

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 222/GT/2013

Coram:

Shri Gireesh B. Pradhan, Chairperson
Shri A.K.Singhal, Member

Date of Hearing: 01.07.2014

Date of Order: 31.03.2015

In the matter of

Revision of tariff of Feroze Gandhi Unchahar Thermal Power Station, Stage- II (420 MW) for the period from 1.4.2009 to 31.3.2014 -Truing up of tariff determined by Commission's order dated 13.7.2012 in Petition No. 323/2009

And

In the matter of

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

...Petitioner

Vs

1. Uttar Pradesh Power Corporation Limited,
Shakti Bhawan, 14 Ashoka Marg, Lucknow-226 001
2. Ajmer Vidyut Vitran Nigam Limited,
Old Power House, Hathi Bhata, Jaipur Road, Ajmer, Rajasthan
3. Jaipur Vidyut Vitran Nigam Limited,
Vidyut Bhawan, Janpath, Jaipur, Rajasthan-302 005
4. Jodhpur Vidyut Vitran Nigam Limited,
New Power House, Industrial Area, Jodhpur, Rajasthan
5. Tata Power Delhi Distribution Ltd.,
33 KV substations, Hudson Lines, Kingsway Camp, Delhi-110 009
6. BSES Rajdhani Power Ltd.,
2nd Floor, B-Block, Nehru Place, New Delhi-110 019
7. BSES Yamuna Power Ltd,
Shakti Kiran Building, Karkardooma, Delhi-110 092
8. Punjab State Power Corporation Ltd,
The Mall, Patiala-147 001

9.Haryana Power Purchase Centre,
Shakti Bhawan, Sector VI, Panchkula, Haryana-134 109

10.Himachal Pradesh State Electricity ,
Vidyut Bhawan, Shimla 171 004, Himachal Pradesh

11.Power Development Department ,
Government of Jammu& Kashmir, Mini Secretariat, Jammu

12.Electricity Wing Of Engineering Department
Union Territory of Chandigarh, Addl. Office Building, Sector 9D, Chandigarh

13. Uttarakhand Power Corporation Limited ,
Urja Bhawan, Kanwali Road, Dehradun-248001

...Respondents

Parties present:

For Petitioner: Shri Ajay Dua, NTPC
Shri A.S.Pandey, NTPC
Shri A.K Srivastava, NTPC

For Respondents: Shri R.B Sharma, Advocate, BRPL
Ms. Megha Bajpeyi, BRPL
Shri Padamjit Singh, PSPCL

ORDER

The present petition has been filed by the petitioner, NTPC for revision of tariff of Feroze Gandhi Unchahar Thermal Power Station, Stage-II (420 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 420 MW comprises of two units of 210 MW each and the date of commercial operation of Unit–I is 1.1.2001 and Unit –II is 1.3.2000.

3. The annual fixed charges of the generating station for the period 2009-14 was determined by the Commission vide its order dated 13.7.2012 in Petition No. 323/2009 considering the capital cost of ₹129840.97 lakh, after deduction of un-discharged

liabilities of ₹62.99 lakh as on 1.4.2009. The annual fixed charges approved by the said order dated 13.7.2012 was as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	6979.72	7053.43	7118.22	7118.22	3511.78
Interest on Loan	630.55	425.93	264.97	107.83	18.68
Return on Equity	9158.10	9254.82	9339.83	9339.83	9339.83
Interest on Working Capital	2916.01	2940.53	2972.81	2991.33	2943.38
O&M Expenses	7644.00	8080.80	8542.80	9034.20	9550.80
Cost of Secondary Fuel Oil	646.44	646.44	648.21	646.44	646.44
Compensation Allowance	0.00	31.50	63.00	63.00	63.00
Special Allowance	0.00	0.00	0.00	0.00	0.00
Total	27974.82	28433.46	28949.84	29300.85	26073.91

4. 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. 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 projected estimated expenditure for the years 2012-13 and 2013-14 in accordance with clause (1) of Regulation 6 of the 2009 Tariff Regulations. The petitioner vide affidavit dated 11.11.2013 has submitted that all the assets forming part of capital cost are in use and the assets capitalized during 2004-09 do not form part of tariff capital cost, as no additional capital expenditure was claimed during the period 2004-09. The petitioner has further submitted that assets capitalized and being claimed under exclusion during 2009-12 do not form part of capital cost for the purpose of tariff. Accordingly, the annual fixed charges for 2009-14 claimed by the petitioner for the period 2009-14 are as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	6979.27	6983.57	6984.00	7009.82	3482.22
Interest on Loan	616.13	355.27	191.31	69.17	11.05
Return on Equity	9157.50	9065.02	8965.51	9009.85	9073.52
Interest on Working Capital	2915.69	2933.65	2960.67	2981.39	2937.05
O&M Expenses	7644.00	8080.80	8542.80	9034.20	9550.80
Cost of Secondary Fuel Oil	646.44	646.44	648.21	646.44	646.44
Compensation Allowance	0.00	31.50	63.00	63.00	63.00
Special Allowance	0.00	0.00	0.00	0.00	0.00
Total	27959.03	28096.25	28355.51	28813.87	25764.09

6. Reply to the petition has been filed by UPPCL (respondent no.1), BRPL (respondent no. 6) and PSPCL (respondent no. 8) and the petitioner has filed its rejoinder to the said replies. The petitioner has also filed additional information in compliance with the directions of the Commission. We now proceed to examine the claim of the petitioner, on prudence check, based on the submissions of the parties and the documents available on records as stated in the subsequent paragraphs.

CAPITAL COST

7. 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 tried 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."

8. The Commission in order dated 13.7.2012 in Petition No. 323/2009 had approved the capital cost of ₹129840.97 lakh as on 1.4.2009, after deduction of un-discharged liabilities amounting to ₹62.99 lakh. Accordingly, the opening capital cost of ₹129840.97 lakh as on 1.4.2009 has been considered for revision of annual fixed charges of the generating station for the period 2009-14.

Actual/ Projected Additional Capital Expenditure

9. 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 kilometres of the power station if, the generating company does not intend to meet such expenditure as part of its Corporate Social Responsibility.”

10. The additional capital expenditure claimed by the petitioner and allowed by order dated 13.7.2012 in Petition No. 323/2009 is as under:

	(₹ in lakh)					
	2009-10 Actual	2010-11 Actual	2011-12 Actual	2012-13 Projected	2013-14 Projected	Total
Additional Capital Expenditure claimed	358.43	2804.00	0.00	0.00	0.00	3162.43
Additional Capital Expenditure allowed with liabilities discharged	332.53	2413.49	0.00	0.00	0.00	2746.02

11. The break-up of the additional capital expenditure allowed by the Commission in its order dated 13.7.2012 in Petition No. 323/2009 is as under.

Sl. No.		(₹ in lakh)				
		Actual/Projected Additional Capital expenditure				
		2009-10	2010-11	2011-12	2012-13	2013-14
	Ash related work					
1	Upstream slope protection of Ash Dyke	203.98	0.00	0.00	0.00	0.00
2	Ash Dyke modification	20.00	50.00	0.00	0.00	0.00
3	Construction of peripheral drain for Ash dyke-II	0.00	47.00	0.00	0.00	1000
4	Construction of Ash dyke corridor road	0.00	62.00	0.00	0.00	0.00
	Sub-total	223.98	159.00	0.00	0.00	0.00
	Change in Law					
5	Rooms for AAQMS	2.40	0.00	0.00	850	0.00
6	Ambient Air Quality Monitoring System	97.69	11.33	0.00	0.00	0.00
7	Liquid Waste Treatment Plant	0.00	50.00	150.00	157.00	0.00
	Sub-total	100.09	61.33	150.00	1007.00	0.00
	Other Capital Works (New works/ Items)					

8	Replacement of Halon system by inert gas system	0.00	0.00	0.00	0.00	0.00
9	Retrofitting of Voltas make 6.6 kV CB with vacuumed CB of same rating	0.00	0.00	0.00	0.00	0.00
10	Up gradation of Human Machine Interface (HMI)	0.00	0.00	0.00	0.00	0.00
11	Energy Monitoring System	0.00	0.00	0.00	0.00	0.00
12	Pro-control diagnostic station & Tool Kit STG	0.00	0.00	0.00	0.00	0.00
	Sub-total	0.00	0.00	0.00	0.00	0.00
	De-capitalization					
13	Energy Monitoring System	0.00	0.00	0.00	0.00	0.00
	Additional capital expenditure allowed	324.07	2392.00	0.00	0.00	0.00
	Liabilities discharged	8.46	21.49	0.00	0.00	0.00
	Total Additional capital expenditure allowed	332.53	2413.49	0.00	0.00	0.00

12. The actual additional capital expenditure for the period 2009-12 and the projected additional capital expenditure for the year 2012-14 claimed by the petitioner is summarized as under:

	2009-10 (Actual)	2010-11 (Actual)	2011-12 (Actual)	2012-13 (Projected)	2013-14 (Projected)	Total
Actual/Projected additional capital expenditure	307.05	42.43	63.35	1225.00	625.00	2263.34

13. The break-up of the additional capital expenditure claimed by the petitioner in the revision petition for 2009-14 is detailed as under:

Sl. No.		Actual Additional Capital expenditure			Projected Additional Capital expenditure	
		2009-10	2010-11	2011-12	2012-13	2013-14
	Ash related work					
1	Upstream slope protection of Ash Dyke	206.57	0.00	0.00	0.00	0.00
2	Ash Dyke modification	0.00	0.00	0.00	55.00	0.00
3	Construction of peripheral drain for Ash dyke-II	0.00	2.36	0.00	0.00	0.00
4	Construction of Ash dyke corridor road	0.00	0.00	0.00	0.00	0.00
	Sub-total	206.57	2.36	0.00	55.00	0.00
	Change in Law					
5	Rooms for AAQMS	2.61	0.34	0.00	0.00	0.00
6	Ambient Air Quality Monitoring System	97.87	5.31	0.00	0.00	0.00
7	Liquid Waste Treatment Plant	0.00	0.00	0.00	1170.00	0.00
	Sub-total	100.48	5.65	0.00	1170.00	0.00
	Other Capital Works (New works/ Items)					

8	Replacement of Halon system by inert gas system	0.00	0.00	0.00	0.00	130.00
9	Retrofitting of Voltas make 6.6 kV CB with vacuumed CB of same rating	0.00	0.00	0.00	0.00	95.00
10	Up gradation of Human Machine Interface (HMI)	0.00	0.00	0.00	0.00	400.00
11	Energy Monitoring System	0.00	34.42	0.00	0.00	0.00
12	Pro-control diagnostic station & Tool Kit STG	0.00	0.00	63.86	0.00	0.00
	Sub-total	0.00	34.42	63.86	0.00	625.00
	De-capitalization					
13	Energy Monitoring System	0.00	0.00	(-) 0.51	0.00	0.00
	Total Additional capital expenditure allowed	307.05	42.43	63.35	1225.00	625.00

14. It is observed from the table under Para 11, Para 12 and Para 13 above that the actual/ projected additional capital expenditure claimed for the period 2009-14 is ₹2263.34 as against the additional capital expenditure of ₹2716.07 lakh allowed vide Commission's order dated 13.7.2012 in Petition No. 323/2009. The difference of ₹452.73 lakh (2716.07-2263.34) is on account of (a) less claim of ₹119.05 lakh under the head 'Ash related works', (b) less claim of ₹1056.96 lakh under the head 'Change-in-Law' and (c) increased claim of ₹723.28 lakh for 'new works' under the head 'Other capital works'.

Ash related works

15. The Commission in order dated 13.7.2012 in Petition No. 323/2009 had allowed the projected expenditure of ₹382.98 lakh pertaining to works related to Ash dyke and Ash corridor system under Regulation 9(2)(iii) of the 2009 Tariff Regulations. The petitioner has now claimed total expenditure of ₹263.93 lakh during 2009-14 which includes the actual expenditure of ₹206.57 lakh in 2009-10 for upstream slope protection Ash Dyke-II, ₹2.36 lakh in 2010-11 towards Ash handling plant Civil work consisting of (a) peripheral drains for Ash dykes (b) Ash Corridor Road and projected expenditure of ₹55.00 lakh in 2012-13 for Ash dyke modification. The petitioner by affidavit dated 28.3.2013 has submitted the reasons for the variation in the above claim as summarized under:

(a) Small deviation of ₹2.59 lakh (206.57-203.98) for Upstream slope protection Ash Dyke-II in 2009-10 is on account of changes during actual execution;

(b) The difference of ₹106.64 lakh (109.00-2.36) towards peripherals drain for Ash Dyke and ash corridor road in 2010-11 was due to delay in implementation on account of submergence of land and non-availability of ash bricks. Also because of which the existing contractor did not agree to the work and the work will be executed through a new contract.

(c) The deviation in the claim for Ash dyke modification during 2012-13 is quite nominal in nature.

16. The petitioner has claimed the projected additional capital expenditure of ₹55.00 lakh in 2012-13 for Ash dyke modification as against the capital expenditure of ₹70.00 lakh (actual capital expenditure of ₹20.00 lakh in 2009-10 and projected additional capital expenditure of ₹50.00 lakh in 2010-11) allowed for ash dyke modification in order dated 13.7.2012 in Petition No. 323/2009. It is evident that the petitioner has not capitalized the projected additional capital expenditure of ₹20.00 lakh in 2009-10. We are of the considered view that the works relating to ash dykes/ash handling system are normal practice and the said works form part of the original scope of work and are normally taken up in stages as and when required. Since, these are normal activities done in phases depending upon the requirement with the passage of time, during the useful life of the plant and is covered under the original scope of work, the total expenditure of ₹263.93 lakh (₹206.57 lakh in 2009-10, ₹2.36 lakh in 2010-11 on actual basis and projected expenditure of ₹55.00 lakh in 2012-13) claimed is allowed to be capitalized under Regulation 9(2)(iii) of the 2009 Tariff Regulations.

Change – in – Law

Ambient Air Quality Management System (AAQMS)

17. Against an expenditure of ₹100.09 lakh (₹2.40 lakh for Room for AAQM System and ₹97.69 lakh for AAQMS) allowed in order dated 13.7.2012 in Petition No. 323/2009 during 2009-10 under Regulation 9(2)(ii), the petitioner has claimed total actual capital expenditure of ₹106.13 lakh (₹ 97.87 lakh in 2009-10 and ₹ 5.31 lakh in 2010-11 for AAQMS) and ₹2.95

lakh (₹2.61 lakh in 2009-10 and 0.34 lakh in 2010-11 for Room for AAQMS) . The petitioner vide affidavit dated 28.3.2013 has submitted that the variation in the said claims is on account of changes in scope of work to include UPS and wireless interfacing of AAQMS with control station. It is observed that the expenditure under this head was allowed by order dated 13.7.2012 based on the submissions of the petitioner that the said expenditure is required in compliance to the terms and conditions of the Environmental Clearance/NOC issued by the Uttar Pradesh Pradushan Nigam Board vide letter dated 15.7.1996 and apart from other activities, the continuous monitoring systems for measuring stack emission and ambient air quality was also required to be arranged. In view of this, we allow the total actual additional capital expenditure of ₹106.13 lakh under Regulation 9(2)(ii) of the 2009 Tariff Regulations.

Liquid Waste Treatment Plant

18. Against the projected additional capital expenditure of ₹2233.00 lakh allowed vide order dated 13.7.2012 in Petition No. 323/2009 in 2010-11 for this work, the petitioner has claimed projected additional capital expenditure of ₹1170.00 lakh in 2012-13 for this work. In justification of the less claim made, the petitioner vide affidavit dated 28.3.2013 has submitted that due to poor financial condition of the agency executing the job, the work progress is slow and the execution of the work is getting deferred and hence the capitalization of the asset is getting delayed. The respondent, BRPL has submitted that the expenditure under this head may not be allowed as the conditions concerning Change in law has not been satisfied and there is also no proximity with the time period of notification contemplating change in law. We have examined the matter. It is noticed that the expenditure for this work had been allowed in order dated 13.7.2012, on prudence check, based on the terms and conditions of the Environmental Clearance/NOC issued by the Uttar Pradesh Pradushan Nigam Board vide letter dated 15.7.1996 and in consideration of the fact that the effluents from the plant are required to be properly treated to

conform to Pollution Board's standards, prior to discharge from the plant. In this background, we are inclined to allow the projected additional capital expenditure of ₹1170.00 lakh in 2012-13 under Regulation 9(2)(ii) of the 2009 Tariff Regulations.

Energy Monitoring System

19. The petitioner vide affidavit dated 5.12.2012 has claimed actual additional capital expenditure of ₹34.42 lakh in 2010-11 towards Energy Monitoring System under Regulation 9(2)(ii) of the 2009 Tariff Regulations (Change in law). In response to the directions of the Commission, the petitioner vide affidavit dated 28.3.2013 has submitted that the meters were installed during 2010-11 in order to comply with the Central Electricity Authority (Installation of meters) Regulations, 2006. The petitioner has also submitted that few meters (gross block of ₹0.51 lakh) got defective and subsequently de-capitalized during 2011-12. It has also submitted that the depreciation adjustment amount of ₹0.028 lakh due to de-capitalization of meters during 2011-12 may be considered and taken on record. Subsequently, the petitioner vide affidavit dated 11.11.2013 has submitted that the Energy Monitoring System has been claimed under Change in law for the year 2010-11 along with the corresponding de-capitalization in 2011-12. It has also pointed out that in support of the claim, the CEA (Installation & Operation of Meters) Amendment Regulations, 2010 has been furnished as documentary evidence.

20. The respondent, BRPL has pointed out that the claim of the petitioner for this asset in respect of Talcher STPS, Stage-II was rejected by the Commission in order dated 28.5.2013 in Petition No. 269/2009. He has also submitted that on appeal by the petitioner before the Appellate Tribunal for Electricity (the Tribunal), the decision of the Commission had been ratified on this issue. Accordingly, the respondent has submitted that the claim of the petitioner may be disallowed.

21. We have examined the matter. The petitioner has claimed the expenditure on this asset towards compliance with the provisions of the Central Electricity Authority (Installation of meters) Regulations, 2006 and its subsequent amendment during 2010, under Change in law, on the ground that it is statutory in nature. It is observed that the claim of the petitioner in respect of Talcher-STPS, Stage-II for 2009-14 (in Petition No.269/2009) for Energy Monitoring System in terms of the notification of the CEA dated 17.3.2006 was earlier rejected by the Commission by order dated 28.5.2013 on the ground that the benefit of reduction in the auxiliary power consumption due to Energy monitoring system is not passed on to the beneficiaries during the tariff period 2009-14. On an appeal filed by the petitioner before the Tribunal (Appeal No.173/2013), the Tribunal by judgment dated 8.5.2014 had ratified the order of the Commission on this issue. The relevant portion of the order is extracted as under:

“The appellant, in order to get double benefit, intends to pass on the additional capital expenditure to the beneficiaries and also enjoyed the fruits of the reduction in the auxiliary consumption which is norm based and hence the Commission has dealt with this issue in an equitable manner”.

22 Accordingly, in line with the judgment of the Tribunal upholding the decision of the Commission, we are not inclined to allow the claim of the petitioner for ₹34.42 lakh in 2010-11 towards Energy Monitoring System. We order accordingly. However, considering the fact that few assets are not in use, being defective/ obsolete, the de-capitalized value of ₹0.51 lakh (gross value of obsolete asset) in the year 2011-12 has been considered.

Other Capital Works (New Items)

Replacement of Halon System by Inert Gas system

23. The petitioner has claimed projected additional capital expenditure of ₹130.00 lakh towards the replacement of Halon system for Central Control Room (CCR) & Control Equipment Room (CER) by Inert Gas system in 2013-14 under Regulation 9(2)(ii) of the

2009 Tariff Regulations. In justification of the said claim, the petitioner vide affidavit dated 5.12.2012 has submitted as under:

“Halon fire protection system is provided for CCR & CER. Halon system of permanent fire fighting system uses substances which are ozone depleting in nature. As per the Environment protection Act, 1986, the Central Government laid down rules for Ozone depleting substances (Regulation & Control Rules) Rules, 2000. As per this, “no person or enterprise shall engage in any activity that uses ozone depleting substances unless he is registered with the authority. As per the Montreal Protocol on substances that deplete the ozone layer, plants using Ozone depleting substances must phase out these systems and adopt systems which use substances that do not deplete the Ozone layer. Hence, it is proposed to replace Halon fire protection system with alternate inert gas. The same has been allowed in case of Auraiya Gas Power station in Petition No.270/2009 in order dated 23.5.2012.”

24. In response to the directions of the Commission, the petitioner vide affidavit dated 9.4.2013 has submitted the original gross block of the asset as ₹46.80 lakh and the depreciation amount recovered till replacement as ₹26.28 lakh.

25. The respondent, UPPCL vide reply affidavit dated 18.4.2013 has submitted that the projected additional capital expenditure of ₹130 lakh for the said asset/work appear reasonable. The respondent, BRPL has pointed out that the petitioner has not submitted any relevant notification in support of its claim for the said expenditure.

26. We have examined the matter. The petitioner in justification of the claim under this head has furnished the copy of the notification dated 19.7.2000 regarding Ozone depleting substances (Regulation and Control) Rules, 2000. Also, in terms of Montreal Protocol on substances that deplete ozone layer, plant using ozone depleting substances are required to phase out these systems and adopt systems that do not deplete the ozone layer. The Commission in its order dated 23.5.2012 in Petition No. 270/2009 had allowed the capitalization of this asset on the ground that the asset is required as statutory compliance under National Fire Protection Association Standard on Clean Agent Fire Extinguishing system (NFPA-2001). In this background, we allow the claim of the petitioner for ₹130.00 lakh along with the corresponding de-capitalization of ₹46.80

lakh. Accordingly, the projected additional capital expenditure of ₹83.20 lakh (130.00-46.80) on net basis, is allowed under Regulation 9(2)(ii) of the 2009 Tariff Regulations.

Retrofitting of Voltas make 6.6 kV SF6 Circuit Breaker with Vacuum Circuit Breaker of same rating

27. The petitioner has claimed the projected additional capital expenditure of ₹95.00 lakh in 2013-14 for Retrofitting of Voltas make 6.6 kV Circuit Breaker with Vacuum Circuit Breaker of the same rating under the head “other capital works”. In justification of the said claim, the petitioner vide affidavit dated 5.12.2012 has submitted as under:

“The existing Voltas make circuit breaker has gone out of production and has become obsolete. The spares are not available. It is very difficult to maintain the same. So these circuit breakers are being replaced with new vacuum type breakers”

28. In response to the directions of the Commission, the petitioner vide affidavit dated 9.4.2013 has submitted the original gross block of Retrofitting of Voltas make 6.6 kV SF6 Circuit Breaker as ₹28.00 lakh.

29. The respondent, UPPCL vide reply affidavit dated 18.4.2013 has submitted that the expenditure for replacement of the said asset appear reasonable. The respondent, BRPL has pointed out that the petitioner has not identified the relevant regulation under which the claim has been made and therefore, the claim is not permissible under Regulation 9(2) of the 2009 Tariff Regulations.

30. The matter has been examined. It is evident from the submissions of the petitioner that the expenditure has been claimed as the Circuit Breakers are being replaced on becoming obsolete and no spares are available. However, the claim of the petitioner does not fall under any of the provisions of Regulation 9(2) of the 2009 Tariff Regulations. The petitioner has also not indicated the specific provision of the regulation under which the said asset is sought to be capitalized. In the absence of this, the claim of the petitioner for capitalization of this asset has not been allowed. However, as the asset

has become obsolete and is not in use, the de-capitalization of gross value of ₹28.00 lakh has been considered.

Up-gradation of Human Machine Inter-face (HMI)

31. The petitioner has claimed projected additional capital expenditure of ₹400.00 lakh during 2013-14 for Up-gradation of Human Machine Interface (HMI) system of Protocol P13/42 DDCMIS. In justification of the same the petitioner vide affidavit dated 5.12.2012 has submitted that the HMI module has become obsolete and in order to make the system effective and to reduce breakdown, the system is being replaced.

32. In response to the directions of the Commission, the petitioner vide affidavit dated 9.4.2013 has submitted the original gross block for Up-gradation of Human Machine Interface system as ₹165.00 lakh.

33. The respondent, UPPCL vide reply affidavit dated 18.4.2013 has submitted that the petitioner may be directed to submit a brief technical report of HMI so that the beneficiaries can appreciate its utility prior to expressing views on the same. In response to this, the petitioner vide affidavit dated 8.5.2013 has submitted the brief technical report for utility of HMI. The respondent, BRPL has pointed out that the petitioner has not identified the relevant regulation under which the claim has been made and therefore, the claim is not permissible under Regulation 9(2) of the 2009 Tariff Regulations.

34. The matter has been examined. It is evident from the submissions of the petitioner that the expenditure has been claimed as the HMI module is being replaced on becoming obsolete. However, the claim of the petitioner does not fall under any of the provisions of Regulation 9(2) of the 2009 Tariff Regulations. The petitioner has also not indicated the specific provision of the regulation under which the said asset is sought to be capitalized. In the absence of this, the claim of the petitioner for capitalization of this asset has not

been allowed. However, as the asset has become obsolete and is not in use, the de-capitalization of gross value of ₹165.00 lakh has been considered.

Pro-control Diagnostic Station & Tool

35. The petitioner has claimed actual additional capital expenditure of ₹63.86 lakh in 2011-12 for Pro-control Diagnostic Station & Tool Kit. In justification of the said claim, the petitioner has submitted that installation of this asset will help in reducing the downtime of the units and also the availability/reliability of the station will increase considerably due to early detection of faults. The petitioner has also not indicated the specific provision of the regulation under which the said asset is sought to be capitalized. However, the claim of the petitioner is in the nature of tools & tackles for which capitalization of expenditure after the cut-off date is not permissible. In view of this, the additional capital expenditure of ₹63.86 lakh has not been allowed.

36. The petitioner has reconciled the actual additional capital expenditure for the period 2009-10 to 2011-12 with the books of accounts as under:

<i>(₹ in lakh)</i>				
Sl. No.		2009-10 (actual)	2010-11 (actual)	2011-12 (actual)
1	Opening Gross Block as on 1st April of year	126462.49	124784.05	127593.18
2	Closing Gross Block as on 31st March of year	124784.05	127593.18	131401.32
3	Addition during the year	(-)1678.44	2809.13	3808.13
4	Un-discharged liabilities	0.59	0.00	12.61
5	Additional capital expenditure excluding Un-discharged liabilities	(-)1679.03	2809.13	3795.52
4	Exclusions	(-) 1986.09	2766.71	3732.17
	Net Additional Capital Expenditure	307.05	42.43	63.35

37. Accordingly, the actual additional capital expenditure claimed by the petitioner has been reconciled with gross block of balance sheet. It is observed from the above table 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 and the un-discharged liabilities for the purpose of tariff.

Exclusions

38. The summary of exclusions claimed and allowed/not allowed as per books of accounts is as under:

(₹ in lakh)				
Sl. No.		2009-10	2010-11	2011-12
1	Works/Items not allowed			
1(a)	Solar water heater- 100 ltr (34 nos)	9.42	0.00	0.00
1(b)	Brick making machine	14.99	0.00	0.00
1(c)	Sewerage system township	0.00	0.00	204.81
1(d)	Ash Brick Plant	0.00	0.00	14.68
2	FERV	(-) 2224.02	2487.39	3367.79
3	Capitalization of MBOA items	0.04	28.04	0.00
4	Capitalization of Spares	400.96	355.09	235.17
5	De-capitalization of spares (Part of capital cost)	(-)76.95	(-)29.37	(-)16.96
6	De-capitalization of spares (not claimed so not part of capital)	(-)23.75	(-)3.04	(-)58.36
7	De-capitalization of MBOA items (Part of capital cost)	(-) 76.83	(-) 18.87	(-) 0.41
8	De-capitalization of MBOA items (not claimed so not part of capital)	(-) 9.95	(20.01	(-)14.56
9	Reversal of Liability	0.00	(-) 32.52	0.00
	Total Exclusion claimed	(-)1986.09	2766.71	3732.15
	Total Exclusion allowed	(-) 1832.31	2814.95	3749.52
	Total Exclusion not allowed	(-) 153.78	(-) 48.24	(-)17.37

39. We now consider the exclusions for the years 2009-10, 2010-11 and 2011-12 under different heads of the claim for the purpose of tariff.

Items disallowed

40. The petitioner has excluded amounts for ₹9.42 lakh for Solar water heater and ₹14.99 lakh for Brick Making Machine during 2009-10, ₹204.81 lakh for Sewage System Township and ₹14.68 lakh for Ash Brick Plant during 2011-12 on account of these items having been disallowed by the Commission. Since these items were not allowed to be capitalized, they do not form part of the capital cost. Hence, the exclusion sought for ₹24.41 lakh during 2009-10 and ₹219.49 lakh during 2011-12 under this head are in order and has been allowed.

FERV

41. The petitioner has excluded an amount of (-) ₹2224.02 lakh in 2009-10, ₹2487.39 lakh in 2010-11, ₹3367.79 lakh in 2011-12 on account of impact of FERV. As the petitioner has billed FERV directly on the beneficiaries, the exclusion of FERV is in order and has been allowed.

Capitalization of spares

42. The petitioner has capitalized capital spares in books of accounts amounting to ₹400.96 lakh in 2009-10, ₹355.09 lakh in 2010-11 and ₹235.17 lakh in 2011-12. Since capitalization of capital spares over and above initial spares procured after cut-off date are not allowed for the purpose of tariff as they form part of O&M expenses as and when consumed, the exclusions of ₹400.96 lakh in 2009-10, ₹355.09 lakh in 2010-11 and ₹235.17 lakh in 2011-12 are in order and is allowed.

De-capitalization of Spares

43. The petitioner has excluded de-capitalized spares in books of accounts amounting to (-) ₹100.70 lakh during 2009-10, (-) ₹32.41 lakh during 2010-11 and (-) ₹75.32 lakh during 2011-12 in books of accounts on these spares becoming unserviceable. After examining the exclusions on account of de-capitalization of spares it is found that an amount of (-) ₹76.95 lakh in 2009-10, (-) ₹29.37 lakh in 2010-11 and (-) ₹16.96 lakh in 2011-12 pertains to spares which were part of the capital cost of the generating station for the purpose of tariff. Hence, exclusion on account of de-capitalization of these spares is not justified and has not been allowed for the purpose of tariff. The remaining amount of de-capitalized spares of (-) ₹23.75 lakh in 2009-10, (-) ₹3.04 lakh in 2010-11 and (-) ₹58.36 lakh in 2011-12 do not form part of the capital cost considered for the purpose of

tariff. Hence, the exclusion of de-capitalization of these spares is in order and has been allowed.

Capitalization of Miscellaneous Bought Out Assets (MBOA)

44. The petitioner has capitalized MBOA items in books of accounts amounting to ₹0.04 lakh in 2009-10, ₹28.04 lakh in 2010-11. Since capitalization of minor assets after the cut-off date is not permissible, the exclusion of the said amounts during 2009-11 are in order and has been allowed.

De-capitalization of Miscellaneous Bought Out Assets (MBOA)

45. The petitioner has decapitalized MBOA amounting to (-) ₹86.78 lakh during 2009-10, (-) ₹38.88 lakh during 2010-11 and (-) ₹14.96 lakh during 2011-12 in books of accounts on these assets becoming unserviceable. After examining the exclusion on account of de-capitalization of MBOA, it is noticed that an amount of (-) ₹76.83 lakh in 2009-10 and (-) ₹18.87 lakh in 2010-11 and (-) ₹0.41 lakh in 2011-12 pertains to MBOA which were part of the capital cost of the generating station for the purpose of tariff. Hence, exclusion on account of de-capitalization of these MBOA is not justified and has not been allowed for the purpose of tariff. Some of the other de-capitalized MBOA amounting to (-) ₹9.95 lakh in 2009-10, (-) ₹20.01 lakh in 2010-11 and (-) ₹14.56 lakh in 2011-12 do not form part of the capital cost and had been earlier disallowed by the Commission. Hence, the exclusion of de-capitalization of these assets which do not form part of the capital cost for the purpose of tariff is in order and has been allowed.

Reversal of liabilities

46. The petitioner has excluded an amount of (-) ₹32.52 lakh on account of reversal liability corresponding to general civil packages and coal handling system civil work

during 2010-11. Hence, the exclusion sought for reversal of liability is in order and therefore, has been allowed.

47. The details of the exclusions claimed *vis-a-vis* allowed, on cash basis, during 2009-12 is as under:

	(₹ in lakh)		
	2009-10	2010-11	2011-12
Exclusions Allowed (A)	(-) 1832.31	2814.95	3749.52
Exclusions Claimed (B)	(-) 1986.09	2766.71	3732.15
Exclusions not allowed (B- A)	(-) 153.78	(-) 48.24	(-) 17.37

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)				
Sl. No.	Head of work/ Equipment	2009-10 (Actual)	2010-11 (Actual)	2011-12 (Actual)	2012-13 (Projected)	2013-14 (Projected)
A	Ash Handling					
i	Upstream slope protection of Ash Dyke	206.57	0.00	0.00	0.00	0.00
ii	Ash Dyke Modification	0.00	0.00	0.00	55.00	0.00
iii	Construction of peripheral drain for Ash dyke-II	0.00	2.36	0.00	0.00	0.00
	Sub-Total (A)	206.57	2.36	0.00	55.00	0.00
B	Change in Law 9(2)(ii)					
i	Room for AAQMS	2.61	0.34	0.00	0.00	0.00
ii	Ambient Air Quality Monitoring System	97.87	5.31	0.00	0.00	0.00
iii	Liquid Waste Treatment Plant	0.00	0.00	0.00	1170.00	0.00
	Sub-Total (B)	100.48	5.65	0.00	1170.00	0.00
C	Other Capital Works (New works/items)					
i	Replacement of Halon system by Inert gas system	0.00	0.00	0.00	0.00	130.00
	De-capitalization	0.00	0.00	0.00	0.00	46.80
	Net amount allowed	0.00	0.00	0.00	0.00	83.20
ii	Retrofitting of Voltas make 6.6 kV CB with vacuum CB of same rating	0.00	0.00			0.00
	De-capitalization	0.00	0.00	0.00	0.00	28.00
	Net amount allowed	0.00	0.00	0.00	0.00	(-) 28.00
iii	Up-gradation of Human Machine Interface (HMI)	0.00	0.00	0.00	0.00	0.00
	De-capitalization	0.00	0.00	0.00	0.00	165.00

	Net amount allowed	0.00	0.00	0.00	0.00	(-) 165.00
iv	Energy Monitoring System	0.00	0.00	0.00	0.00	0.00
	De-capitalization	0.00	0.00	0.51	0.00	0.00
	Net amount allowed	0.00	0.00	(-) 0.51	0.00	0.00
v	Pro-control diagnostic station & Tool Kit STG	0.00	0.00	0.00	0.00	0.00
	Total (C)	0.00	0.00	(-) 0.51	0.00	(-) 109.80
D	Total (A+B+C)	307.05	8.01	(-) 0.51	1225	(-) 109.80
E	Exclusions not allowed	153.78	48.24	17.37	0.00	0.00
F	Net Additional Capitalization allowed (D-E)	153.28	(-) 40.23	(-)17.88	1225.00	(-) 109.80
	Discharge of liabilities	8.46	21.49	0.00	0.00	0.00

49. The additional capital expenditure (exclusive of discharge of liabilities) for the period 2009-14 is worked out as under:

	<i>(₹ in lakh)</i>				
	2009-10 (actual)	2010-11 (actual)	2011-12 (actual)	2012-13 (Projected)	2013-14 (Projected)
Additional Capital Expenditure (excluding discharges)	153.28	(-) 40.23	(-) 17.88	1225.00	(-) 109.80

50. The actual/projected additional capital expenditure allowed after adjustment of discharges of liabilities is as under:

	<i>(₹ in lakh)</i>				
	2009-10 (actual)	2010-11 (actual)	2011-12 (actual)	2012-13 (Projected)	2013-14 (Projected)
Additional Capital Expenditure (excluding discharges)	153.28	(-) 40.23	(-) 17.88	1225.00	(-) 109.80
Add: Discharges of liabilities (against allowed assets / works)	8.46	21.49	0.00	0.00	0.00
Net Additional Capital Expenditure	161.75	(-) 18.75	(-) 17.88	1225.00	(-) 109.80

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

	<i>(₹ in lakh)</i>				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	129840.97	130002.72	129983.98	129966.09	131191.09
Add: Additional Capital Expenditure	161.75	(-) 18.75	(-) 17.88	1225.00	(-) 109.80
Closing Capital Cost	130002.72	129983.98	129966.09	131191.09	131081.29
Average Capital Cost	129921.85	129993.35	129975.04	130578.59	131136.19

Debt–Equity Ratio

52. In terms of the provisions of Regulation 12 of the 2009 Tariff Regulations, the gross loan and equity of ₹90932.77 lakh and ₹38971.19 lakh respectively, as on 31.3.2009 approved vide order dated 5.10.2011 in Petition No.150/2004 has been considered as gross loan and equity as on 1.4.2009. However, un-discharged liabilities amounting to ₹62.99 lakh deducted from the capital cost, as on 1.4.2009, has been adjusted to debt and equity in the ratio of 70:30. As such, the gross normative loan and equity as on 1.4.2009 is revised to ₹90888.68 lakh and ₹38952.29 lakh respectively. Further, the additional expenditure has been allocated in the debt-equity ratio of 70:30. The same is subject to truing-up in the terms of the provisions contained in Regulation 6 of the 2009 Tariff Regulations.

Return on Equity

53. In terms of the provisions of Regulation 15 of the 2009 Tariff Regulations, return on equity has been worked out as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Notional Equity- Opening	38952.29	39000.82	38995.19	38989.83	39357.33
Addition of equity due to additional capital expenditure	48.53	(-) 5.62	(-) 5.37	367.50	(-) 32.94
Normative Equity - Closing	39000.82	38995.19	38989.83	39357.33	39324.39
Average Normative Equity	38976.55	38998.01	38992.51	39173.58	39340.86
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
Tax Rate for respective years	33.990%	33.218%	32.445%	32.445%	33.990%
Rate of Return on Equity (Pre Tax)	23.481%	23.210%	22.944%	22.944%	23.481%
Return on Equity (Pre Tax)- (annualized)	9152.08	9051.44	8946.44	8987.99	9237.63

Interest on loan

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

- (a) The gross normative loan of ₹90680.64 lakh as on 1.4.2009 has been considered.
- (b) Cumulative repayment of ₹62654.71 lakh as on 31.3.2009 as considered in order dated 5.10.2011 in Petition No.150/2004 has been considered as on 1.4.2009. However, after taking into account proportionate adjustment (taking into account the liability and

debt position as on 1.4.2004 along with additions during the period 2004-09, if any) 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 ₹62624.33 lakh.

(c) Accordingly, the net normative opening loan as on 1.4.2009 works out to ₹28056.31 lakh.

(d) Addition to normative loan on account of additional capital expenditure approved above has been considered.

(e) Depreciation allowed has been considered as repayment of normative loan during the respective year of the tariff period 2009-14. Further proportionate adjustment has been made to the repayments corresponding to discharges and reversals of liabilities considered during the respective years on account of cumulative repayment adjusted as on 1.4.2009.

(f) In line with the provisions of Regulation 16(5), the weighted average rate of interest has been calculated considering the actual loan portfolio existing as on 1.4.2009 for the generating station. 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 truing-up.

(g) The cumulative repayment has been adjusted @70% due to de-capitalization of assets/works considered for the purpose of tariff.

55. 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	90888.68	91001.91	90988.78	90976.27	91833.77
Cumulative repayment of loan upto previous year / period	62624.33	69495.91	76461.32	83417.97	90410.67
Net Loan Opening	28264.35	21505.99	14527.46	7558.29	1423.10
Addition due to Additional capitalisation	113.23	(-) 13.12	(-) 12.52	857.50	(-) 76.86
Repayment of loan during the year	6975.14	6973.13	6969.17	6992.70	1514.10
Less: Repayment adjustment on account of de-capitalization	107.64	33.77	12.52	0.00	167.86
Add: Repayment adjustment on discharges corresponding to un-discharged liabilities deducted as on 1.4.2009	4.08	26.05	0.00	0.00	0.00
Net Repayment	6871.59	6965.41	6956.65	6992.70	1346.24
Net Loan Closing	21505.99	14527.46	7558.29	1423.10	0.00
Average Loan	24885.17	18016.73	11042.88	4490.70	711.55
Weighted Average Rate of Interest on Loan	2.4761%	1.9716%	1.7286%	1.5300%	1.5300%
Interest on Loan	616.17	355.21	190.89	68.71	10.89

Depreciation

56. In terms of Regulation 17 of the 2009 Tariff Regulations the cumulative depreciation of ₹47354.03 lakh as on 31.3.2009 (as considered in order dated 5.10.2011 in Petition No.150/2004) has been considered as on 1.4.2009. Further, proportionate adjustment has been made to this cumulative depreciation on account of un-discharged liabilities deducted as on 1.4.2009. Accordingly, the revised cumulative depreciation works out to ₹47331.00 lakh as on 1.4.2009. Further, the value of freehold land considered in the said order is ₹436.51 lakh as on 31.3.2009 and the same has been considered for the purpose of calculating depreciable value. Accordingly, the balance depreciable value (before providing depreciation) for the year 2009-10 works out to ₹69205.81 lakh. Since, the used life of the generating station (i.e. 8.67 years) is less than 12 years, as on 1.4.2009, from the effective date of commercial operation of the generating station (i.e 1.8.2000), depreciation has been calculated by applying the weighted average rate of depreciation of 5.3687% for the year 2009-10, 5.3642% for the year 2010-11, 5.3619% for the year 2011-12 and 5.3552% for the year 2012-13. However, as the useful life of the generating station as on 1.4.2013 (i.e.12.67 years) is more than 12 years from the effective date of commercial operation of the generating station (1.8.2000), for the year 2013-14 depreciation has been calculated by spreading over of the balance depreciable value. The balance useful life as on 1.4.2013 works out to 12.33 years. Further, 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. Also, the cumulative depreciation has been adjusted for de-capitalisation considered during tariff period 209-14. The necessary calculations in support of depreciation are as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	129840.97	130002.72	129983.98	129966.09	131191.09
Add: Additional Capital Expenditure	161.75	(-) 18.75	(-)17.88	1225.00	(-) 109.80
Closing Capital Cost	130002.72	129983.98	129966.09	131191.09	131081.29
Average Capital Cost	129921.85	129993.35	129975.04	130578.59	131136.19
Depreciable value @ 90%	116536.80	116601.16	116584.67	117127.88	117629.72
Remaining useful life at the beginning of the year	16.33	15.33	14.33	13.33	12.33
Balance depreciable value	69205.81	62355.29	55365.95	48946.26	42455.40
Depreciation (annualized)	6975.14	6973.13	6969.17	6992.70	3442.33
Cumulative depreciation at the end	54306.14	61219.00	68187.89	75174.31	78616.64
Less: Cumulative depreciation adjustment on account of de-caps	63.36	20.03	6.27	0.00	0.00
Add: Cumulative depreciation adjusted on account of discharges out of un-discharged liabilities deducted as on 1.4.2009	3.10	19.75	0.00	0.00	0.00
Cumulative depreciation (at the end of the period)	54245.87	61218.72	68181.62	75174.31	78616.64

O&M Expenses

57. O&M expenses as considered in order dated 13.7.2012 as stated below has been considered.

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
O&M expenses	7644.00	8080.80	8542.80	9034.20	9550.80

Interest on Working Capital

Cost of Coal and Secondary Fuel Oil for two months

58. The fuel component in the working capital as considered in order dated 13.7.2012 is stated as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of coal for 2 months	8434.07	8434.07	8457.18	8434.07	8434.07
Cost of secondary fuel oil 2 months	107.74	107.74	108.04	107.74	107.74

Maintenance Spares

59. The maintenance spares as considered in order dated 13.7.2012 is stated as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of maintenance spares	1528.80	1616.16	1708.56	1806.84	1910.16

Receivables

60. The 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
Variable Charges - for two months	8434.07	8434.07	8457.18	8434.07	8434.07
Fixed Charges – for two months	4658.22	4678.61	4720.08	4795.60	4315.12
Total	13092.29	13112.68	13177.26	13229.67	12749.19

O&M Expenses

61. O & M expenses for 1 month as considered in order dated 13.7.2012 is stated as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
O & M for 1 month	637.00	673.40	711.90	752.85	795.90

62. Accordingly, SBI PLR of 12.25% has been considered for the purpose of calculating interest on working capital. The necessary computations in support of calculation of interest on working capital are as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of coal – Two months	8434.07	8434.07	8457.18	8434.07	8434.07
Cost of secondary fuel oil – Two months	107.74	107.74	108.04	107.74	107.74
Maintenance Spares	1528.80	1616.16	1708.56	1806.84	1910.16
Receivables – Two months	13092.29	13112.68	13177.26	13229.67	12749.19
O&M expenses – One month	637.00	673.40	711.90	752.85	795.90
Total Working Capital	23799.91	23944.06	24162.93	24331.18	23997.07
Rate of Interest	12.2500%	12.2500%	12.2500%	12.2500%	12.2500%
Interest on Working Capital	2915.49	2933.15	2959.96	2980.57	2939.64

Compensation and Special Allowance

63. The Compensation Allowance and Special Allowance considered in order dated 13.7.2012 has been considered in this order.

Annual Fixed Charges for 2009-14

64. 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	6975.14	6973.13	6969.17	6992.70	3442.33
Interest on Loan	616.17	355.21	190.89	68.71	10.89
Return on Equity	9152.08	9051.44	8946.44	8987.99	9237.63
Interest on Working Capital	2915.49	2933.15	2959.96	2980.57	2939.64
O&M Expenses	7644.00	8080.80	8542.80	9034.20	9550.80
Cost of Secondary Fuel Oil	646.44	646.44	648.21	646.44	646.44
Compensation Allowance	0.00	31.50	63.00	63.00	63.00
Special Allowance	0.00	0.00	0.00	0.00	0.00
Total	27949.33	28071.67	28320.47	28773.60	25890.73

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.

65. The annual fixed charges allowed as above are subject to truing up as per Regulation 6(1) of the 2009 Tariff Regulations.

66. The difference in the annual fixed charges determined by order dated 13.7.2012 and those determined by this order shall be adjusted in accordance with Regulation 6 (6) of the 2009 Tariff Regulations.

67. Petition No. 222/GT/2013 is disposed of in terms of the above.

Sd/-
(A.K. Singhal)
Member

Sd/-
(Gireesh B. Pradhan)
Chairperson