

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 135/GT/2013

Coram:

**Shri Gireesh B. Pradhan, Chairperson
Shri M. Deena Dayalan, Member
Shri A.K.Singhal, Member
Smt. Neerja Mathur, Member (EO)**

Date of Hearing: 15.4.2014

Date of Order: 13.5.2014

In the matter of

Revision of tariff of Kahalgaon Super Thermal Power Station, Stage-I (840 MW) for the period from 1.4.2009 to 31.3.2014 -Truing up of tariff determined by order dated 23.5.2012 in Petition No. 245/2009 and order dated 3.5.2013 in R. P. No. 19/2012.

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 Co. Ltd.
Vidyut Bhawan, Block-DJ, Sector-II,
Salt Lake City, Kolkata-7000091

2. Bihar State Electricity Board
Vidyut Bhawan, Bailey Road
Patna-800001

3. Jharkhand State Electricity Board
Engineering Bhawan, Heavy Engineering Corporation
Dhurwa, Ranchi-834004

4. GRIDCO Ltd.
Vidyut Bhawan, Janpath
Bhubaneshwar-751007

5. Damodar Valley Corporation
DVC Towers, VIP Road
Kolkata-700054

6. Power Department,
Government of Sikkim,
Kazi Road, Gangtok, Sikkim-737101



7. Electricity Department,
Union Territory of Pondicherry
58, Subhash Chandra Bose Salai
Pondicherry-605001

8. Tamil Nadu Generation & Distribution Corporation Ltd
144, Anna Salai
Chennai-600002

9. Madhya Pradesh Power Trading Company Ltd,
Shakthi Bhavan, Vidyut Nagar,
Jabalpur-482008

10. Maharashtra State Electricity Distribution Company Ltd,
Prakashgad, Bandra (East)
Mumbai -400051

11. Gujarat Urja Vikas Nigam Limited,
Vidyut Bhavan, Race Course,
Vadodara-390007

12. Uttar Pradesh Power Corporation Ltd
Shakti Bhavan, 14, Ashok Marg,
Lucknow – 226001(Uttar Pradesh)

13. Power Development Department,
Government of J&K,
New secretariat,
Srinagar (J&K)

14. Power Department,
UT Secretariat,
UT Secretariat, Sector 9D
Chandigarh-160009

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

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

17. Tata Power Delhi Distribution Ltd.,
Grid Sub-station Hudson Road,
Kingsway Camp, Delhi-110009

18. Electricity Department,
Administration of Dadra and Nagar Haveli
Silvassa via VAPI

19. Electricity Department,
Administration of Daman and Diu
Daman-396210

...Respondents

Parties present:

For Petitioner: Shri Ajay Dua, NTPC
Shri I.Uppal, NTPC
Shri Rohit Chabbra, NTPC
Shri Bhupinder Kumar, NTPC

For Respondents: Shri R.B. Sharma, Advocate, GRIDCO, JSEB & BRPL

ORDER

This petition has been filed by the petitioner, NTPC, for revision of tariff of Kahalgaon Super Thermal Power Station, Stage-I (840 MW) (hereinafter referred to as “the generating station”) for the period from 1.4.2009 to 31.3.2014 in terms of the proviso to Regulation 6 (1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 Tariff Regulations”).

2. The generating station with a capacity of 840 MW comprises of four units of 210 MW each. The dates of commercial operation of different units of the generating station are as under:

	COD
Unit-I	1.1.1995
Unit-II	1.4.1995
Unit-III	1.2.1996
Unit-IV	1.8.1996

3. Petition No. 245/2009 was filed by the petitioner for approval of tariff of the generating station for the period 2009-14 and the Commission by its order dated 23.5.2012 approved the annual fixed charges considering the capital cost of ₹203951.87 lakh as on 1.4.2009, after deduction of un-discharged liabilities of ₹188.25 lakh as on 1.4.2009. Thereafter, the petitioner filed Review Petition No. 19/2012 seeking review of the said order dated 23.5.2012 and the Commission by its order dated 3.5.2013 revised the annual fixed charges approved vide order dated 23.5.2012. The annual fixed charges approved by order dated 3.5.2013 was as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	3794.11	4039.49	4601.52	5028.73	5121.94
Interest on Loan	41.58	0.00	19.08	15.95	0.00
Return on Equity	23874.64	24058.26	24522.58	24841.91	24904.29
Interest on Working Capital	5479.91	5538.90	5624.63	5685.23	5746.29
O&M Expenses	15288.00	16161.60	17085.60	18068.40	19101.60
Cost of Secondary fuel Oil	1219.45	1219.45	1222.79	1219.45	1219.45
Compensation Allowance	126.00	210.00	252.00	294.00	294.00
Special Allowance	0.00	0.00	0.00	0.00	0.00
Total	49823.69	51227.70	53328.20	55153.67	56387.57

4. The petitioner presently seeks revision of the annual fixed charges based on the actual additional capital expenditure incurred for the years 2009-10, 2010-11 and 2011-12 and revised projected estimated expenditure for the years 2012-13 and 2013-14 in accordance with clause (1) of Regulation 6 of the 2009 Tariff Regulations. 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."

5. In terms of the above, the petitioner has filed this petition for revision of tariff of the generating station for the period 2009-14. The annual fixed charges claimed by the petitioner for the period 2009-14 in this petition are as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	3801.04	3865.05	4195.60	4639.15	5061.25
Interest on Loan	38.22	0.00	11.90	9.10	0.00
Return on Equity	23881.44	23630.89	23626.53	23950.97	24226.99
Interest on Working Capital	5484.59	5533.79	5606.27	5668.82	5741.32
O&M Expenses	15288.00	16161.60	17085.60	18068.40	19101.60
Secondary Fuel Oil Cost	1219.45	1219.45	1222.79	1219.45	1219.45
Compensation Allowance	126.00	210.00	252.00	294.00	294.00
Special Allowance	0.00	0.00	0.00	0.00	0.00
Total	49838.74	50620.78	52000.69	53849.89	55644.61

6. Reply to the petition has been filed by the Respondent No.4. Grid Corporation of Orissa (GRIDCO), Respondent No 9, Uttar Pradesh Power Company Ltd (UPPCL) and the Respondent No 16, BSES Rajdhani Power Ltd (BRPL) and the petitioner has filed its rejoinder to the said reply. The

petitioner has also filed additional submissions as directed by the Commission. The petition was listed for directions on 15.4.2014 and the representative of the respondents UPPCL and BYPL submitted that the petitioner shall be directed to file audited statement of the actual capital expenditure for 2009-12 in terms of the regulations of the Commission. The representative of the petitioner clarified that the same has been filed and copies have been served on all the respondents.

7. GRIDCO and BRPL in their reply have pointed out that the petitioner has not submitted the details of the assets forming part of the generating station but not in use but has furnished the details of fixed assets forming part of the balance sheets. According to them, the assets not in use are to be de-capitalized. These respondents have not pointed to any specific asset which has impaired but not de-capitalized. The balance sheets submitted by the petitioner are duly audited and contain the details of the expenditure de-capitalized. As such, the objection of BRPL and GRIDCO are not acceptable. GRIDCO and BRPL have also pointed out that the petitioner has not furnished the details of works-in-progress and has sought these details from the petitioner. The objection lacks merit. The present petition is for revision of the Annual Fixed Charges after truing up on the basis of the capital expenditure actually incurred and the details of works-in-progress are not relevant for the purpose of the present petition filed for truing up of capital expenditure.

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."

9. In accordance with the above, the capital cost of ₹203951.87 lakh as on 31.3.2009, after excluding un-discharged liabilities of ₹188.25 lakh from the approved capital cost of ₹204140.12 lakh (on accrual basis) as considered by the Commission in order dated 23.5.2012 has been considered as the opening capital cost as on 1.4.2009 for revision of the annual fixed charges.

Actual/ Projected Additional Capital Expenditure

10. Regulation 9 of the 2009 Tariff Regulations, as amended on 21.6.2011 and 31.12.2012, 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 or projected to be 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.

(ix) Expenditure on account of creation of infrastructure for supply of reliable power to rural households within a radius of five kilometers of the power station if, the generating company does not intend to meet such expenditure as part of its Corporate Social Responsibility."

11. The break-up of the additional capital expenditure allowed by the Commission in its order dated 23.5.2012/3.5.2013 in Petition No. 245/2009 /R.P. No.19/2012 is as under.

(₹ in lakh)

Sl. No	Head of work/ Equipment	2009-10 (actual)	2010-11	2011-12	2012-13	2013-14	Total Allowed (2009-14)
A	Ash Handling System						
i	Ash Dyke Raising work	203.80	267.90	523.50	500.00	301.00	1796.20
ii	Pipe Line Pedestal in Ash Dyke	0.00	10.00	15.00	0.00	0.00	25.00
iii	Ash Slurry Series P/Ps (3 nos) 2 sets	0.00	0.00	40.00	40.00	40.00	120.00
iv	CISF Security Post in Ash Dyke	0.00	13.00	0.00	0.00	0.00	13.00
v	Dredging in Ash Dyke overflow Lagoon/Ganga Make up P/H	0.00	200.00	100.00	0.00	0.00	300.00
vi	Tower Light in Ash Dyke & Ash Brick Plant	0.00	0.00	120.00	0.00	0.00	120.00
	Sub Total- Ash Handling System (A)	203.80	490.90	798.50	540.00	341.00	2374.20
B	Environmental System						
i	Dry Ash System for Unit # 3 & 4 including Silo	0.00	0.00	974.00	0.00	0.00	974.00
ii.	AAQM	95.90	0.00	0.00	0.00	0.00	95.90
	Sub Total-Environmental System (B)	95.90	0.00	974.00	0.00	0.00	1069.90
C	Other Capital Works						
I	Wagon Tippler (M/s Elecon)	0.00	3509.88	3509.88	0.00	0.00	7019.76
ii	Locomotives (3 Nos)	0.00	736.00	1338.71	0.00	0.00	2074.71
iii	Track work/Augmentation of Railway Siding	0.00	800.00	1000.00	890.10	0.00	2690.10
iv	S&T and in-motion Weigh bridge	0.00	10.00	15.00	0.00	0.00	25.00
v	Condenser on Line tube cleaning systems	0.00	0.00	0.00	0.00	0.00	0.00
vi	Procurement of wagon (10 nos) against replacement	(-)171.80	0.00	0.00	0.00	0.00	(-) 171.80
	Total- Other Capital Cost (C)	(-) 171.80	5055.88	5863.59	890.10	0.00	11637.77
D	De-capitalization						
I	De-capitalization of construction equipments	(-) 445.90	0.00	0.00	0.00	0.00	(-) 445.90

ii	De-capitalization of vehicles	(-) 6.10	0.00	0.00	0.00	0.00	(-) 16.10
	Total- De-capitalization (D)	(-) 462.00	0.00	0.00	0.00	0.00	(-) 462.00
E	Grand Total (A+B+C+D)	(-) 334.10	5546.78	7636.09	1430.10	341.00	14619.87
F	New Items / Works Claimed						
I	Exclusion of de-capitalization of one wagon allowed in 2008-09	0.00	0.00	0.00	0.00	0.00	0.00
ii	Augmentation of security system	0.00	0.00	0.00	0.00	0.00	0.00
iii	Enhanced land compensation payment as per court settlement	0.00	0.00	0.00	0.00	0.00	0.00
iv	Implementation of 5 KM Scheme	0.00	0.00	0.00	0.00	0.00	0.00
	Sub Total (F)	0.00	0.00	0.00	0.00	0.00	0.00
	Total (E+F)	(-) 334.10	5546.78	7636.09	1430.10	341.00	14619.87
	Discharge of liabilities	0.00	0.00	0.00	0.00	0.00	0.00
	De-capitalization of equipments	0.00	0.00	0.00	0.00	0.00	0.00
	Total	(-)334.10	5546.78	7636.09	1430.10	341.00	14619.87

12. The additional capital expenditure claimed by the petitioner in this petition is summarized as under:

	(₹ in lakh)				
	2009-10 (actual)	2010-11 (actual)	2011-12 (actual)	2012-13 (Projected)	2013-14 (Projected)
Actual/Projected additional capital expenditure claimed including discharge of liabilities	(-) 140.34	861.48	6882.16	2544.92	5475.00

13. The petitioner vide its affidavit dated 29.8.2012 and the additional information submitted vide affidavit dated 13.6.2013 had not claimed any amount towards actual capitalization of Tower Light in Ash Dyke & Ash Brick Plant area during 2011-12, though an expenditure of ₹120.00 lakh on projected basis, was allowed by Commission's order dated 23.5.2012 in the original petition. Pursuant to the directions of the Commission during the proceedings held on 27.8.2013, the petitioner vide affidavit dated 5.9.2013 submitted that the work of Tower Light in Ash Dyke & Ash Brick Plant area has been completed during 2012-13 and the actual capital expenditure incurred was ₹154.00 lakh and has prayed for allowing the capitalization of the said amount. Accordingly, the year-wise actual/projected additional capital expenditure claimed by the petitioner stands revised as under:

	2009-10 (actual)	2010-11 (actual)	2011-12 (actual)	2012-13 (Projected)	2013-14 (Projected)
Actual/Projected additional capital expenditure claimed including discharge of liabilities	(-) 140.34	861.48	6882.16	2698.92	5475.00

14. The break-up of the additional capital expenditure claimed by the petitioner in this petition is detailed as under:

		2009-10 (Actual)	2010-11 (Actual)	2011-12 (Actual)	2012-13 (Projected)	2013-14 (Projected)	Total Claimed (2009-14)
A	Ash Handling System						
i	Ash Dyke Raising work	203.80	867.07	30.69	1023.92	301.00	2426.48
ii	Pipe Line Pedestal in Ash Dyke	0.00	0.00	0.00	0.00	15.00	15.00
iii	Ash Slurry Series P/Ps (3 nos) 2 sets	0.00	0.00	0.00	30.00	30.00	60.00
iv	CISF Security Post in Ash Dyke	0.00	0.00	0.00	0.00	0.00	0.00
v	Dredging in Ash Dyke overflow Lagoon/Ganga Make up P/H	0.00	0.00	0.00	0.00	0.00	0.00
vi	Tower Light in Ash Dyke & Ash Brick Plant	0.00	0.00	0.00	154.00	0.00	0.00
	Sub Total- Ash Handling System (A)	203.80	867.07	30.69	1207.92	346.00	2655.48
B	Environmental system						
i	Dry Ash System for Unit # 3 & 4 including Silo	0.00	0.00	0.00	0.00	0.00	0.00
ii.	AAQM	95.90	0.00	0.00	0.00	0.00	95.90
	Sub Total- Environmental System (B)	95.90	0.00	0.00	0.00	0.00	95.90
C	Other Capital Works						
I	Wagon Tippler (M/s Elecon)	0.00	0.00	4703.57	1176.00	0.00	5879.57
ii	Locomotives (3 Nos)	0.00	0.00	2043.46	0.00	0.00	2043.46
iii	Track work/Augmentation of Railway Siding	0.00	0.00	0.00	0.00	1690.00	1690.00
iv	S&T and in-motion Weigh bridge	0.00	0.00	0.00	15.00	10.00	25.00
v	Condenser on Line tube cleaning systems	0.00	0.00	0.00	0.00	0.00	0.00
vi	Procurement of wagon (10 nos) against replacement	0.00	0.00	0.00	0.00	0.00	0.00
	Total- Other capital works (C)	0.00	0.00	6747.03	1191.00	1700.00	9638.03
D	De-capitalization						
i	De-capitalization of construction equipments	(-) 445.89	0.00	0.00	0.00	0.00	(-) 445.89
ii	De-capitalization of vehicles	(-) 16.08	0.00	0.00	0.00	0.00	(-) 16.08
	Total- De-capitalization (D)	(-) 461.97	0.00	0.00	0.00	0.00	(-) 461.97
E	Grand Total (A+B+C+D)	(-) 162.27	867.07	6777.72	2398.92	2046.00	11927.44
F	New Items / Works claimed						
i	Exclusion of de-capitalization of one wagon allowed in 2008-09	19.18	0.00	0.00	0.00	0.00	19.18
ii	Augmentation of security system	0.00	0.00	56.90	0.00	0.00	56.90
iii	Enhanced land compensation payment as per court settlement	2.08	0.00	37.91	0.00	0.00	39.99
iv	Implementation of 5 KM Scheme	0.00	0.00	0.00	0.00	2577.00	2577.00
	Sub Total (F)	21.26	0.00	94.81	0.00	2577.00	2693.07
	Total (E+F)	(-) 141.01	867.07	6872.53	2398.92	4623.00	14620.51
	Discharge of liabilities	0.67	1.16	9.62	300.00	852.00	1163.45
	De-capitalization of equipments	0.00	(-) 6.75	0.00	0.00	0.00	(-) 6.75
	Sum Total	(-) 140.34	861.48	6882.16	2698.92	5475.00	15777.21

15. The total claim of the petitioner raised for capitalization of additional expenditure in the present petition is ₹11927.44 lakh (excluding new items) as against the additional capital expenditure of ₹14619.87 lakh allowed vide orders dated 23.5.2012/ 3.5.2013. Thus, there is reduction of ₹2692.43 lakh in the petitioner's claim. The reduction is mainly due to less claim of ₹974.00 lakh for Dry Ash system, ₹1140.19 lakh for Wagon tippler and ₹1000.10 lakh for augmentation of railway siding. There is no variation in the actual capital expenditure claimed in this petition against those allowed vide orders dated 23.5.2012 /3.5.2013 during 2009-10. We now proceed to consider the claims of the petitioner for capitalization based on the available records and submissions of the parties as stated in the subsequent paragraphs

Regulation 9(2)(iii)

Ash Handling System under Ash Dyke Raising

16. The petitioner has claimed actual additional capital expenditure of ₹1101.56 lakh (₹203.80 lakh during 2009-10, ₹867.07 lakh during 2010-11 and ₹30.69 lakh during 2011-12) as against the admitted capital expenditure of ₹995.20 lakh (actual of ₹203.80 lakh in 2009-10, projected expenditure of ₹267.90 lakh in 2010-11 and ₹523.50 lakh in 2011-12) and projected / estimated additional capital expenditure of ₹1324.92 lakh during 2012-14 as against the projected additional capital expenditure of ₹801.00 lakh allowed vide order dated 23.5.2012/3.5.2013. Hence, there is increase of ₹106.36 lakh in the actual capital expenditure claimed during 2009-12 which works out to 10.68% (approx) and an increase of ₹523.92 lakh in the projected capital expenditure which works out to 65.4% (approx). The petitioner vide its affidavit dated 11.2.2013 has submitted that the difference is mainly due to variation in the awarded value of certain packages which is higher than the estimated values considered in the main tariff petition. Further, the petitioner vide its affidavit dated 5.9.2013 has submitted that the estimates for 3rd Ash dyke raising was prepared in 2009-10 based on the awarded rate of 2nd raising of Lagoon-II and the capitalization projected earlier was based on the same. The capitalization value of Ash dyke raising work has however increased on account of the considerable increase in the rates of sand, soil, labour, diesel, stone aggregates etc. It is observed from the comparative price of the above items (for the period 2007 and 2012) furnished by the

petitioner that price of the above items has increased twofold. In view of the above, the increase in the actual additional capital expenditure for the period 2009-12 and the projected additional capital expenditure for the period 2012-14 in respect of Ash dyke raising is justified since these works relating to raising of ash dyke are normal activities done in phases depending upon the requirement with passage of time and the said works forms part of the original scope of work. Hence, the actual additional capital expenditure claimed during 2009-12 and the projected additional capital expenditure claimed during 2012-14 has been allowed.

Pipeline pedestal in Ash Dyke

17. The petitioner has claimed projected additional capital of ₹15.00 lakh during 2013-14 as against the projected capital expenditure of ₹25.00 lakh allowed towards pipeline pedestal in Ash dyke during 2009-14 vide order dated 23.5.2012/3.5.2013. Hence, there is reduction of ₹10.00 lakh in the projected capital expenditure. The petitioner vide its affidavit dated 11.2.2013 has submitted that the difference is mainly due to variation in the awarded value than the estimated values considered in the main tariff petition. In view of the above, the projected additional capital expenditure claimed in respect of pipeline pedestal in Ash dyke is justified and hence, the capital expenditure of ₹15.00 lakh during 2013-14 on this count is allowed.

Installation of Tower Light in Ash Dyke

18. The petitioner vide affidavit dated 5.9.2013 has submitted that the Commission in its order dated 23.5.2012 had allowed ₹120.00 lakh towards installation of Tower light in Ash dyke and Ash brick plant. The petitioner has, however, not indicated any capitalization on actual/projected basis in this petition. As stated in para 13 above, the petitioner in affidavit dated 5.9.2013 has submitted that the said work has been completed in 2012-13 and the corresponding capitalization is ₹154.00 lakh. According to petitioner, the completed cost of Tower Light in Ash Dyke is ₹154.00 lakh. We notice that the completed cost of the said work is higher by ₹34.00 lakh which is 28%(approx) higher from the projected expenditure and the same has not been explained by the petitioner in its affidavit dated 5.9.2013. In view of this, the capitalization of ₹120.00 lakh only has been considered during 2012-13. However, the petitioner is at liberty to claim the increased capital expenditure of ₹34.00 lakh towards

installation of Tower light in Ash dyke and Ash brick plant with proper justification at the time of truing-up.

Ash Slurry Series P/Ps (3 nos) 2 sets

19. The petitioner has claimed projected capital expenditure of ₹60.00 lakh (₹30.00 lakh during 2012-13 and ₹30.00 lakh during 2013-14) for Ash slurry series pumps as against allowed projected capital expenditure of ₹120.00 lakh vide order dated 23.5.2012/ 3.5.2013. So, there is reduction of ₹60.00 lakh in the projected capital expenditure. The petitioner vide affidavit dated 11.2.2013 has submitted that the difference is mainly due to variation in the awarded value than the estimated values considered in the original tariff petition. In view of the above, the projected additional capital expenditure claimed in respect of pipeline pedestal in ash dyke is found justified and hence, the capital expenditure of ₹30.00 lakh each in the year 2012-13 and in the year 2013-14 on this count has been allowed.

CISF security in Post in Ash Dyke and Dredging in Ash Dyke overflow Lagoon/ Ganga make up P/H.

20. The petitioner has not claimed any actual/projected additional capital expenditure as against the projected capital expenditure of ₹13.00 lakh allowed for CISF Security Post in Ash Dyke and ₹300.00 lakh for Dredging Ash Dyke overflow Lagoon/ Ganga make up P/H.

Regulation 9(2)(ii) -Change-in-Law

Environmental System

21. The Commission had allowed ₹1069.90 lakh for Environmental System which included actual additional capital expenditure of ₹95.90 lakh in 2009-10 for Ambient Air Quality Management System (AAQMS) and projected additional capital expenditure of ₹974.00 lakh during 2011-12 for Dry Ash System. The petitioner in this petition has claimed actual additional capital expenditure of ₹95.90 lakh during 2009-10 and has not incurred any capital expenditure towards Dry Ash System. Hence, actual additional capital expenditure of ₹95.90 lakh for AAQMS during 2009-10 has been allowed under Regulation 9(2)(ii).

Wagon Tippler, Locomotives, Weigh Bridge & Augmentation of Railway siding etc.

22. The Commission had allowed an additional capital expenditure of ₹7019.76 lakh during 2010-11 and 2011-12. The petitioner has claimed additional capital expenditure of ₹5879.57 lakh (actual expenditure of ₹4703.57 lakh during 2011-12 and projected capital expenditure of ₹1176.00 lakh during 2012-13) for installation of Wagon Tippler. The petitioner has also claimed actual capital expenditure of ₹2043.46 lakh during 2011-12 towards procurement of locomotives (3 nos) as against 2074.71 lakh (₹736.00 lakh during 2010-11 and ₹1338.71 lakh during 2011-12) allowed by the Commission. Similarly, projected capital expenditure of ₹1690.00 lakh has been claimed during 2013-14 for augmentation of Railway Siding as against the expenditure of ₹2690.10 lakh (₹800.00 lakh during 2010-11, ₹1000.00 lakh during 2010-11 and ₹890.10 lakh during 2011-12) and projected capital expenditure of ₹15.00 lakh during 2012-13 and ₹10.00 lakh during 2013-14 for Weigh Bridge. The projected capital expenditure claimed had been allowed under Regulation 9(2)(vii) of the 2009 Tariff Regulations in order dated 23.5.2012. Accordingly, the actual/ projected additional capital expenditure claimed during 2011-14 by the petitioner for Wagon Tippler and its associated works amounting to ₹9638.03 lakh, which are lesser than the approved estimate of ₹11809.57 lakh, has been allowed under Regulation 9(2)(vii) of the 2009 Tariff Regulations as per year-wise phasing given under:

	(₹ in lakh)					
	2009-10 (Actual)	2010-11 (Actual)	2011-12 (Actual)	2012-13 (Projected)	2013-14 (Projected)	Total
Wagon Tippler	0.00	0.00	4703.57	1176.00	0.00	5879.57
Locomotives (3 Nos.)	0.00	0.00	2043.46	0.00	0.00	2043.46
Augmentation of railway siding work	0.00	0.00	0.00	0.00	1690.00	1690.00
Weigh Bridge	0.00	0.00	0.00	15.00	10.00	25.00
Total	0.00	0.00	6747.03	1191.00	1700.00	9638.03

De-capitalization of construction equipment, Vehicles

23. The Commission in order dated 3.5.2013 had allowed the actual de-capitalization of (-) ₹445.90 lakh towards construction equipments and (-) ₹16.10 lakh for vehicles during 2009-10. The petitioner now has de-capitalized an amount of (-) ₹445.89 lakh towards construction equipment and (-) ₹16.08 lakh for vehicles from books of accounts during 2009-10. This appears to be on account of rounding-off error. Further, the petitioner has de-capitalized (-) ₹6.75 lakh for 500 TR capacity Vapour

Absorption Machine during 2010-11 respectively on the ground that these assets have become unserviceable. As these assets have become un-serviceable and render no useful service to the generating station, the de-capitalization of these amounts on the said assets has been allowed.

New items /works

24. The petitioner has claimed additional capital expenditure on new assets/works totalling to ₹2693.07 lakh. This includes projected expenditure of ₹2577.00 lakh in 2013-14 for creation of infrastructure for supply of reliable power within a radius of five kilometers of the power station of (5 km. scheme), actual expenditure of ₹39.99 lakh (₹2.08 in 2009-10 and ₹37.91 lakh in 2011-12) towards Land compensation as per Court settlement and ₹56.90 lakh during 2011-12 for Augmentation of security system. Since the scheme for creation of infrastructure for supply of reliable power within a radius of five kilometers has been withdrawn by the Govt. of India, Ministry of Power vide its notification dated 25.3.2013, the projected additional capital expenditure claimed by the petitioner has not been allowed. As regards enhanced compensation for land as per Court Settlement, the petitioner has furnished sufficient justification / documentary evidence for the same and hence the expenditure on this count has been allowed under Regulation 9(2)(i). The petitioner has claimed actual capital expenditure of ₹19.18 lakh towards exclusion of de-capitalization of one wagon allowed in 2008-09. The petitioner vide its affidavit dated 23.11.2012 has clarified that the Commission has disallowed the de-capitalization of 9 wagons whereas the exclusion of one wagon of ₹19.18 lakh was allowed in 2008-09 vide order dated 15.6.2010, the same may be disallowed (given back) now. The submission of the petitioner regarding de-capitalization of wagon has been examined. It is pertinent to mention that the Commission in its order dated 3.5.2013 in R.P. No. 19/2012 has rectified the error in ignoring the de-capitalization of 9 wagons in order dated 23.5.2012. Similarly, the claim of the petitioner for disallowing de-capitalization of 1 wagon of ₹19.18 lakh (effected during 2008-09) has not been allowed. In regard to actual additional capitalization of ₹56.90 lakh towards installation of Concertina fencing etc. during 2011-12, the additional capital expenditure of ₹56.90 lakh shall be met from the Compensation Allowance of ₹1176.00 lakh allowed to the petitioner vide order dated 23.5.2012 in Petition No. 245/2009. Hence, the expenditure has not been allowed.

25. The petitioner has claimed additional capital expenditure as per books of accounts for the years 2009-10, 2010-11 and 2011-12 as under:

(₹ in lakh)				
Sl. No.		2009-10	2010-11	2011-12
a	Opening Gross Block as per audited Balance Sheet for Kahalgaon STPS	547112.53	712848.58	732377.02
b	Closing Gross Block as per audited Balance Sheet Kahalgaon STPS	712848.58	732377.02	762738.90
c	Addition during the year (b-a) (as per books)	165736.05	19528.44	30361.88
d	Additional capitalization , Stage-II	166313.59	18870.44	21450.49
6	Additional capitalization, Stage-I as per books	(-) 577.54	658.00	8911.39
	Additional capitalization claimed on cash basis	(-) 141.01	860.32	6872.54

Exclusions

26. The actual additional capital expenditure claimed by the petitioner has been reconciled with gross block of the balance sheet. It is observed that the actual additional capital expenditure claimed by the petitioner is at variance with the additional capital expenditure as per books of accounts due to exclusions of certain expenditure for the purpose of tariff. The details of exclusions claimed by the petitioner during 2009-10 to 2011-12, are summarized under:

Name of work	(₹ in lakh)		
	Capitalization / De-capitalization		
	2009-10	2010-11	2011-12
De-capitalization of 9 unserviceable Wagons	(-) 171.83	(-) 619.02	(-) 240.10
Capital Spares de-capitalized	(-) 243.50	(-) 123.40	(-) 176.34
Capital Spares capitalized	-	641.69	321.24
De-capitalized MBOA	(-) 3.56	(-) 14.87	-
Inter-unit Transfer	-	(-) 5.48	975.42
Assets not owned by the company	-	(-) 99.83	-
Liability Reversal	-	(-) 4.42	-
ERV (loan)	(-) 10.05	1.96	6.38
Total Exclusions	(-) 428.94	(-) 223.37	886.60

27. We consider the exclusions for the years 2009-10, 2010-11 and 2011-12 under different heads in the claim for the purpose of tariff as discussed in subsequent paragraphs:

2009-10

De-capitalization of unserviceable Wagons

28. The petitioner has excluded an amount of (-) ₹171.83 lakh for de-capitalization of 9 no Wagons on the basis that the de-capitalization of Wagons was disallowed by the Commission in order dated 23.5.2012. However, the Commission in its order dated 3.5.2013 in R.P.No.19/2012 *suo motu* reviewed the decision in order dated 23.5.2012 as regards ignoring de-capitalization. Accordingly, the

exclusion of (-) ₹171.83 lakh towards De-Capitalization of Wagons has not been considered in this order.

Capital Spares De-capitalized

29. The petitioner has de-capitalized capital spares amounting to (-) ₹243.50 lakh in books of accounts during 2009-10 on these spares becoming unserviceable. It is observed from the de-capitalization of spares that out of (-) ₹243.50 lakh, Capital spares amounting to ₹215.23 lakh were allowed in tariff as part of the capital cost and spares amounting to ₹28.27 lakh was not allowed. Hence, de-capitalization of spares for (-) ₹215.23 lakh which was allowed in tariff earlier has not been allowed under exclusions. However, de-capitalization of spares for (-) ₹28.27 lakh which was not allowed, and thereby not forming part of capital cost of the generating station for the purpose of tariff, has been allowed under exclusion.

De-capitalization of Miscellaneous Bought Out Assets (MBOA) items

30. The petitioner has also excluded de-capitalized MBOA in books of accounts amounting to (-) ₹3.56 lakh during the year 2009-10 on the same being rendered unserviceable. The prayer of the petitioner for exclusion of de-capitalized MBOA would have been justified if the de-capitalized MBOA items were the ones which were disallowed by the Commission for the purpose of tariff. However, the petitioner by its affidavit dated 11.2.2013 has submitted that these MBOA items were part of the capital cost for the purpose of tariff. Hence, exclusion of negative entries on account of de-capitalization of MBOA items has not been allowed for the purpose of tariff.

LOAN FERV

31. The petitioner has excluded an amount of (-) ₹10.05 lakh in the year 2009-10 on account of impact of FERV. As the petitioner bills FERV directly on the beneficiaries, the exclusion of FERV is in order and has been allowed.

32. Based on the above, the details of exclusions claimed vis-à-vis allowed, on cash basis, during 2009-10 is as under:

	(₹ in lakh)
Exclusions Allowed (A)	(-) 38.32
Exclusions Claimed (B)	(-) 428.94
Exclusions not allowed (A-B)	390.62

2010-11

Capital Spares De-capitalized

33. The petitioner has de-capitalized capital spares amounting to (-) ₹123.40 lakh in books of accounts during the year 2010-11 on these spares becoming unserviceable. The petitioner has sought exclusion on the ground that capitalization as well as de-capitalization of Capital spares are not being allowed as part of capital cost. This submission is not acceptable since de-capitalization of spares on it becoming unserviceable should be taken out from capital base. Further, the petitioner has not produced any documentary proof that these spares were not part of the capital cost allowed for tariff. Hence, de-capitalization of spares for (-) ₹123.40 lakh which was allowed in tariff has not been allowed under exclusion.

Capitalization of Capital Spares

34. The petitioner has capitalized capital spares in books of accounts amounting to ₹641.69 lakh during 2010-11. Since capitalization of capital spares over and above the initial spares procured after cut-off date are not allowed for the purpose of tariff as they form part of O&M expenses when consumed, the exclusions of ₹641.69 lakh during 2010-11 are in order and are allowed.

Inter-Unit Transfers

35. An amount of (-) ₹5.48 lakh in the year 2010-11 has been excluded under this head on account of transfer of certain assets. These inter-unit transfers are indicated to be temporary. The Commission while dealing with 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 exclusions of the amount of (-) ₹5.48 lakh in the year 2010-11 on account of inter-unit transfer of equipment on temporary basis is in order and has been allowed.

Reversal of Liability

36. The petitioner has excluded an amount of (-) ₹4.42 lakh in the year 2010-11 on account of reversal of liability against land compensation. The petitioner vide its affidavit dated 4.12.2012 has submitted that the reversal of liability claimed under exclusion has not been included in tariff. Hence, the exclusion of reversal of liability is in order and therefore, allowed.

De-capitalization of Miscellaneous Bought out Assets (MBOA) items

37. The petitioner has excluded de-capitalized MBOA in books of accounts amounting to (-) ₹14.87 lakh during the year 2010-11 on the same being rendered unserviceable. The prayer of the petitioner for exclusion of de-capitalized MBOA items would have been justified if the de-capitalized MBOA items were the ones which were disallowed for the purpose of tariff. However, the petitioner vide its affidavit dated 11.2.2013 has submitted that these MBOA items were part of the capital cost of the generating station for the purpose of tariff. Hence, exclusion of negative entries on account of de-capitalization of these MBOA rendered unserviceable is not allowed.

De-capitalization unserviceable MGR Wagons (34 nos)

38. The petitioner has excluded an amount of (-) ₹619.02 lakh for de-capitalization of Wagons on the basis that the de-capitalization of Wagons was disallowed by the Commission in the tariff order dated 23.5.2012 in Petition No. 245/2009. However, in order dated 3.5.2013 the Commission had *suo motu* allowed the de-capitalization of wagons by way of review of the order dated 23.5.2012 in Petition No. 245/2009. Accordingly, the exclusion of (-) ₹619.02 lakh sought for de-capitalization of Wagons has not been considered.

Assets not owned by the Company

39. The petitioner has excluded (-) ₹99.83 lakh towards assets not owned by the company. Since the asset does not render any useful service, the exclusion of the same has not been allowed.

LOAN FERV

40. The petitioner has excluded an amount of ₹1.96 lakh in the year 2010-11 on account of impact of FERV. As the petitioner bills FERV directly to the beneficiaries, the exclusion of FERV is in order and has been allowed.

41. Based on the above, the details of exclusions claimed vis-à-vis allowed for 2010-11 is as under:

(₹ in lakh)	
Exclusions Allowed (A)	633.75
Exclusions Claimed (B)	(-) 223.37
Exclusions not Allowed (A-B)	857.12

2011-12

De-capitalization of capital spares

42. The petitioner has de-capitalized capital spares amounting to (-)₹176.34 lakh in books of accounts during the year 2011-12 on becoming these spares unserviceable. The petitioner has sought exclusion on the ground that capitalization as well as de-capitalization of Capital spares are not being allowed as part of capital cost. The submission is not acceptable as the de-capitalization of spares on its becoming unserviceable, should be taken out from capital base. Further, the petitioner has not produced any documentary evidence indicating that these spares were not part of capital cost considered for tariff. Hence, de-capitalization of spares for (-)₹176.34 lakh which was allowed in tariff has not been allowed under exclusion.

Capitalization of Capital Spares

43. The petitioner has capitalized capital spares in books of accounts amounting to ₹321.24 lakh during 2011-12. Since the capitalization of capital spares over & above initial spares procured after cut-off date are not allowed for the purpose of tariff as they form part of O&M expenses when consumed, the exclusions of ₹321.24 lakh during 2011-12 are in order and are allowed.

LOAN FERV

44. The petitioner has excluded an amount of ₹6.38 lakh in the year 2011-12 on account of impact of FERV. As the petitioner bills FERV directly to the beneficiaries, the exclusion of FERV is in order and has been allowed.

Inter-Unit Transfers

45. An amount of ₹975.42 lakh during 2011-12 has been excluded under this head on account of transfer of Diesel Loco from Barh generating station. However, it has not been indicated as to whether this inter-unit transfer is temporary or permanent. However, the petitioner has excluded the

same from capitalization. In consideration of this, exclusion of ₹975.42 lakh during 2011-12 on account of inter-unit transfer of Diesel Loco has been allowed.

De-capitalization of MGR wagons (12 Nos)

46. The petitioner has excluded amount of (-)₹240.10 lakh towards de-capitalization of Wagons on the ground that capitalization and de-capitalization of Wagons was disallowed by the Commission in the order dated 23.5.2012 in Petition No.245/2009. However, the Commission in its order dated 3.5.2013 in Petition No 19/RP/2013 had *suo motu* allowed the de-capitalization of wagons by way of review of its decision to ignore the de-capitalization in order dated 23.5.2012 in Petition No. 245/2009. Accordingly, the exclusion of (-)₹240.10 lakh for de-capitalization of Wagons has not been considered.

47. Accordingly, the details of exclusions claimed vis-à-vis allowed is as under:

	(₹ in lakh)
Exclusions Allowed (A)	1303.04
Exclusions Claimed (B)	886.60
Exclusions not Allowed (A-B)	416.44

48. Based on the above discussions, the actual additional capital expenditure for the years 2009-10, 2010-11 and 2011-12 and the projected additional capital expenditure during 2012-13 and 2013-14, allowed is summarized as under:

		(₹ in lakh)				
	Head of work / Equipment	2009-10 (actual)	2010-11 (actual)	2011-12 (actual)	2012-13 (Projected)	2013-14 (Projected)
A	Ash Handling System					
i	Ash Dyke Raising work	203.80	867.07	30.69	1023.92	301.00
ii	Pipe Line Pedestal in Ash Dyke	0.00	0.00	0.00	0.00	15.00
iii	Ash Slurry Series P/Ps (3 nos) 2 sets	0.00	0.00	0.00	30.00	30.00
iv	CISF Security Post in Ash Dyke	0.00	0.00	0.00	0.00	0.00
v	Dredging in Ash Dyke overflow Lagoon/Ganga Make up P/H	0.00	0.00	0.00	0.00	0.00
vi	Tower Light in Ash Dyke & Ash Brick Plant	0.00	0.00	0.00	120.00	0.00
	Sub-Total-Ash Handling System (A)	203.80	867.07	30.69	1173.92	346.00
B	Environmental System					
i	Dry Ash System for Unit # 3 & 4 including Silo	0.00	0.00	0.00	0.00	0.00
ii	Ambient Air Quality Management System (AAQMS)	95.90	0.00	0.00	0.00	0.00
	Sub-Total-Environmental System (B)	95.90	0.00	0.00	0.00	0.00
C	Other Capital Works					
i	Wagon Tippler (M/s Elecon)	0.00	0.00	4703.57	1176.00	0.00
ii	Locomotives (3 Nos)	0.00	0.00	2043.46	0.00	0.00

iii	Track work/Augmentation of Railway Siding	0.00	0.00	0.00	0.00	1690.00
iv	S&T and in-motion Weigh bridge	0.00	0.00	0.00	15.00	10.00
	Sub Total-Other Capital Works (C)	0.00	0.00	6747.03	1191.00	1700.00
D	De-Capitalization					
i	De-capitalization of construction equipments	(-) 445.89	(-) 6.75	0.00	0.00	0.00
ii	De-capitalization of vehicles	(-) 16.08	0.00	0.00	0.00	0.00
	Sub Total (D)	(-) 461.97	(-) 6.75	0.00	0.00	0.00
1	Total (A+B+C+D)	(-) 162.27	860.32	6777.72	2364.92	2046.00
E	New Items / Works Claimed					
i	Exclusion of de-capitalization of one wagon allowed in 2008-09	0.00	0.00	0.00	0.00	0.00
ii	Augmentation of security system (Concertina fencing)	0.00	0.00	0.00	0.00	0.00
iii	Enhanced land compensation payment as per court settlement	2.08	0.00	37.91	0.00	0.00
iv	Implementation of 5 KM Scheme	0.00	0.00	0.00	0.00	0.00
2	Sub Total (E)	2.08	0.00	37.91	0.00	0.00
3	Grand Total (1+2)	(-) 160.19	860.32	6815.63	2364.92	2046.00
4	Exclusions not allowed	390.62	857.12	416.44	0.00	0.00
	Total additional capital expenditure allowed (3-4)	(-) 550.81	3.20	6399.19	2364.92	2046.00

49. The actual/projected additional capital expenditure allowed, considering discharges, is as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Net additional capital expenditure allowed prior to adjustment of discharges of liabilities	(-) 550.81	3.20	6399.19	2364.92	2046.00
Discharges of liabilities	0.67	1.16	9.62	300.00	852.00
Actual/ Projected additional capital expenditure allowed	(-) 550.14	4.36	6408.81	2664.92	2898.00

50. Based on the above, the capital cost considered for the purpose of tariff for 2009-14 is as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2019-14
Opening Capital cost	203951.87	203401.73	203406.09	209814.90	212479.82
Additional capital expenditure Allowed	(-) 550.14	4.36	6408.81	2664.92	2898.00
Closing capital cost	203401.73	203406.09	209814.90	212479.82	215377.82
Average Capital Cost	203676.80	203403.91	206610.50	211147.36	213928.82

Debt-Equity Ratio

51. Regulation 12 of the 2009 Tariff Regulations provides that:

(a) 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 utilised for meeting the capital expenditure of the generating station or the transmission system.

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

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

52. Accordingly, gross loan and equity amounting to ₹102225.43 lakh and ₹101726.44 lakh, respectively as allowed in order dated 3.5.2013 has been considered as gross loan and equity as on 1.4.2009. Further, the admitted actual/ projected additional capital expenditure as above has been allocated in debt-equity ratio of 70:30. This is subject to truing-up in terms of Regulation 6 of the 2009 Tariff Regulations.

Return on Equity

53. Regulation 15 of the 2009 Tariff Regulations, as amended on 21.6.2011, provides that:

“(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 charges 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 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.”

54. Return on equity has been worked out based on the grossing up of the base rate with respect to actual tax rate applicable to the petitioner as a generating company for the years 2009-10, 2010-11 and 2011-12 and for the balance years, the rate of grossing up as applicable for the year 2011-12 per annum has been considered on the normative equity after accounting for actual/projected additional capital expenditure. Accordingly, return on equity worked out is as given under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Notional Equity- Opening	101726.44	101561.40	101562.71	103485.35	104284.83
Addition of Equity due to additional capital expenditure	(-)165.04	1.31	1922.64	799.48	869.40
Normative Equity-Closing	101561.40	101562.71	103485.35	104284.83	105154.23
Average Normative Equity	101643.92	101562.06	102524.03	103885.09	104719.53
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
Tax Rate	33.990%	33.218%	32.445%	32.445%	32.445%
Rate of Return on Equity (Pre Tax)	23.481%	23.210%	22.944%	22.944%	22.944%
Return on Equity (Pre Tax)- (annualised)	23867.01	23572.55	23523.11	23835.40	24026.85

Interest on loan

55. Regulation 16 of the 2009 Tariff Regulations provides that:

“(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.

56. The interest on loan has been worked out as under:

- (a) The gross normative loan of ₹102225.43 lakh as on 1.4.2009 has been considered.
- (b) Cumulative repayment as on 1.4.2009 amounting to ₹100982.93 lakh as considered in order dated 3.5.2013 has been considered.
- (c) Accordingly, the net normative opening loan as on 1.4.2009 works out to ₹1242.72 lakh.
- (d) Addition to normative loan to the tune of 70% of additional capital expenditure approved above has been considered on year to year basis.
- (e) In line with the provisions of the Regulation 16(5) stated above, the weighted average rate of interest has been calculated considering the actual loan portfolio. In case of loans carrying floating rate of interest, the rate of interest as provided by the petitioner has been considered for the purpose of tariff. This is subject to true-up.
- (f) The cumulative repayment has been adjusted @70% due to de-capitalization of assets/works.

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

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross opening loan	102225.43	101840.33	101843.38	106329.55	108194.99
Cumulative repayment of loan upto previous year	100982.70	101840.33	101843.38	105727.34	108194.99
Net Loan Opening	1242.72	0.00	0.00	602.21	0.00
Addition due to Additional capitalisation	(-) 385.10	3.05	4486.17	1865.44	2028.60
Repayment of loan during the year	1454.04	605.11	4169.68	2467.66	2028.60
Less: Repayment adjustment on account of de-capitalization	596.82	604.72	291.51	0.00	0.00
Add: Repayment adjustment on account of discharges / reversals corresponding to un-discharged liabilities deducted as on 1.4.2009	0.40	2.66	5.79	0.00	0.00
Net Repayment	857.63	3.05	3883.95	2467.66	2028.60
Net Loan Closing	0.00	0.00	602.21	0.00	0.00
Average Loan	621.36	0.00	301.11	301.11	0.00
Weighted Average Rate of Interest on Loan	6.1516%	5.1416%	3.7936%	2.9000%	2.9000%
Interest on Loan	38.22	0.00	11.42	8.73	0.00

Depreciation

58. Regulation 17 of the 2009 Tariff Regulations provides that:

“(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 long-term 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 3[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.”

59. The cumulative depreciation works out to ₹133234.49 lakh as on 1.4.2009 after accounting for adjustment of un-discharged liabilities. Further, the value of freehold land as considered in order dated 3.5.2013 as on 1.4.2009 is ₹2944.10 (on accrual basis) and un-discharged liabilities in land is ₹144.13 lakh. After considering the approved additional capital expenditure for the year 2009-10 above and after accounting for freehold land (on cash basis), the balance depreciable value before providing depreciation for the year 2009-10 works out to ₹47553.73 lakh. Depreciation has been calculated by spreading over of the balance depreciable value. Further, proportionate adjustment has been made to the cumulative depreciation on account of de-capitalization of assets and also on account of discharges/reversal of liabilities out of un-discharged liabilities deducted from capital cost as on 1.4.2009. The necessary calculations in support of depreciation are as shown below:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening capital cost	203951.87	203401.73	203406.09	209814.90	212479.82
Closing capital cost	203401.73	203406.09	209814.90	212479.82	215377.82
Average capital cost	203676.80	203403.91	206610.50	211147.36	213928.82
Depreciable value @ 90%	180788.22	180541.68	183406.22	187468.01	189971.32
Remaining useful life at the beginning of the year	12.55	11.55	10.55	9.55	8.55
Balance depreciable value	47553.73	44199.88	43990.12	44177.57	42054.96
Depreciation (annualized)	3789.14	3826.83	4169.68	4625.92	4918.71
Cumulative depreciation at the end	137023.63	140168.63	143585.78	147916.36	152835.07
Less: Cumulative depreciation reduction due to de-capitalization	682.27	752.53	295.34	0.00	0.00
Add: Cumulative depreciation adjustment on account of discharges / reversal of liabilities out of liabilities deducted as on 01.04.2009	0.44	0.00	0.00	0.00	0.00
Net Cumulative depreciation (at the end of the period)	136341.80	139416.10	143290.44	147916.36	152835.07

O&M Expenses

60. O&M expenses as considered in order dated 3.5.2013 as stated below has been considered.

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
O&M expenses	15288.00	16161.60	17085.60	18068.40	19101.60

Interest on Working Capital

61. Cost of coal for 1.1/2 months and cost of secondary fuel for 2 months as considered in order dated 3.5.2013 as stated below, has been considered.

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of coal – 1.1/2 months	13669.36	13669.36	13706.81	13669.36	13669.36
Cost of secondary fuel oil – 2 month	203.24	203.24	203.80	203.24	203.24

62. Maintenance spares as considered in order dated 3.5.2013 as stated below, has been considered.

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	3057.60	3232.32	3417.12	3613.68	3820.32

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

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Variable Charges -2 months	18225.81	18225.81	18275.75	18225.81	18225.81
Fixed Charges - 2 months	8301.23	8419.13	8643.21	8951.27	9214.06
Total	26527.05	26644.94	26918.95	27177.08	27439.88

64. O&M expenses for 1 month for the purpose of working capital as considered in order dated 3.5.2013 has been considered.

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
O & M for 1 month	1274.00	1346.80	1423.80	1505.70	1591.80

65. 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 given as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of coal – 1.1/2 months	13669.36	13669.36	13706.81	13669.36	13669.36
Cost of secondary fuel oil –2 month	203.24	203.24	203.80	203.24	203.24
Maintenance Spares	3057.60	3232.32	3417.12	3613.68	3820.32
O&M expenses – 1 month	1274.00	1346.80	1423.80	1505.70	1591.80
Receivables – 2 months	26527.05	26644.94	26918.95	27177.08	27439.88
Total working capital	44731.25	45096.66	45670.48	46169.06	46724.60
Rate of interest	12.2500%	12.2500%	12.2500%	12.2500%	12.2500%
Interest on working capital	5479.58	5524.34	5594.63	5655.71	5723.76

Annual Fixed Charges for 2009-14

66. 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
Depreciation	3789.14	3826.83	4169.68	4625.92	4918.71
Interest on Loan	38.22	0.00	11.42	8.73	0.00
Return on Equity	23867.01	23572.55	23523.11	23835.40	24026.85
Interest on Working Capital	5479.58	5524.34	5594.63	5655.71	5723.76
O&M Expenses	15288.00	16161.60	17085.60	18068.40	19101.60
Cost of secondary fuel oil	1219.45	1219.45	1222.79	1219.45	1219.45
Compensation Allowance	126.00	210.00	252.00	294.00	294.00
Total	49807.40	50514.77	51859.24	53707.61	55284.37

Note: (1) All figures are on annualized basis.(2) All the figures under each head have been rounded. 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.

67. The annual fixed charges allowed as above are subject to truing up as per Regulation 6 of the 2009 Tariff Regulations.

68. The difference in the annual fixed charges determined by order dated 23.5.2012/3.5.2013 and those determined by this order shall be adjusted in accordance with Regulation 6 (6) of the 2009 Tariff Regulations.

69. Petition No. 135/GT/2013 is disposed of in terms of the above.

Sd/-
(Neerja Mathur)
Member (EO)

Sd/-
(A.K.Singhal)
Member

Sd/-
(M. Deena Dayalan)
Member

Sd/-
(Gireesh B. Pradhan)
Chairperson