) and 9 (2) (viii) of the 2009 Tariff Regulations, as the works was executed within the cut-off date.

Chimney

29. As against the projected additional capital expenditure of ₹50.00 lakh allowed by Commission's order dated 13.4.2012, the petitioner has claimed additional capital expenditure ₹11.00 lakh [₹8.00 lakh in 2010-11 under Regulation 9(1)(ii) and ₹3.00 lakh in 2013-14 under Regulation 9(2)(viii)] of the 2009 Tariff Regulations. The petitioner has submitted that these works have been completed for an amount of ₹11.00 lakh which includes balance final payment of ₹3.00 lakh for these works after the cut-off date. Accordingly, the petitioner has prayed for allowing the expenditure. Considering the fact that the expenditure of ₹11.00 lakh includes ₹3.00 lakh balance final payments on deferred liabilities in respect of works executed within the cut-off dates, the total expenditure claimed by the petitioner is allowed under Regulation 9 (1) (ii) and 9 (2) (viii).

Permanent Township

30. As against the projected additional capital expenditure of ₹5158.00 lakh allowed by Commission's order dated 13.4.2012, the petitioner has claimed additional capital expenditure ₹5726.00 lakh [₹276.00 lakh in 2010-11, ₹162.00 lakh in 2011-12 and ₹4957.00 lakh in 2012-13 under Regulation 9(1)(ii) and ₹331.00 lakh in 2013-14 under Regulation 9(2)(viii)] of the 2009 Tariff Regulations. The petitioner has submitted that an amount of ₹5395.00 lakh was capitalized by cut-off date and part of work had to be foreclosed and off loaded due to poor performance of the contractor M/s. NPCC Ltd. The petitioner has also submitted that with continued efforts by the petitioner, the work was finally completed before the cut-off date and an amount of ₹331.00 lakh has been capitalized in 2013-14 as balance final payments towards the work completed within the cut-off date. The petitioner has also submitted that the work of community marriage hall is in progress and balance work shall be completed and capitalized for ₹450.00 lakh in 2014-15 and accordingly, the Commission may condone the delay and allow capitalization under this head. The respondents BRPL & GRIDCO have submitted that the balance amount of ₹450.00 lakh in 2014-15 executed after the cut-off date is not permissible under the 2009 Tariff Regulations. The respondent MPPCL has submitted that the provisions of the 2009 Tariff Regulations do not provide for consideration of additional capitalization in respect of works after the cut-off date and hence the claim of the petitioner may be rejected.

31. We have examined the matter. It is noticed that there is difference in the actual expenditure claimed as against the projected expenditure allowed by the Commission in order dated 13.4.2012. This variation of ₹568.00 lakh is according to the petitioner attributable to the cost variations due to longer span of activity and minor variations in the scope of work. In view of the submissions of the petitioner, the actual expenditure of ₹5395.00 lakh incurred during 2010-13 i.e. within the cut-off date is allowed under the provisions of the Regulation 9 (1) (ii) of the 2009 Tariff Regulations. Also, the expenditure of ₹331.00 lakh capitalized in 2013-14 as balance final payments towards the works completed within the cut-off date is allowed as deferred liabilities under Regulation 9 (2) (viii) of the 2009 Tariff Regulations. However, the

claim of the petitioner for capitalization of expenditure of ₹450.00 lakh in 2014-15 has not been allowed and the same shall be considered under the provisions of the 2014 Tariff Regulations.

Construction tools and plants

32. As against the projected additional capital expenditure of ₹1464.00.00 lakh allowed by Commission's order dated 13.4.2012, the petitioner has claimed additional capital expenditure of ₹1136.00 lakh (₹323.00 lakh in 2011-12 and ₹813.00 lakh in 2012-13 under Regulation 9(1) (ii) and ₹271.00 lakh in 2013-14 under 9(2) (viii) & 9(1) read with Regulation 44) of the 2009 Tariff Regulations. As the claim of the petitioner for ₹1136.00 lakh for the period 2011-13 is in respect of deferred works within the cut-off date of the generating station, the same is allowed under Regulation 9 (1) (ii) of the 2009 Tariff Regulations. As regards the capitalization of expenditure of ₹271.00 lakh in 2013-14 the petitioner has stated that the same is towards supply of certain T&Ps for which orders were placed before the cut-off date and after rigorous follow-up by petitioner, the supplies have been completed in 2013-14. From the submissions of the petitioner it is evident that the order for lathe machine was given to the agency only in January, 2013 i.e. two months before the cut-off date and the same was dispatched by the party on 30.3.2013 and received by the petitioner in April, 2013. Considering the fact that the order has been placed only in January 2013 and that there has been delay in the supply of the machines, we find no reason to condone the delay of one month in capitalization of expenditure after the cut-off date. Accordingly, the claim of the petitioner for capitalization of ₹271.00 lakh in 2013-14 is not allowed.

Steam Generator

33. As against the projected additional capital expenditure of ₹6321.00 lakh allowed vide order dated 13.4.2012, the petitioner has claimed total additional capital expenditure of ₹3765.00 lakh during 2010-12 (₹2182.00 lakh in 2010-11 and ₹1583.00 lakh in 2011-12) under Regulation 9(1)(iii) of the 2009 Tariff Regulations. The said expenditure has been incurred within the cut-off date of the generating station and hence the same is allowed to be capitalized under Regulation 9(1)(iii) of the 2009 Tariff Regulations. The petitioner has further submitted that an amount of ₹3300.00 lakh has been withheld pending full & complete demonstration of

all guaranteed parameters in the PG Test and accordingly, the Commission may allow the capitalization under this head including subsequent payments against the withheld amount under Regulation 14(3)(vi) of the 2014 Tariff Regulations. We have considered the submissions of the petitioner and the capitalization of withheld amount as and when paid shall be considered as per prevailing regulations.

34. The petitioner vide affidavit dated 11.8.2014 in Petition No. 272/GT/2014 has submitted that it has capitalized ₹459.13 lakh in books of account. However the expenditure is yet to be incurred and the expenditure is of nature of un-discharged liabilities.

Turbine Generator

35. Against the projected additional capital expenditure of ₹1278.00 lakh allowed vide order dated 13.4.2012, the petitioner has claimed total additional capital expenditure of ₹5621.00 lakh during 2011-13 (₹3787.00 lakh in 2011-12 and ₹1834.00 lakh in 2012-13) for initial spares for TG under Regulation 9(1)(iii) of the 2009 Tariff Regulations. The petitioner has also submitted that subsequently, the petitioner identified, procured and capitalized certain other initial spares within the limit of 2.5% of capital as permissible under the regulations. Accordingly, the petitioner has submitted that the capitalized value within the cut-off date is ₹5621.00 lakh and has prayed that the Commission may allow the same as these spares are within the limits permitted under the applicable regulations of this Commission.

36. We have examined the matter. In response to the directions of the Commission in the Record of the Proceedings dated 11.11.2014, the petitioner vide affidavit dated 8.12.2014 has submitted the actual value of initial spares capitalized from COD of the generating station and on each year till the cut-off date of the generating station. According to this, the cumulative value of initial spares (on gross basis) capitalized till 2012-13 i.e upto the cut-off date of the generating station (31.3.2013) is ₹15604.00 lakh and the corresponding cash value is ₹14765.42 lakh. The petitioner has also submitted that the initial spares procurement has been planned and carried out based on the FR approved completed cost as on the cut-off date. It has also submitted that the projection of capital spares was accordingly submitted vide affidavit

dated 11.1.2011 which has been considered by the Commission in order dated 13.4.2012. considering the closing capital cost of ₹474832.05 lakh as on COD of the Unit-III (i.e. 20.3.2010), the admissible initial spares upto the cut-off date of the generating station works out to ₹13523.20 lakh which has been considered for the purpose of tariff. Thus, the addition of initial spares by the petitioner in respect of the generating station has been allowed to the extent of 2.5% of the capital cost as on the cut-off date of the generating station in terms of the provisions of the 2009 Tariff Regulations.

37. The petitioner vide affidavit dated 11.8.2014 in Petition No. 272/GT/2014 has submitted that it has capitalized ₹553.14 lakh in books of account. However the expenditure is yet to be incurred and the expenditure is of nature of undischarged liabilities.

Control & Instrumentation

38. As against the projected additional capital expenditure of ₹31.00 lakh allowed vide Commission's order dated 13.4.2012, the petitioner has now claimed additional capital expenditure of ₹3.00 lakh in 2013-14 under Regulation 9(2)(viii) of the 2009 Tariff Regulations. The petitioner has submitted that AMC has been covered in contractual terms covering C&I equipments which is valid till September, 2014 and therefore no payments were released against these works till the pendency of AMC. The petitioner has however, submitted that a small amount of ₹3.00 lakh was capitalized in 2013-14 as balance final payments towards works capitalized earlier. Accordingly, the petitioner has prayed to allow the same and the payments to be released after completion of AMC considering the circumstances as submitted therein. Considering the fact that the amount capitalized by the petitioner is in respect of final payments made for works capitalized within the cut-off date, the expenditure is allowed under Regulation 9(2)(viii) of the 2009 Tariff Regulations.

Coal Transportation system

39. As against the projected additional capital expenditure of ₹39927.00 lakh allowed vide Commission's order dated 13.4.2012, the petitioner has now claimed additional capital expenditure of ₹23477.52 lakh (₹15891.82 lakh in 2010-11, ₹4359.00 lakh in 2011-12 and ₹3227.20 lakh in 2012-13) under Regulation 9(1)(ii) of the 2009 Tariff Regulations and ₹685.00

lakh under Regulation 9 (1) read with Regulation 44 of the 2009 Tariff Regulations. The petitioner has submitted that out of the projected expenditure allowed by the Commission, an amount of ₹24163.00 lakh has already been capitalized and that the major portion of the MGR for the associated linked mines of Hurra-C, Chuperbhita & Rajmahal Expansion mines are kept abeyance pending development of mines by ECL. The petitioner has further submitted that since the mines are yet to be developed it is envisaged to carry out the works like track, railway siding, way-wide stations, S&T and additional wagons for rakes matching with the development of these mines. The petitioner has stated that an expenditure of ₹23000.00 lakh on this account would be carried out after the cut-off date to avoid creation of assets not immediately usable. Accordingly, the petitioner has prayed to allow the expenditure capitalized which includes an amount of ₹685.00 lakh towards procurement of 46 wagons capitalized in 2013-14. The petitioner has further stated that these wagons were ordered before the cut-off date and constitute a part of the wagons envisaged for the MGR for linked mines of Hurra-C, Chuperbhita & Rajmahal Expansion. The petitioner has added that these wagons are presently being used to source part of coal requirement for Stage-II from Stage-I linked mines of Rajmahal. The petitioner vide affidavit dated 30.5.2013 has submitted that it had claimed tariff based on projected capitalization of all the balance schemes under original scope of work by 31.3.2013 except for part of the scheme in its scope under Coal Transportation System (including land cost, MGR Transportation System, siding/signaling works, wagon package etc.) associated with new linked mines viz. Rajmahal expansion, Chuperbhita & Hurra-C mines, which are yet to be developed by ECL, as under:

	Amount ***(₹in crore)***
Coal Transportation System (New MGR line to Hurra-C, Chuperbhita)	209.95
Railway Siding & MGR system	4.00
Wagon Package (55 Nos.)	20.62
Land cost provision for new MGR line	13.07
Total	**242.64**

40. As submitted in the petition the deferment of these works is due to non-development of the linked mines. It has further submitted that deferment of implementation of coal transportation system associated with linked new mines-yet to be developed, has also

benefited the beneficiaries as this has avoided unwarranted loading of these schemes on generating station tariff, without commensurate benefit in terms of supply of coal from these linked mines.

41. The Commission vide ROP of the hearing dated 11.11.2014 directed the petitioner to clarify that the linked mines viz Rajmahal expansion, Chuperbhita & Hurra-C which are yet to be developed by CIL and the MGR system will not be in useful service to the generating station till the mines are developed. In this background, the capitalization of ₹234.78 crore for MGR system was directed to be justified. In response, the petitioner vide its affidavit dated 8.12.2014 has submitted that an amount of ₹241.63 crore capitalized on account of Coal Transportation system is towards the works other than those related to transport of coal from Hurra, Chuperbita etc. mines and coal transportation works within the plant boundary (diversion towards track hopper, S&T & associated works). It has also submitted that all the works are within the original scope and have been completed & capitalized by the cut-off date of the generating station and are in use. It has further submitted that the balance amount approved by Commission is towards the portion of MGR for the associated linked mines of Hurra-C, Chuperbhita & Rajmahal expansion and is kept in abeyance pending development of mines by ECL. Accordingly, the petitioner has submitted that the above amount capitalized corresponds to assets which are already in use.

42. We have considered the matter. It is observed from the audited certificate that an actual cash expenditure of ₹15199.02 lakh in 2010-11, ₹4359.00 lakh in 2011-12 and ₹3227.00 lakh in 2012-13 incurred by the petitioner. Considering the fact that these are deferred works within the original scope of work and the expenditure incurred and capitalized by the petitioner for the above said amount totaling to ₹22785.02 lakh during 2010-13 is allowed under Regulation 9 (1) (ii) of the 2009 Tariff Regulations.

43. As regards, the prayer of the petitioner for capitalization of ₹685.00 lakh in 2013-14 for 46 wagons in exercise of power to relax under Regulation 44 of the 2009 Tariff Regulations, on the ground that the same were ordered prior to the cut-off date and constitute part of wagon

envisaged for MGR for the said linked mines, we are of the considered view that these wagons are part of the MGR system for the linked mines which are yet to be developed and put to use and hence cannot be said to give any intended service for which these wagons were procured.

44. In view of above, the petitioner is granted liberty to approach the Commission after completion of work of railway siding, track, way side stations etc. and MGR and the claim of the petitioner including the claim of ₹685.00 lakh capitalized in 2013-14 for 46 wagons will be considered in accordance with the prevailing tariff regulation.

Coal handling system

45. As against the projected additional capital expenditure of ₹578.00 lakh allowed vide Commission's order dated 13.4.2012, the petitioner has claimed total additional capital expenditure of ₹508.00 lakh (₹58.00 lakh in 2010-11 and ₹450.00 lakh in 2012-13) under Regulation 9(1) (ii) of the 2009 Tariff Regulations. Since the expenditure incurred is in respect of works within the cut-off date, the same has been allowed.

Water & cooling system

46. As against the projected additional capital expenditure of ₹1027.00 lakh allowed vide Commission's order dated 13.4.2012, the petitioner has now claimed total additional capital expenditure of ₹40.00 lakh (₹39.00 lakh in 2011-12 and ₹1.00 lakh in 2013-14) under Regulation 9(1)(ii) and Regulation 9(2)(viii) of the 2009 Tariff Regulation. The petitioner has submitted that the projected expenditure allowed includes an amount of ₹1000.00 lakh towards additional stream of DM plant. The petitioner has submitted that it had also taken up the issue of water quality of Kahalgaon and proposed for online condensate tubeline system in petition related to Kahalgaon Stage-I. The petitioner has submitted that the tendering process was reinitiated in 2012 and after clarification from the party, the complete tender was cancelled at a late stage. It has also submitted that the tendering process was further reinitiated and NIT was issued in July, 2014 and the bids are under finalization and the contract expected to be awarded by October, 2014. The petitioner has submitted that an additional amount of rs 1.00 lakh has been capitalized in 2013-14 as balance final payments towards works capitallised in

2011-12. The Commission vide ROP of the hearing dated 29.1.2015 directed the petitioner to clarify the need for additional stream of DM plant at a cost of ₹10.27 crore towards additional capitalization in water & cooling system when the plant is operating successfully with the existing DM plant. The petitioner vide affidavit dated12.2.2015 has submitted that in view of prevailing better quality of water in 2003, only two stream of DM plant were envisaged for Kahalgaon-II Thermal Power Station. However due to drifting of stream, in 2008 it was observed that TDS of Raw water has been increased considerably. The input water TDS remains up to 600 PPM for 6 to 7 months in a year against the design value of 275 PPM and with this quality of water, the plant is able to discharge 800- 900 $M^{3/}$ Regeneration of DM water and it becomes difficult to meet the requirement of DM make up water to run the power plant. The Committee comprising of NTPC Engineering and NTPC R&D in its report recommended installing of additional DM stream capable to handle raw water of TDS 600 PPM and deliver 1840 $M^{3/}$ regeneration of DM water and this scheme was subsequently included in the package list of Kahalgaon-II after approval. NIT was floated for supply and installation of additional DM stream designed for handling input raw water TDS of 600 PPM. However due to very poor response of parties to supply this type of plant, it was then decided to instead install a Reverse Osmosis (RO) technology pre-treatment plant in the existing DM stream itself. This RO plant would pre-treat the raw water and bring its TDS below 275 PPM before feeding it to the DM streams. NIT for supply and installation of RO plant has been floated, techno-commercial evaluation has been completed and it is in advanced stage of award. In order to overcome the problem temporarily till the RO plant is installed, dredging of the intake channel from main river course to raw water intake pump house is being carried out as a short term measure from November-May every year to maintain minimum of 50 meter width and 4-6 meters depth of the intake channel. However the dredging activity in the main river course is causing a law & order problem in the area due to requiring of displacement of temporarily settled people & the disposal of large quantity of silt. So the same cannot be adopted as a permanent solution, which necessitates the installation of RO plant. As per the submission of petitioner, the work of installation of RO system shall be completed during the 2014-19 Tariff period. The petitioner has prayed for grant of liberty to seek capitalization of the essential RO plant on completion.

The claim of the petitioner with regard to RO system shall be dealt as per the prevailing CERC tariff regulations.

47. Accordingly, the petitioner has prayed for grant of liberty to seek capitalization of the essential DM Stream on completion.

48. We have examined the matter. The amount of ₹39.00 lakh in 2011-12 is towards deferred works within the cut-off date is allowed. Under Regulation 9 (1) (ii) of the 2009 Tariff Regulations the expenditure of ₹1.00 lakh in 2013-14 incurred by the petitioner is in respect of balance payments for works capitalized in 2011-12, the same is allowed under Regulation 9 (2) (viii) of the 2009 Tariff Regulations.

Service and general station equipments

49. As against the projected additional capital expenditure of ₹251.00 lakh allowed vide Commission's order dated 13.4.2012, the petitioner has claimed total additional capital expenditure of ₹57.00 lakh in 2010-11 under Regulation 9(1) (ii) of the 2009 Tariff Regulations. The petitioner has submitted that the projected expenditure of ₹251.00 lakh includes two nos. of EOT cranes to be procured and commissioned in O&M workshop and MGR workshop buildings. However, due to delay in execution of certain main plant civil works by M/s. MPCC Ltd. the O&M and MGR workshop were not ready before the cut-off date. It has further submitted that the crane for O&M workshop received in 2012-13 and the crane for MGR workshop received in 2013-14 could not be capitalized as the O&M and MGR workshop were not ready before the cut-off date. The petitioner has therefore submitted that these assets shall be commissioned after the workshop buildings are ready and the same has been submitted vide affidavit dated 30.5.2013. The petitioner has stated that the balance expenditure of ₹57.00 lakh has been capitalized by the cut-off date and has prayed for condonation of delay in commissioning of these cranes and allow the expenditure which is expected to be capitalized in 2014-15.

50. The matter has been examined. Considering the fact that the expenditure of ₹57.00 lakh has been capitalized by the petitioner in 2010-11 i.e. within the cut-off date and the same is

allowed under Regulation 9(1) (ii) of the 2009 Tariff Regulations. As regards, capitalization of expenditure in 2014-15 the same will be considered in terms of the 2014 Tariff Regulations.

Electrical Systems

51. As against the projected additional capital expenditure of ₹341.00 lakh allowed vide Commission's order dated 13.4.2012, the petitioner has claimed total additional capital expenditure of ₹33.13 lakh in 2012-13 under Regulation 9(2)(viii) and ₹85.00 lakh in 2013-14 under Regulation 9(2)(viii) & 9(1) read with Regulation 44 of the 2009 Tariff Regulations towards cables and fire ceiling components respectively. The petitioner has submitted that though the purchase orders was made on M/s. L&T along with the package prior to the cut-off date the materials could not be received and capitalized before the cut-off date due to deletion of Type A fire ceiling material from the scope of L&T order and award placed on M/s. Llyod insulation. It has been submitted that the items were received and capitalized only in 2013-14 despite efforts by the petitioner to capitalize the same by the cut-off date. Accordingly, the petitioner has prayed for condonation of delay and allow capitalization under this head.

52. We have examined the matter. Since the payment of ₹33.00 lakh is in respect of payments made within the cut-off date of the generating station, the same is allowed under Regulation 9(2)(viii) of the 2009 Tariff Regulation. . As regards, the claim for capitalization of ₹85.00 lakhs in 2013-14 we are of the considered view that the petitioner had sufficient time period of three years from 20.3.2010 (COD of the generating station) upto the cut-off date (31.3.2013). The petitioner having failed to do the same cannot seek the capitalization of this expenditure in terms of Regulation 44 of the 2009 Tariff Regulations. We are not inclined to grant the relief prayed for by the petitioner as no case has been made out by the petitioner for relaxation of the provisions of Regulation 9 (2) (viii) read with Regulation 44 of the 2009 Tariff Regulations.

Satellite system

53. As against the projected additional capital expenditure of ₹345.00 lakh allowed vide Commission's order dated 13.4.2012, the petitioner has submitted that it has capitalized an expenditure of ₹326.00 lakh for works completed within the cut-off date and ₹3.00 lakh has

been capitalized in 2013-14 as balance final payments towards works executed upto the cut-off date. In view of the submissions of the petitioner, the said expenditure claimed by the petitioner has been allowed under Regulation 9 (1) (ii) and 9 (2) (viii) of the 2009 Tariff Regulations.

MBOA & Misc Items

54. As against the projected additional capital expenditure of ₹514.00 lakh allowed vide Commission's order dated 13.4.2012, the petitioner has claimed total additional capital expenditure of ₹1229.0lakh (₹408.00 lakh in 2010-11, ₹297.00 lakh in 2011-12 and ₹409.00 lakh in 2012-13) and ₹115.00 lakh in 2013-14 under Regulation 9(1)(ii) of the 2009 Tariff Regulations. The petitioner has submitted that this expenditure generally included the furnishing works of office & building and office equipment etc. and does not include some of the works namely, service building, ET Hostel and CISF Barrack, extended VIP Guest House and Central stores etc. it has been submitted that these works were also taken up because of enhanced requirements of the facilities of the generating stations due to increase in project size from 840 MW to 2340 MW. The petitioner has submitted that the works on the buildings and facilities were completed in 2012-13 and the works of furnishing these buildings spilled over and capitalized in 2013-14 and has been capitalized in 2013-14. Accordingly, the petitioner has prayed for capitalization of the total expenditure under this head.

55. We have considered the matter. It is noticed from the submissions of the petitioner that the variation in the claim for additional capitalization is on account of additions in the scope of work and increase in the furnishing work cost over and above the original estimated cost during 2009. Considering the fact that an expenditure of ₹1114.00 lakh has been capitalized during the period 2010-13 and is within the cut-off date and the same is allowed under Regulation 9 (1) (ii) of the 2009 Tariff Regulations. However, the expenditure of ₹115.00 lakh in 2013-14 is not allowed as the same has been capitalized in 2013-14 after completion of the work.

Ash Dyke

56. As against the projected additional capital expenditure of ₹4000.00 lakh allowed vide Commission's order dated 13.4.2012, the petitioner has claimed additional capital expenditure

of ₹3466.00 lakh towards raising of Ash dyke Lagoon-III A/B. it has also submitted that further raising of Lagoon-III A/B is in progress. Considering the fact that the expenditure of ₹2008.00 lakh has been capitalized in 2012-13 and the same is allowed under Regulation 9 (1) (ii) of the 2009 Tariff Regulations. However, the expenditure of ₹1458.00 lakh incurred after the cut-off date relates to ash handling system and is within the original scope of work. Hence, the expenditure claimed is allowed under the Regulation 9 (1) (iii) of the 2009 Tariff Regulations.

Ash Handling System

57. As against the projected additional capital expenditure of ₹2628.00 lakh allowed vide Commission's order dated 13.4.2012, the petitioner has claimed additional capital expenditure of ₹1564.00 lakh (₹221.00 lakh in 2010-11 and ₹1343.00 lakh in 2011-12) towards Ash handling system. Since the expenditure incurred is within the cut-off date and is within the original scope of work, the same is allowed under Regulation 9(1) (ii) of the 2009 Tariff Regulations.

AWRS & Treatment System

58. As against the projected additional capital expenditure of ₹262.80 lakh allowed vide Commission's order dated 13.4.2012 against AWRS & Treatment related work, the petitioner has submitted that a liability of ₹28.00 lakh has been discharged in 2012-13 and there is a pending liability of ₹62.00 lakh which may please be allowed under Regulation 9(2)(viii) of the 2009 Tariff Regulations**.** The liability discharged by the petitioner in 2012-13 has been considered as additional capital expenditure for the said year.

De-capitalization of Miscellaneous items

59. The de-capitalized of small miscellaneous items of ₹0.48 lakh in 2013-14 which are not in use, has been allowed as submitted by the petitioner.

60. The reconciliation of the actual additional capital expenditure for the period 2009-14 with the books of accounts as submitted by the petitioner is as under:

(₹ in lakh)

	2009-10 (20.3.2010 to 31.3.2010)	2010-11	2011-12	2012-13	2013-14
Closing Gross Block (for Stage-II)	509689.65	528560.09	550010.58	581404.93	593453.47
Opening Gross Block (for Stage-II)	508174.03	509689.65	528560.09	550010.58	581404.93
Additional capital expenditure as per books (for Stage-II)	1515.63	18870.44	21450.49	31394.35	12048.54
Less: Exclusions					
Liability Reversal	7.71	1059.31	(-) 12.27	(-) 384.91	(-) 3169.25
FERV (Loan)	(-) 741.31	(620.88)	7854.36	4977.19	5204.69
FERV (Package)	0.00	153.60	740.72	0.00	0.00
Inter-unit transfer	0.00	97.89	(11.05)	(3.03)	22.09
Capitalization of spares	0.00	0.00	0.00	0.00	3774.84
De-capitalization of spares	0.00	0.00	0.00	0.00	(-) 219.53
De-capitalization of assets	0.00	(-) 758.89	0.00	(-)1949.44	0.00
Rounding off gap *	(-) 0.50	0.45	(0.20)	0.00	0.00
Net Additional capital expenditure claimed (on accrual basis)	2265.14	21057.57	14093.66	26805.11	6435.70
Less: Un-discharged liabilities included above	109.14	923.29	1082.66	7669.42	3238.73
Add: Discharge of liabilities (against allowed assets / works)	0.00	6453.74	3905.40	3301.03	2221.72
Net Additional capital expenditure claimed (on cash basis)	**2156.00**	**26588.02**	**16916.40**	**22436.72**	**5418.69**

* *Derived values*

Exclusions

61. The summary of exclusions from the books of accounts claimed for the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 under different heads and those allowed / not allowed for the purpose of tariff are examined as under:

Loan ERV

62. The petitioner has excluded amounts of (-) ₹741.31 lakh in 2009-10, (-) ₹621.00 lakh in 2010-11, ₹7854.00 lakh in 2011-12, ₹4977.00 lakh in 2012-13 and ₹5205.00 lakh in 2013-14 on account of impact of loan ERV. As the petitioner has to bill the said amounts directly to the beneficiaries, the exclusion of loan ERV is in order and is allowed.

Liability Reversal

63. The petitioner has excluded liability reversal of (-) ₹7.71 lakh during 2009-10, (-) ₹1059.00 lakh in 2010-11, (-) ₹1227.0 lakh in 2011-12, (-) ₹385.00 lakh in 2012-13 and (-) ₹3169.00 lakh in 2013-14. In justification of the same, the petitioner vide affidavit dated 11.8.2014 has submitted that since the tariff for the period 2009-14 is on cash basis, the liability

reversal has been sought under exclusion. Accordingly, the liability reversal submitted by the petitioner has been allowed**.**

Inter-Unit transfers

64. The petitioner has excluded amounts of ₹97.89 lakh in 2010-11, ₹11.05 lakh in 2011-12, ₹3.03 lakh in 2012-13 and ₹22.00 lakh in 2013-14 on account of inter-unit transfer of certain assets like Crane & Diesel locomotive. It is noticed that these inter-unit transfers are temporary in nature. The Commission while dealing with the applications for additional capitalization in respect of other generating stations of the petitioner had decided that both positive and negative entries arising out of inter unit-transfers of temporary nature shall be ignored for the purpose of tariff. In consideration of the same, the exclusion of the said amounts on account of inter-unit transfer of equipments on temporary basis, is in order and has been allowed.

Capitalization of Capital Spares

65. The petitioner has capitalized capital spares in books of accounts for ₹3774.84 lakh in 2013-14. Since capitalization of capital spares over & above the initial spares procured after the cut-off date are not allowed for the purpose of tariff, the exclusion sought by the petitioner on these count is in order and has been allowed

Capital Spares De-capitalized

66. The petitioner has de-capitalized capital spares for (-) ₹219.53 lakh in 2013-14 in books of accounts on these spares becoming unserviceable. Since these spares were capitalized during the period from 2007-08 to 2009-10 and allowed in tariff as part of the capital cost, the claim of the petitioner has not been allowed under exclusion as these assets do not render any useful service**.**

De-Capitalization of damaged MGR wagons

67. The petitioner has de-capitalized damaged MGR wagons amounting to (-) ₹758.89 lakh in books of accounts in 2010-11.The petitioner has sought the exclusion of the unserviceable wagons as the procurement of new wagons is in progress. As the MGR wagons do not render

any useful service to the generating station on the same becoming unserviceable, the exclusion sought for by the petitioner is not in order and is accordingly not allowed.

68. The exclusion of package FERV on accrual basis is ₹153.60 lakh in 2010-11 and ₹740.72 lakh in 2011-12 and the same is reflected as liability also on cash basis the value of package FERV is 'nil' lakh for the years 2010-11 and 2011-12. The package FERV is allowed as capital cost for the purpose of tariff and as such the exclusion of package FERV is not allowed.

69. Based on the above, the exclusions claimed vis-à-vis allowed is as under:

(₹in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Exclusion claimed	(-) 748.71	(-) 2341.00	6615.95	4588.97	5613.31
Exclusion Allowed	(-) 748.71	(-) 1582.11	6615.95	4588.97	5393.78
Exclusion not allowed	0.00	(-) 758.89	0.00	0.00	(-) 219.53

70. Based on the above discussions, the actual additional capital expenditure allowed for the period 2009-14 to 2013-14 is as detailed under:

(₹in lakh)

Sl. No	Activity	Actual additional capital expenditure				
		2009-10	2010-11	2011-12	2012-13	2013-14
1	Land & Infrastructure	0.00	557.00	165.00	1122.00	25.00
2	Main Plant Superstructure	0.00	456.00	945.00	3718.00	0.00
3	Admin & service building	0.00	20.00	0.00	249.00	3.00
4	Chimney	0.00	8.00	0.00	0.00	3.00
5	Permanent Township	0.00	276.00	162.00	4957.00	330.73
6	Construction tools and plants	0.00	0.00	323.00	813.00	0.00
7	Steam Generator	0.00	2182.00	1583.00	0.00	0.00
8	Turbine Generator	0.00	0.00	3787.00	1834.00	0.00
9	Control & Instrumentation	0.00	0.00	0.00	0.00	3.00
10	Coal Transportation system	0.00	15199.02	4359.00	3227.00	0.00
11	Coal handling system	0.00	58.00	0.00	450.00	0.00
12	Water & cooling system	0.00	0.00	39.00	0.00	1.00
13	Service and general station equipments	0.00	57.00	0.00	0.00	0.00
14	Electrical Systems	0.00	0.00	0.00	33.13	0.00
15	Satellite system	0.00	0.00	8.00	315.00	0.00
16	MBOA & Misc.	0.00	408.00	297.00	409.00	0.00
17	Township meter packaging, External electrification, boundary fencing, EPABX, Capital spares etc.	2155.50	0.00	0.00	0.00	0.00
	Sub-total (A1) works deferred for	**2155.50**	**19221.02**	**11668.0**	**17127.13**	**368.73**
17	Ash Dyke	0.00	0.00	0.00	2008.00	1458.00
18	Ash Handling System	0.00	221.00	1343.00	0.00	0.00
	Subtotal (A2)	**0.00**	**221.00**	**1343.00**	**2008.00**	**1458.00**

A	Total Additional Capital Expenditure (A1+A2)	**2155.50**	**19442.02**	**13011.00**	**19135.13**	**1826.73**
B	Exclusion Not Allowed	0.00	(-) 758.89	0.00	0.00	**(-) 219.53**
C	Cost of initial spares included by petitioner (up to cut-off date)	**1858.67**	**2181.99**	**5370.17**	**591.36**	**0.00**
D	De-capitalization	0.00	0.00	0.00	0.00	0.00
	Revenue items de-capitalization	0.00	0.00	0.00	0.00	(-) 0.48
E	**Total Additional capital expenditure allowed (A+B – C+D)**	**296.83**	**16501.05**	**7640.63**	**17302.10**	**1606.53**

Discharge of liabilities

71. The discharge of liabilities claimed by the petitioner is allowed as under:

(₹in lakh)

2009-10 (20.3.2010 to 31.3.2010)	**2010-11**	**2011-12**	**2012-13**	**2013-14**
0.00	7146.55	3905.40	3301.03	2221.72

Initial spares

72. As stated, against the actual capitalization of initial spares amounting to ₹15603.82 lakh (on accrual basis) and ₹14765.42 lakh (on cash basis) upto cut-off date i.e. 31.03.2013, the admissible initial spares upto the cut-off date works out to ₹13523.20 lakh considering the closing admitted capital cost of ₹474832.05 lakh as on COD of Unit-III (20.03.2010) of the generating station. Accordingly, initial spares allowed for the purpose of tariff are as under:

(₹ in lakh)

As on 20.3.2010	**20.3.2010 to 31.3.2010**	**2010-11**	**2011-12**	**2012-13**	**2013-14**
3521.00	1858.67	2181.99	5370.17	591.36	0.00

73. Based on the above discussions, the net additional capital expenditure allowed for the period 2009-14 after considering the discharge of liabilities and Initial spares is summarized as under:

(₹ in lakh)

	2009-10 (20.3.2010 to 31.3.2010)	**2010-11**	**2011-12**	**2012-13**	**2013-14**
Additional capital expenditure before discharge of liabilities & Initial spares	296.83	16501.05	7640.63	17302.10	1606.53
Add: Discharge of liabilities	0.00	7146.55	3905.40	3301.03	2221.72
Add: Initial Spares	1858.67	2181.99	5370.17	591.36	0.00
Net Additional capital expenditure allowed	**2155.50**	**25829.58**	**16916.20**	**21194.49**	**3828.25**

Capital Cost for 2009-14

74. Accordingly, the capital cost considered for the generating station for 2009-14 is as under:

(₹in lakh)

	2009-10		2010-11	2011-12	2012-13	2013-14
	1.4.2009 to 19.3.2010	**20.3.2010 to 31.3.2010**				
Opening Capital cost	314674.28	474832.05	476987.55	502817.13	519733.34	540927.83
Additional capital expenditure allowed	3480.12	2155.50	25829.58	16916.20	21194.49	3828.25
Closing Capital cost	**318154.40**	**476987.55**	**502817.13**	**519733.34**	**540927.83**	**544756.09**
Average Capital cost	**316414.34**	**475909.80**	**489902.34**	**511275.24**	**530330.58**	**542841.96**

Debt- Equity Ratio

75. 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 modernization expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation."

76. The debt-equity ratio as on 1.4.2009 as considered in order dated 29.11.2011 in Petition No.125/2009 relating to the tariff period 2004-09 has been considered till 19.3.2010. However, un-discharged liabilities amounting to ₹16807.54 lakh deducted from the capital cost as on 1.4.2009 has been adjusted to debt and equity in the debt-equity ratio of 70:30. As such, the gross normative loan and equity as on 1.4.2009 is revised to ₹220272.00 lakh and ₹94402.28 lakh respectively. Further, considering the quarter-wise cumulative expenditure and debt position, the debt-equity ratio as on 20.3.2010 i.e. COD of Unit-III/station works out to

57.48:42.52 which is within the normative debt-equity of 70:30. Accordingly, the debt-equity ratio of 70:30 has been considered for the purpose of tariff as on COD of Unit-III/station. Further considering the details of assets and un-discharged liabilities submitted in Form-9A & 9B and the loan position at the end of each year (after COD of generating station), the debt-equity ratio arrived at is well within the normative debt-equity ratio of 70:30. Accordingly, the debt-equity ratio of 70:30 has been considered on the admitted additional capital expenditure till 31.3.2014.

Return on Equity

77. Regulation 15 of the 2009 Tariff Regulations provides as under:

> *(1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.*
>
> *(2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per clause (3) of this regulation.*
>
> ***Provided** that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in **Appendix-II**.*
>
> ***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.*
>
> *(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.*
>
> *(4) 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 clause (3) of this regulation.*
>
> *(5) The generating company or the transmission licensee, as the case may be, shall recover the shortfall or refund the excess Annual Fixed Charge on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission:*
>
> *Provided further that Annual Fixed Charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations.*

78. Return on equity has been worked out considering base rate of 15.5% and tax rate applicable to petitioner for respective years. The return on equity has been computed as under:

(₹ in lakh)

	2009-10		**2010-11**	**2011-12**	**2012-13**	**2013-14**
	1.4.2009 to 19.3.2010	**20.3.2010 to 31.3.2010**				
Normative Equity - Opening	94402.28	142449.61	143096.27	150845.14	155920.00	162278.35
Addition due to	1044.04	646.65	7748.88	5074.86	6358.35	1148.48

additional capital expenditure						
Normative Equity – Closing	95446.32	143096.27	150845.14	155920.00	162278.35	163426.83
Normative Equity – Average	94924.30	142772.94	146970.70	153382.57	159099.18	162852.59
Base Rate for return on equity	15.500%	15.500%	15.500%	15.500%	15.500%	15.500%
Applicable Tax Rate	33.990%	33.990%	33.218%	32.445%	32.445%	33.990%
Rate of Return on Equity (Pre-tax)	23.481%	23.481%	23.210%	22.944%	22.944%	23.481%
Return on Equity	**22289.18**	**33524.51**	**34111.90**	**35192.10**	**36503.71**	**38239.42**

Interest on loan

79. Regulation 16 of the 2009 Tariff Regulations provides as under*:*

'(1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.

3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be 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.

(5) 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 or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The generating company or the transmission licensee, as the case may be, 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 or the transmission licensee, as the case may be, in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute.

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan."

80. Interest on loan has been worked out as mentioned below:

i) As stated, the gross normative loan amounting to ₹220272.00 lakh has been considered as on 1.4.2009.

ii) Cumulative repayment of loan amounting to ₹7080.43 lakh as on 31.3.2009 as considered in order dated 29.11.2011 in Petition No.125/2009 has been considered as on 1.4.2009. However, after taking in to account proportionate adjustment to the cumulative repayment on account of un-discharged liabilities deducted from the capital cost as on 1.4.2009, the cumulative repayment as on 1.4.2009 is revised to ₹6721.42 lakh.

iii) Accordingly, the net normative opening loan as on 1.4.2009 works out to ₹213550.57 lakh.

iv) Depreciation allowed has been considered as repayment for the respective periods.

v) Weighted average rate of interest has been computed considering the details of actual loan portfolio till 31.3.2014 as submitted by the petitioner. Further, the IDC capitalized in the admissible gross block, if any, has been adjusted while computing the weighted average rate of interest on loan.

81. Interest on loan has been computed as under:

(₹in lakh)

	2009-10		2010-11	2011-12	2012-13	2013-14
	1.4.2009 to 19.3.2010	**20.3.2010 to 31.3.2010**				
Gross opening loan	220272.00	332382.43	333891.29	351971.99	363813.34	378649.48
Cumulative repayment of loan upto previous year / period	6721.42	22608.10	23414.82	48256.67	74634.46	102003.06
Net Loan Opening	213550.57	309774.33	310476.46	303715.33	289178.87	276646.42
Addition due to Additional capital expenditure	2436.08	1508.85	18080.71	11841.34	14836.15	2679.78
Repayment of loan during the year	15812.35	806.72	25255.85	26321.25	27327.15	27754.87
Less: Repayment adjustment on account of de-caps	0.00	0.00	531.22	0.00	0.00	154.01
Add: Repayment adjustment on discharges corresponding to un-discharged liabilities deducted as on 01.04.2009	74.34	0.00	117.22	56.55	41.45	43.92
Net Repayment	15886.68	806.72	24841.84	26377.80	27368.60	27644.79
Net Loan Closing	200099.98	310476.46	303715.33	289178.87	276646.42	251681.41
Average Loan	206825.28	310125.40	307095.89	296447.10	282912.65	264163.91
Weighted Average Rate of Interest on Loan	6.5964%	6.5704%	6.8417%	7.7479%	7.8781%	8.3107%
Interest on Loan	**13642.96**	**20376.55**	**21010.68**	**22968.56**	**22288.18**	**21953.79**

Depreciation

82. Regulation 17 of the 2009 Tariff Regulations provides as under*:*

> *"(1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.*
>
> *(2) 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 longterm power purchase agreement at regulated tariff.*
>
> *(3) Land other than the 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.*
>
> *(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the assets of the generating station and transmission system.*
>
> *Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.*
>
> *(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation including Advance against Depreciation as admitted by the Commission upto 31.3.2009 from the gross depreciable value of the assets.*
>
> *(6) 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."*

83. The cumulative depreciation as on 31.3.2009 as considered in order dated 29.11.2011 is ₹7080.43 lakh. Proportionate adjustment has been made to the cumulative depreciation on account of the un-discharged liabilities deducted as on 1.4.2009. Consequently, the revised cumulative depreciation as on 1.4.2009 works out to ₹6721.42 lakh. Further, the petitioner has claimed depreciation considering the weighted average rate of depreciation of 5.1576% for the period 2009-10 (1.4.2009 to 19.3.2009), 5.1497% for 2009-10 (20.3.2010 to 31.3.2010), 5.1601% for 2010-11, 5.1528% for 2011-12, 5.1574% for 2012-13 and 5.1172% for 2013-14. However, considering the rate of depreciation as per Appendix-III to the 2009 Tariff Regulations, the weighted average rate of depreciation works out to 5.1672% for 2009-10 (1.4.2009 to 19.3.2009), 5.1560% for 2009-10 (20.3.2010 to 31.3.2010), 5.1553% for 2010-11, 5.1482% for 2011-12, 5.1529% for 2012-13 and 5.1129% for 2013-14. This has been considered for the purpose of tariff. Further also, proportionate adjustment has been made to

the cumulative depreciation corresponding to discharges and/or reversal of liabilities considered during the respective years on account of cumulative depreciation adjusted as on 1.4.2009. As also cumulative depreciation has been adjusted for de-caps considered during tariff period 2009-14. The necessary calculations in support of depreciation are as under:

(₹ in lakh)

	2009-10		2010-11	2011-12	2012-13	2013-14
	1.4.2009 to 19.3.2010	**20.3.2010 to 31.3.2010**				
Average capital cost	316414.34	475909.80	489902.34	511275.24	530330.58	542841.96
Freehold Land (included above)	0.00	0.00	37.14	74.28	93.99	122.70
Depreciable value @ 90%	284772.91	428318.82	440878.68	460080.86	477212.94	488447.33
Balance depreciable value	278051.48	405710.72	417463.86	411341.52	402095.80	385961.59
Depreciation (for the period)	**15812.35**	**806.72**	**25255.85**	**26321.25**	**27327.15**	**27754.87**
Depreciation (annualized)	**16349.88**	**24537.81**	**25255.85**	**26321.25**	**27327.15**	**27754.87**
Cumulative depreciation at the end	22533.77	23414.82	48670.67	75060.59	102444.29	130240.61
Less: Cumulative depreciation adjustment on account of de-capitalization	0.00	0.00	48.55	0.00	0.00	55.75
Add: Cumulative depreciation adjusted on account of discharges out of un-discharged liabilities deducted as on 1.4.2009	74.34	0.00	117.22	56.55	41.45	43.92
Cumulative depreciation (at the end of the period)	22608.10	23414.82	48739.34	75117.14	102485.74	130228.78

Normative Annual Plant Availability Factor

84. Normative Annual Plant Availability Factor (NAPAF) of 85% as considered in order dated 13.4.2012 has been considered.

O & M Expenses

85. The O&M expenses for the generating station allowed for the period 2009-14 in order dated 13.4.2012 has been considered as under:

(₹ in lakh)

2009-10		2010-11	2011-12	2012-13	2013-14
1.4.2009 to 19.3.2010	20.3.2010 to 31.3.2010				
13000.00	18850.00	19923.00	21068.50	22272.00	23548.00

Interest on Working Capital

86. Regulation 18(1) (a) of the 2009 Tariff Regulations provides that the working capital for coal based generating stations shall cover:

> *(i) Cost of coal for 1.5 months for pit-head generating stations and two months for non-pithead generating stations, for generation corresponding to the normative annual plant availability factor;*
>
> *(ii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one liquid fuel oil, cost of fuel oil stock for the main secondary fuel oil;*
>
> *(iii) Maintenance spares @ 20% of operation and maintenance expenses specified in regulation 19.*
>
> *(iv) Receivables equivalent to two months of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor; and*
>
> *(v) O&M expenses for one month.*

87. Clause (3) of Regulation 18 of the 2009 Tariff Regulations as amended on 21.6.2011 provides as under:

> *"Rate of interest on working capital shall be on normative basis and shall be considered as follows:*
>
> *(i) SBI short-term Prime Lending Rate as on 01.04.2009 or on 1st April of the year in which the generating station or unit thereof or the transmission system, as the case may be, is declared under commercial operation, whichever is later, for the unit or station whose date of commercial operation falls on or before 30.06.2010.*
>
> *(ii) SBI Base Rate plus 350 basis points as on 01.07.2010 or as on 1st April of the year in which the generating station or a unit thereof or the transmission system, as the case may be, is declared under commercial operation, whichever is later, for the units or station whose date of commercial operation lies between the period 01.07.2010 to 31.03.2014.*
>
> *Provided that in cases where tariff has already been determined on the date of issue of this notification, the above provisions shall be given effect to at the time of truing up.*

88. Working capital has been calculated considering the following elements:

Fuel Component in working capital

89. The cost for fuel component in working capital as considered in order dated 13.4.2012/8.2.2013 is considered as under:

(₹ in lakh)

	2009-10		2010-11	2011-12	2012-13	2013-14
	1.4.2009 to 19.3.2010	20.3.2010 to 31.3.2010				
Cost of coal for 1.5 months	14905.26	22744.92	22744.92	22807.23	22744.92	22744.92
Cost of secondary fuel oil 2 months	241.95	610.52	610.52	612.19	610.52	610.52

Maintenance Spares in working capital

90. Maintenance spares allowed in order dated 13.4.2012/8.4.2013 is allowed as under:

(₹ in lakh)

2009-10		2010-11	2011-12	2012-13	2013-14
1.4.2009 to 19.3.2010	20.3.2010 to 31.3.2010				
2600.00	3770.00	3984.60	4213.70	4454.40	4709.60

Receivables

91. Receivables have been worked out on the basis of two months of fixed and energy charges (based on primary fuel only) as under:

(₹ in lakh)

	2009-10		2010-11	2011-12	2012-13	2013-14
	1.4.2009 to 19.3.2010	20.3.2010 to 31.3.2010				
Variable Charges -2 months	19873.68	30326.56	30326.56	30409.64	30326.56	30326.56
Fixed Charges - 2 months	12160.78	18406.18	18925.07	19829.67	20315.31	20851.14
Total	**32034.46**	**48732.73**	**49251.63**	**50239.31**	**50641.87**	**51177.70**

O&M Expenses

92. O & M expenses for 1 month as allowed in order dated 13.4.2012/ 8.2.2013 is allowed for the purpose of working capital as under:

(₹ in lakh)

2009-10		2010-11	2011-12	2012-13	2013-14
1.4.2009 to 19.3.2010	20.3.2010 to 31.3.2010				
1083.33	1570.83	1660.25	1755.71	1856.00	1962.33

93. SBI PLR of 12.25% has been considered in the computation of the interest on working capital. Necessary computations in support of calculation of interest on working capital are as under as under:

(₹ in lakh)

	2009-10		2010-11	2011-12	2012-13	2013-14
	1.4.2009 to 19.3.2010	**20.3.2010 to 31.3.2010**				
Cost of coal –1.1/2 months	14905.26	22744.92	22744.92	22807.23	22744.92	22744.92
Cost of secondary fuel oil – 2 month	241.95	610.52	610.52	612.19	610.52	610.52
O&M expenses – 1 month	1083.33	1570.83	1660.25	1755.71	1856.00	1962.33
Maintenance Spares	2600.00	3770.00	3984.60	4213.70	4454.40	4709.60
Receivables – 2 months	32034.46	48732.73	49251.63	50239.31	50641.87	51177.70
Total working capital	**50865.00**	**77429.01**	**78251.92**	**79628.15**	**80307.71**	**81205.07**
Rate of interest	12.2500%	12.2500%	12.2500%	12.2500%	12.2500%	12.2500%
Interest on working capital	**6230.96**	**9485.05**	**9585.86**	**9754.45**	**9837.69**	**9947.62**

Cost of secondary fuel oil

94. The cost of secondary fuel as allowed in order dated 13.4.2012 is considered as under:

(₹ in lakh)

2009-10		2010-11	2011-12	2012-13	2013-14
1.4.2009 to 19.3.2010	**20.3.2010 to 31.3.2010**				
1451.72	3663.13	3663.13	3673.17	3663.13	3663.13

Annual Fixed charges for 2009-14

95. Accordingly, the annual fixed charges for the period 2009-14 in respect of the generating station are summarized as under:

(₹ in lakh)

	2009-10		2010-11	2011-12	2012-13	2013-14
	1.4.2009 to 19.3.2010	**20.3.2010 to 31.3.2010**				
Depreciation	16349.88	24537.81	25255.85	26321.25	27327.15	27754.87
Interest on Loan	13642.96	20376.55	21010.68	22968.56	22288.18	21953.79
Return on Equity	22289.18	33524.51	34111.90	35192.10	36503.71	38239.42
Interest on Working Capital	6230.96	9485.05	9585.86	9754.45	9837.69	9947.62
O&M Expenses	13000.00	18850.00	19923.00	21068.50	22272.00	23548.00
Cost of Secondary Fuel Oil	1451.72	3663.13	3663.13	3673.17	3663.13	3663.13
Total	**72964.70**	**110437.06**	**113550.42**	**118978.02**	**121891.87**	**125106.83**

Note: *(i) All figures are on annualized basis.(ii) All the figures under each head have been rounded. (ii) The figure in total column in each year is also rounded. Because of rounding of each figure the total may not be arithmetic sum of individual items in columns*.

Energy Charge Rate (ECR)

96. The ECR of 171.275 paise/kwh (1.4.2009 to 19.3.2010) and 174.24 paise/kwh (20.3.2010 to 31.3.2014) considered for the purpose of tariff in order dated 13.4.2012 remain unchanged.

97. This order disposes of Petition Nos.206/GT/2013 & 272/GT/2014.

-Sd/-	***-Sd/-***	***-Sd/-***
[A.S BAKSHI]	**[A.K.SINGHAL]**	**[GIREESH B PRADHAN]**
MEMBER	**MEMBER**	**CHAIRPERSON**