

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 18/GT/2013

Coram:

Shri V.S.Verma, Member

Shri M.Deena Dayalan, Member

Date of Hearing: 11.6.2013

Date of Order: 16.12.2013

In the matter of

Revision of tariff of Badarpur Thermal Power Station (705 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.332/2009 and order dated 8.2.2013 in R.P. No.18/2012.

And

In the matter of

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

...Petitioner

Vs

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

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

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

4. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110001

5. Military Engineering Services,
Delhi Cantonment,
New Delhi -110010

...Respondents



Parties present:

Shri Ajay Dua, NTPC
Shri S. Saran, NTPC
Shri Rohit Chhabra, NTPC
Shri K K Narang, NTPC
Shri Bhupinder Kumar, NTPC
Shri Sameer Aggarwal, NTPC
Shri S.K.Jain, NTPC
Shri Vivek Kumar, NTPC
Shri Aman, Advocate, TPDDL
Shri R.B.Sharma, Advocate, BRPL
Shri Manish Garg, BYPL
Shri Debarun Saha Roy, BYPL

ORDER

This petition has been filed by the petitioner, NTPC, for revision of tariff of Badarpur Thermal Power Station (705 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. Petition No.332/2009 was filed by the petitioner for determination of tariff of the generating station for the period 2009-14 and the Commission by its order dated 23.5.2012 determined the annual fixed charges for the generating station. Subsequently, the Commission by its order dated 10.12.2012 in Review Petition No. 3/2011 (in Petition No. 194/2009) had revised the tariff of the generating station for the period 2004-09 considering the capital cost of ₹45228.61 lakh as on 31.3.2009. Thereafter, the petitioner filed Review Petition No.18/2012 against the order dated 23.5.2012 and the Commission by its order dated 8.2.2013 revised the tariff of the generating station. The revised capital cost considered for the purpose of tariff for the period 2009-14 in the said order is as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital cost	45165.68	45335.97	45990.82	50237.62	61879.98
Projected Additional Capital Expenditure	170.29	654.84	4246.80	11642.36	10211.71
Closing Capital cost	45335.97	45990.82	50237.62	61879.98	72091.69
Average Capital cost	45250.83	45663.40	48114.22	56058.80	66985.83

3. Accordingly, the annual fixed charges for the generating station for 2009-14 approved by order dated 23.5.2012 (in Petition No. 332/2009) was revised by order dated 8.2.2013 as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	2359.38	2380.89	2508.68	2922.91	3492.64
Interest on Loan	8.30	0.00	30.28	362.40	866.33
Return on Equity	3776.26	3333.33	3280.52	3840.16	4609.90
Interest on Working Capital	5451.01	5477.76	5527.63	5581.36	5658.27
O&M Expenses	22101.75	22736.25	23384.85	24054.60	24738.45
Cost of secondary fuel oil	1906.79	1906.79	1912.02	1906.79	1906.79
Special Allowance	0.00	0.00	0.00	0.00	0.00
Total	35603.49	35835.02	36643.98	38668.22	41272.38

4. The annual fixed charges claimed by the petitioner for the generating station for the period 2009-14 in this petition is as under:

(₹ in lakh)

	2009-10 (actual)	2010-11 (actual)	2011-12 (actual)	2012-13 (projected)	2013-14 (projected)
Depreciation	2361.68	2394.47	2514.37	2783.14	2969.08
Interest on Loan	8.27	0.00	6.43	105.36	98.93
Return on Equity	3785.22	3313.32	3208.13	3561.25	3729.71
Interest on Working Capital	5451.21	5477.59	5525.70	5567.24	5612.97
O&M Expenses	22101.75	22736.25	23384.85	24054.60	24738.45
Cost of secondary fuel oil	1906.79	1906.79	1912.02	1906.79	1906.79
Annual Fixed Charges (annualized)	35614.92	35828.41	36551.50	37978.38	39055.94

5. Reply to the petition has been filed by the respondent No.1, TPDDL and the respondent Nos. 2 and 3 namely, BRPL and BYPL respectively. The petitioner has filed its rejoinder to the said replies of the respondents.

6. The first proviso to 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."

7. The respondents, TPDDL, BRPL and BYPL in their replies have submitted that for the purpose of truing-up, the petitioner should be directed to file the complete details of additional capital expenditure for the period 2009-12 duly audited and certified by the auditors in terms of Regulation 6(3) of the 2009 Tariff Regulations. It is noticed that pursuant to the directions of the Commission in the record of the proceedings held on 5.3.2013, the petitioner, by its affidavit dated 23.4.2013 has submitted the year-wise/item wise actual additional capital expenditure incurred for the years 2009-10, 2010-11 and 2011-12 duly certified by auditor and had served copies on the respondents. Accordingly, we proceed to examine this petition filed in terms of the proviso to Regulation 6(1) for revision of tariff of the generating station for 2009-14 after truing up, as discussed in the subsequent paragraphs.

Capital cost

8. Regulation 7 (1) (a) of the 2009 Tariff Regulations provides as under:

"7. Capital Cost. (1) Capital cost for a project shall include: (a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan - (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed, up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;"

9. 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."

10. In accordance with Regulation 38(2) of the 2009 Tariff Regulations, the annual fixed charges of the generating station had been determined by order dated 23.5.2012 by adopting

the Net Fixed Assets approach. The gross capital cost of ₹45228.61 lakh, including liabilities as on 31.3.2009 as determined by order dated 10.12.2012 in Review Petition No. 3/2011 in Petition No. 194/2009 has been considered as the opening capital cost as on 1.4.2009. The cumulative depreciation as on 1.4.2009 has been worked out as ₹27939.78 (i.e. Cumulative repayment of loan of ₹23177.84 lakh *plus* Cumulative re-payment of equity of ₹4761.94 lakh as on 1.4.2009). Therefore, the net capital cost, including liabilities as on 1.4.2009, has been worked out as ₹17288.83 lakh (45228.61-27939.78).

Un-discharged liabilities as on 1.4.2009

11. The petitioner has claimed un-discharged liabilities amounting to ₹60.68 lakh as on 1.4.2009. However, as per records, the un-discharged liabilities as on 1.4.2009 included in the capital cost is ₹62.93 lakh (as in order dated 8.2.2013 in Review Petition No.18/2012). This liability of ₹62.93 lakh comprises of ₹19.93 lakh which pertain to the period prior to 1.4.2001 and ₹43.00 lakh pertain to the period 2004-09.

Gross capital cost on cash basis as on 1.4.2009

12. Based on the above, the gross capital cost, on cash basis, considered for the purpose of tariff as on 1.4.2009 is worked out as ₹45165.68 lakh, after deduction of un-discharged liability of ₹62.93 lakh from the gross capital cost of ₹45228.61 lakh. Discharges, if any, made against these upfront deducted liabilities, would be considered as additional capital expenditure in the year of discharge.

Actual/ Projected Additional Capital Expenditure during 2009-14

13. 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.”

14. Taking into account the discharge of liabilities during 2009-11, the additional capital expenditure approved for 2009-14 by order dated 23.5.2012 in Petition No. 332/2009 was revised by order dated 8.2.2013 in R.P.No.18/2012 and allowed as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Amount allowed on CEA approved schemes (including IDC and FC)	29.57	95.75	1101.25	3676.16	397.31
Other than CEA approved schemes	99.36	538.03	3145.55	7966.20	9814.40
Total	128.93	633.78	4246.80	11642.36	10211.71
Discharges of liabilities	41.36	21.06	0.00	0.00	0.00
Additional capital expenditure allowed	170.29	654.84	4246.80	11642.36	10211.71

15. The petitioner in this petition has claimed the actual/projected additional capital expenditure for the period 2009-14 as under:

Sl. No	Description	(₹ in lakh)				
		Actual / Projected additional expenditure claimed				
		Actual			Projected	
		2009-10	2010-11	2011-12	2012-13	2013-14
1	Capital expenditure claimed on schemes as allowed in Petition No. 332/2009	136.57	651.48	3961.40	6493.07	605.19
2	Liabilities (included in 1 above)	8.58	27.33	308.37	-	-
3	Net claim on cash basis (1-2)	127.99	624.15	3653.03	6493.07	605.19
4	New claims	104.86	28.43	93.59	-	-
5	Liabilities (included in new claims)	15.63	3.47	7.23	-	-
6	Net capital expenditure on new claims	89.23	24.96	86.36	-	-
7	Total expenditure claimed (3+6)	217.22	649.11	3739.39	6493.07	605.19
8	De-capitalization	4.60	0.13	0.00	-	-
9	Net Additional Capitalization claimed (7-8)	212.62	648.99	3739.39	6493.07	605.19

16. The petitioner in Petition No. 332/2009 had claimed actual additional capital expenditure during the years 2009-10 and 2010-11 and projected additional capital expenditure during the years 2011-12 to 2013-14 based on R&M schemes approved by the Commission vide its order dated 12.5.2011 in Petition No. 324/2009. It is observed that the actual capitalization claimed during the period 2009-12 in this petition for ₹217.22 lakh during 2009-10, ₹649.11 lakh during 2010-11 and ₹3739.39 lakh during 2011-12 is at variance with the actual capital expenditure allowed in order dated 23.5.2012 in Petition No.332/2009. The petitioner vide its affidavit dated

31.1.2013 has submitted the item-wise justification for the variation in the additional capital expenditure incurred for the period from 2009-10 to 2011-12 and projected additional capital expenditure claimed during the years 2012-13 and 2013-14 under the respective heads with respect to the additional capital expenditure allowed by the Commission in order dated 23.5.2012 for increase or decrease, as the case may be. From the submissions of the petitioner it is mainly noticed that the variation due to decrease in expenditure is on account of the liabilities, projection of decreased expenditure inadvertently shown and the awarded value being less than the estimated value. Similarly, the variation due to increase in expenditure is mainly on account of amounts lying under CWIP which was not indicated by petitioner inadvertently, change in scope of work, awarded value being higher than estimated price, etc., The petitioner has also prayed that the deviation in the expenditure may be permitted and the variation in capitalization on higher side would be considered at the time of final truing-up to be undertaken after 31.3.2014, in terms of Regulation 6 of the 2009 Tariff Regulations.

17. The additional capital expenditure as per books of accounts *vis-a-vis* tariff claimed for the years 2009-10, 2010-11 and 2011-12 are as under:

Sl. No.		₹ in lakh		
		2009-10	2010-11	2011-12
1	Opening Gross Block as per audited Balance Sheet as on 1.4.2009 (A)	24957.59	27916.18	29265.65
2	Closing Gross Block as per audited Balance Sheet as on 31.3.2010 (B)	27916.18	29265.65	34492.43
3	Addition during the year 2009-10 C=(B-A) (as per books)	2958.59	1349.47	5226.78
4	Exclusions (D)	2721.76	669.68	1171.80
6	Additional capital expenditure claimed E=(C-D) (for tariff purpose)	236.83	679.79	4054.98
7	Liability included (F)	24.21	30.80	315.59
8	Net additional capitalization claimed on cash basis (E-F)	212.62	648.99	3739.39

18. The actual additional capital expenditure claimed by the petitioner has been reconciled with the 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 on account of 'exclusion' of certain expenditure for the purpose of tariff. Accordingly, we now examine the exclusions (year-wise) claimed under different heads by the petitioner and consider the same in the subsequent paragraphs.

Exclusions

2009-10

19. The summary of exclusions from the books of accounts claimed for the purpose of tariff is as under:

(₹ in lakh)				
Sl. No.	Name of work	Capitalization / De-capitalization	Liabilities in Additional capitalization	Net claim on cash basis
1	Main Plant Package (Boiler & Aux., TG & Aux. Electrical & C&I)	3.42	-	3.42
2	Condenser tubes,90:10 CU/Ni,30x28x10020 L - 210 MW (Unit-V)	519.90	-	519.90
3	Generator Transformer (T4) Unit -IV	951.50	-	951.50
4	Chartless Recorders for Main Plant & Offsite areas.	8.38	-	8.38
5	Convection SH Coils - 50 Nos.	152.37	-	152.37
6	HPH Control System in Stage-I	63.93	-	63.93
7	Open Loop Control System (OLCS) and Closed Loop Control System (CLCS) for Stage-I Units (3 x 95 MW)	28.30	-	28.30
8	Smart Transmitters	11.81	3.65	8.16
9	Ball Mill (Type 300/579) Unit-I,II,III	78.33	-	78.33
10	Installation of Solar Water Heater in ET Hostel & Guest House	8.23	0.80	7.43
11	Portable Gas Analyser Fuel cell based	1.00	-	1.00
12	Analyser for dissolved oxygen and sodium	13.88	-	13.88
13	Ultrasonic level indicator in WTP	0.77	-	0.77
14	Strengthening of roads in various phases of Ash dyke by coal pick stone aggregate.	1.75	-	1.75
	Sub-total of disallowed items	1843.57	4.45	1839.12
15	Capital Spares	1110.79	34.37	1076.42
16	De-capitalization of Spares	(-) 325.72)	-	(-) 325.72
17	MBOA	99.64	5.83	93.81
18	De-capitalization of MBOA	(-) 6.52	-	(-) 6.52
	Exclusions Total	2721.76	44.66	2677.10

Spares & Minor Assets

19. The petitioner has excluded an amount of ₹1839.12 lakh towards spares & minor assets such as condenser tubes, Main Plant Package (Boiler & TG Auxiliaries, electrical & C&I),

generator transformers, HPH control system for Stage-I, portable gas analyser, installation of solar water heater, Analyser for dissolved Oxygen & Sodium, strengthening of roads etc. (Sl. No. 1 to 14 of the table above), excluding liabilities of ₹4.45 lakh. Since capitalization of these spares and minor assets has not been allowed, the exclusions on this count are in order and are allowed.

Capital Spares

20. The petitioner has procured capital spares amounting to ₹1076.42 lakh, on cash basis (excluding liability of ₹34.37 lakh) during 2009-10 for maintaining stock of necessary spares. As capitalization of spares over and above the initial spares procured after the cut-off-date are not allowed for the purpose of tariff, and since they form part of the O&M expenses when consumed, the exclusion of ₹1076.42 lakh under this head is in order and is allowed.

De-capitalization of spares

21. The petitioner has de-capitalized capital spares amounting to ₹325.72 lakh in books of account during 2009-10 on the ground that these spares have become unserviceable. The petitioner vide its affidavit dated 18.1.2013 has submitted the details of de-capitalization of spares. It is observed that out of the total spares de-capitalized for ₹325.72 lakh, spares amounting to ₹110.24 lakh were allowed in tariff as part of the capital cost and spares amounting to ₹215.48 lakh were not claimed as hence do not form part of tariff. Hence, de-capitalization of spares for ₹110.24 lakh which were allowed has not been considered under exclusions. However, the de-capitalization of spares for ₹215.48 lakh which were not claimed and which do not form part of the capital cost of the generating station for the purpose of tariff, has been allowed under exclusion.

Capitalization of Miscellaneous Bought Out Assets (MBOA)

22. The petitioner has capitalized expenditure for ₹93.80 lakh (excluding liability of ₹5.84 lakh) towards MBOA items in books of accounts during 2009-10. Since capitalization of minor assets after the cut-off-date is not allowed, the exclusion of ₹93.80 lakh is in order and is allowed.

De-capitalization of Miscellaneous Bought out Assets (MBOA)

23. The petitioner has excluded the de-capitalized MBOA in books of accounts amounting to ₹6.52 lakh during 2009-10 on the same being rendered unserviceable. The prayer of the petitioner for exclusion of de-capitalized MBOA is justified if the de-capitalized MBOA items were the ones which were disallowed by the Commission for the purpose of tariff. However, the petitioner vide its affidavit dated 18.1.2013 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 these spares rendered unserviceable is not justified and thus not allowed for the purpose of tariff.

24. Based on the above, the details of exclusions claimed and allowed for the year 2009-10 is summarized as under:

Exclusions Claimed (B)	2677.10
Exclusions Allowed (A)	2793.86
Exclusions not allowed (A-B)	116.76

2010-11

25. The summary of exclusions from the books of accounts claimed for the purpose of tariff is as under:

Name of work	Capitalization/De-capitalization	Liabilities in Additional capitalization	Net claim on cash basis
Capital Spares	1277.19	7.40	1269.79
De-capitalization of Spares	(-) 707.70	-	(-) 707.70
MBOA	117.02	8.36	108.65
De-capitalization of MBOA	(-) 13.25	-	(-) 13.25
Cost Adjustment	(-) 3.57	-	(-) 3.57
Total Exclusions	669.68	15.76	653.92

Capital spares

26. The petitioner has procured spares amounting to ₹1269.79 lakh on cash basis (excluding liability of ₹7.40 lakh) during the year 2010-11 for maintaining stock of necessary spares. As

capitalization of spares over and above the initial spares procured after the cut-off-date are not allowed for the purpose of tariff, and since they form part of the O&M expenses when consumed, the exclusion of ₹1269.79 lakh is in order and allowed.

De-capitalization of spares

27. The petitioner has de-capitalized capital spares amounting to ₹707.70 lakh in books of accounts during the year 2010-11 on the ground that these spares have become unserviceable. The petitioner vide its affidavit dated 18.1.2013 has submitted the details of de-capitalization of spares. It is observed from the details of de-capitalization of spares that out of ₹707.70 lakh de-capitalized, spares amounting to ₹39.01 lakh have been allowed as part of the capital cost in tariff and spares amounting to ₹668.69 lakh were not claimed and hence do not form part of tariff. Hence, de-capitalization of spares for ₹39.01 lakh which were allowed has not been considered under exclusion and the de-capitalization of spares for ₹668.69 lakh which were not claimed and which do not form part of the capital cost of the generating station for the purpose of tariff, has been allowed under exclusion.

Capitalization of Miscellaneous Bought Out Assets (MBOA)

28. The petitioner has capitalized expenditure of ₹108.65 lakh on cash basis (excluding liability of ₹8.36 lakh) towards MBOA items in books of accounts during the year 2010-11. Since capitalization of minor assets after cut-off date is not allowed, the exclusion of ₹108.65 lakh is in order and are allowed.

De-capitalization of Miscellaneous Bought out Assets (MBOA)

29. The petitioner has also excluded the de-capitalization of ₹13.25 lakh towards MBOA in books of accounts during 2010-11 as the same has been rendered unserviceable. The petitioner vide its affidavit dated 18.1.2013 has submitted the details of de-capitalization of MBOA. Hence, exclusion of negative entries on account of de-capitalization of these MBOA rendered unserviceable is not justified and has not been allowed for the purpose of tariff.

Cost Adjustment

30. The petitioner has excluded expenditure of ₹3.57 lakh towards adjustment for work of NDS Building (school) ground floor. Since the expenditure incurred on this count was not allowed by the Commission, the exclusion on this count is in order and has been allowed.

31. Based on the above, the details of exclusions claimed and allowed for the year 2010-11 is summarized as under:

<i>(₹ in lakh)</i>	
Exclusions Claimed (B)	653.92
Exclusions Allowed (A)	706.18
Exclusions not Allowed (A-B)	52.26

2011-12

32. The summary of exclusions from the books of accounts claimed for the purpose of tariff is as under:

<i>(₹ in lakh)</i>			
Name of work	Capitalization/De-capitalization	Liabilities in Additional capitalization	Net claim on cash basis
Capital Spares	1908.88	8.38	1900.50
De-capitalization of Spares	(-) 855.91	-	(-) 855.91
MBOA	118.89	20.76	98.13
De-capitalization of MBOA	(-) 0.06	-	(-) 0.06
Total Exclusions	1171.80	29.14	1142.66

Capital spares

33. The petitioner has procured spares amounting to ₹1900.50 lakh on cash basis (excluding liability of ₹8.38 lakh) during 2011-12 for maintaining stock of necessary spares. As capitalization of spares over and above the initial spares procured after the cut-off-date are not allowed for the purpose of tariff, and since they form part of the O&M expenses when consumed, the exclusion ₹1900.50 lakh is in order and is allowed.

De-capitalization of spares

34. The petitioner has de-capitalized capital spares amounting to ₹855.91 lakh in books of accounts during the year 2011-12 as the same has been rendered unserviceable. The petitioner

vide its affidavit dated 18.1.2013 has submitted the details of de-capitalization of spares. It is observed from the details of de-capitalization of spares that out of ₹855.91 lakh spares de-capitalized, spares amounting to ₹34.26 lakh were allowed as part of the capital cost in tariff and spares amounting to ₹821.65 lakh have not been claimed and hence do not form part of tariff. Hence, de-capitalization of spares for ₹34.26 lakh which were allowed in tariff has not been allowed under exclusion and the de-capitalization of spares for ₹821.65 lakh which were not claimed and which do not form part of the capital cost of the generating station for the purpose of tariff, has been allowed under exclusion.

Capitalization of Miscellaneous Bought Out Assets (MBOA)

35. The petitioner has capitalized expenditure of ₹98.13 lakh on cash basis (excluding liability of ₹20.76 lakh) towards MBOA in books of accounts during 2011-12. Since the capitalization of miscellaneous assets after the cut-off date is not allowed, the exclusion of ₹98.13 lakh is in order and is allowed.

De-capitalization of Miscellaneous Bought out Assets (MBOA)

36. The petitioner has also excluded de-capitalization of ₹00.06 lakh towards MBOA in books of accounts during 2011-12 as the same has been rendered unserviceable. The prayer of the petitioner for exclusion of de-capitalized MBOA items is justified if the de-capitalized MBOA items are the ones which were disallowed for the purpose of tariff. However, as per affidavit dated 18.1.2013, 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 items rendered unserviceable is not justifiable and has accordingly not been allowed for the purpose of tariff.

37. Based on the above, the details of exclusions claimed and allowed for 2011-12 are summarized as under:

(₹ in lakh)	
Exclusions Claimed (B)	1142.66
Exclusions Allowed (A)	1176.98
Exclusions not Allowed (A-B)	34.32

Additional capital expenditure for 2009-10, 2010-11 and 2011-12

38. The admissibility of petitioner's claim for actual additional capital expenditure for 2009-12 has been examined and is discussed below:

2009-10

39. The actual capital expenditure claimed on approved R&M schemes under Regulation 10 of the 2009 Tariff Regulations is summarized as under:

(₹ in lakh)						
Sl. No.	Name of work	Capitalization Amount	Liability in Additional capitalization	Net Additional capitalization on cash basis	Allowed in order dated 23.5.2012	Variation
(1)	(2)	(3)	(4)	(5=3-4)		
1	Replacement of existing Station Lighting Fixtures etc.	11.98	-	11.98	11.97	0.00
2	Replacement of existing LT Power & Control cables.	1.38	-	1.38	1.38	0.00
3	Replacement of online instrumentation in WTP	17.33	-	17.33	17.33	0.00
4	PLC based control system of OCHP	14.75	2.75	12.00	14.75	0.00
5	Strengthening of chimneys	5.95	-	5.95	5.95	0.00
6	UPS	43.67	5.83	37.84	43.68	0.00
7	Lab instruments	21.39	-	21.39	21.30	0.09
8	(Ash dyke) - Construction of boundary wall for balance portion of ash dyke.	0.06	-	0.06	0.06	0.00
9	Ash Dyke - 1st raising of Ash Dyke Phase-V	4.36	-	4.36	4.36	0.00
10	3rd Raising of Ash Dyke Phase-II	15.70	-	15.70	15.70	0.00
	Total (2009-10)	136.57	8.58	127.99	128.08	0.09

40. The petitioner in this petition has claimed actual expenditure of ₹127.99 lakh during 2009-10, excluding liability of ₹8.58 lakh, for assets such as replacement of existing lighting fixtures, replacement of existing LT Power & Control Cables, replacement of online instruments in WTP etc. (Sl. No. 1 to 10 of the table above) under various heads of approved R&M schemes which were allowed vide order dated 23.5.2012 in Petition No. 332/2009 under Regulation 10 of the 2009 Tariff Regulations. It is observed that there is minor variation of ₹0.09 lakh in the actual

expenditure claimed and to those allowed in order dated 23.5.2012. Hence, expenditure of ₹127.99 lakh on the said assets are allowed. However, there is de-capitalization of ₹3.07 lakh (estimated at 10%) on the assets replaced viz. Lighting Fixtures, LT Panel, Control cables & on line instruments in WTP. Therefore, on net basis, the actual capital expenditure of ₹124.92 lakh (127.99-3.07) excluding liabilities, on approved R&M schemes is allowed for 2009-10 as summarized under:

(₹ in lakh)				
Sl. No.	Name of work	Amount Allowed Excluding liability	Estimated De-capitalization @10%	
(1)	(2)			
1	Replacement of existing Station Lighting Fixtures etc.	11.98	1.20	
2	Replacement of existing LT Power & Control cables.	1.38	0.14	
3	Replacement of online instrumentation in WTP	17.33	1.73	
4	PLC based control system of OCHP	12.00	0.00	
5	Strengthening of chimneys	5.95	0.00	
6	UPS	37.84	0.00	
7	Lab instruments	21.39	0.00	
8	(Ash dyke) - Construction of boundary wall for balance portion of ash dyke.	0.06	0.00	
9	Ash Dyke - 1st raising of Ash Dyke Phase-V	4.36	0.00	
10	3rd Raising of Ash Dyke Phase-II	15.70	0.00	
	Total (2009-10)	127.99	3.07	124.92

New Claims during 2009-10

41. In addition to the approved R&M schemes, the petitioner has claimed expenditure on new items/ works as detailed hereunder:

(₹ in lakh)				
Sl. No.	Name of work	Capitalization/ De-capitalized Amount claimed	Liabilities in Additional Capitalization	Net Additional capitalization claimed on cash basis
1	Finned Economiser J Bends Tube SA 210A 1	60.58	0.00	60.58
2	Electric Hoist 5T capacity	4.95	0.0	4.95
3	Advance Anesthesia station	13.78	0.00	13.78
4	Elisa Plate Washer	4.32	0.00	4.32
5	Digital Blood Pressure Instrument	0.06	0.00	0.06
6	Autoclave (Electrically Powered)	0.06	0.00	0.06
7	Autoclave Vertical Manual Operation)	0.39	0.02	0.37
8	Medical Oxygen Cylinder B Type 10 ltrs EKC make	0.33	0.00	0.33
9	Anterior Vitrectomy Unit: Electrical/Gas Operated	0.61	0.00	0.61
20	HBA 1C Analyser with standard accessories	0.95	0.95	0.00

21	Ultrasound machine digital color doppler	12.50	12.50	0.00
22	Dental chair and unit equipment electrically operated	2.40	2.15	0.25
23	PH Meter	0.01	0.00	0.01
25	ERP Implementation	3.91	0.00	3.91
	Total (1+2+24+25)	104.85	15.62	89.23

42. The actual expenditure on new claims for 2009-10 is discussed as under:

Finned Economiser J bends

43. The petitioner has claimed actual expenditure of ₹60.58 lakh for replacement of 'J' bends under the Regulation 10 of the 2009 Tariff Regulations. The petitioner vide its affidavit dated 18.1.2013 has submitted that the quality of intake raw water has deteriorated drastically during the years and is now almost sewerage and this has resulted in frequent rupturing of condenser tubes and subsequently increasing depositions inside boiler tubes. It has also submitted that due to this reason frequent boiler tube leakages were occurring and for increasing boiler reliability & availability, replacement of 'J' bends was required and was carried out as a onetime activity. We are of the view that 'J' bends are capital spares and should be booked under O&M expenses as the petitioner has been allowed expenditure on capital spares in the normative O&M expense. In view of this, the expenditure claimed has not been allowed to be capitalized.

Electric Hoist 5 Ton capacity

44. The petitioner has claimed actual expenditure of ₹4.95 lakh towards the procurement of Electric Hoist of 5 Ton capacity under Regulation 10 of the 2009 Tariff Regulations. The petitioner vide its affidavit dated 18.1.2013 has submitted that the Electric Hoist has been installed to keep the Trash Rack before the CW Pump in clean conditions by removing debris from the cooling water received at the generating station. This asset is required for running & maintenance of the generating station. In view of this, we are of the considered view that the expenditure for the purpose of maintenance should be booked under O&M expenses allowed for the generating station. Accordingly, the expenditure claimed has not been allowed to be capitalized.

Hospital Equipments

45. The petitioner has claimed actual expenditure of ₹19.79 lakh, excluding liabilities, towards Hospital equipments under Regulation 10 of the 2009 Tariff Regulations. It is observed that most of the expenditure on Hospital equipments is minor in nature. We are of the view that the expenditure towards such welfare activities of employees should be borne by the petitioner and the beneficiaries should not be burdened on this count. Accordingly, the expenditure claimed has not been allowed to be capitalized.

ERP implementation

46. The petitioner in this petition has claimed actual expenditure of ₹3.91 lakh towards SAP-ERP implementation under the Regulation 10 of the 2009 Tariff Regulations. The said expenditure incurred for SAP-ERP implementation is allowed under the Regulation 10 of the 2009 Tariff Regulations.

De-capitalization

47. The petitioner has de-capitalized expenditure for ₹2.68 lakh towards Renovation of 'A' type quarters for ET Hostel and ₹1.92 lakh towards Ambient Air Quality Monitoring System (AAQMS) during 2009-10 on the ground that these have become un-serviceable. Since the said assets do not render any useful service to the generating station, the de-capitalization of spares for ₹2.68 lakh and ₹1.92 lakh respectively which were not claimed and which do not form part of the capital cost of the generating station for the purpose of tariff, has been allowed under exclusion.

48. Based on the above discussions, only an expenditure of ₹3.91 lakh towards ERP implementation has been allowed during 2009-10 under new claims.

2010-11

49. The actual capital expenditure claimed on approved R&M schemes under Regulation 10 of the 2009 Tariff Regulations is detailed as under:

(₹ in lakh)

Sl. No.	Name of work	Capitalization / De-capitalization amount	Liabilities in Additional capitalization	Net Add Cap on cash Basis	Allowed in order dated 23.5.2012	Variation
1	Goods Lift No.2 & 3 (2 nos)	37.04	9.28	27.76	37.04	0.00
2	Supply & Installation of ILMS & suspended magnets in CHP	61.02	14.17	46.85	61.02	0.00
3	Bridges over gurgaon canal and Agra canal under deposit works by UPID & Haryana ID	449.62	-	449.62	449.62	0.00
4	UPS	20.91	-	20.91	20.91	0.00
5	Ash dyke 1st raising of Ash Dyke Phase-V.	12.73	-	12.73	12.73	0.00
6	Pay Loaders (2 Nos.)	51.74	3.23	48.51	51.74	0.00
7	Procurement of Portable Environment Monitoring Instruments	6.49	0.64	5.85	6.49	0.00
8	Instruments	10.82	0.01	10.81	10.82	0.00
9	Ambient Air Quality Monitoring System	1.11		1.11	1.11	0.00
	Total	651.48	27.33	624.15	624.15	0.00

50. The petitioner in this petition has claimed actual expenditure of ₹624.15 lakh during 2010-11 excluding liability of ₹27.33 lakh for assets such as goods lift, Supply & installation of Inline Magnetic Separator (ILMS), Bridges over Gurgaon canal, raising of ash dyke, etc. (Sl. No. 1 to 9 of the above table) under various heads of R&M schemes allowed vide Commission's order dated 23.5.2012 in Petition No.332/2009 under the Regulation 10 of the 2009 Tariff Regulations. It is observed that the actual expenditure incurred is in line with the actual expenditure allowed in the order dated 23.5.2012. Hence, the actual capital expenditure of ₹624.15 incurred in respect of the assets (Sl. No. 1 to 9 of the table above), excluding liabilities during 2010-11 on approved R&M schemes is allowed. However, the de-capitalization amount of ₹16.06 lakh (estimated at 10%) on the assets replaced viz. goods lift, ILMS & suspended magnets in CHP, Pay Loaders & Instruments has been considered and accordingly, on net basis, the actual capital expenditure of ₹608.09 lakh (624.15-16.06), excluding liabilities, has been allowed as summarized as under:

(₹ in lakh)

Sl. No.	Name of work	Amount Allowed excluding liability	Estimated amount de-capitalized @10%	Net Amount allowed
1	Goods Lift No.2 & 3 (2 nos)	27.76	3.70	24.05
2	Supply & Installation of ILMS & suspended magnets in CHP	46.85	6.10	40.75
3	Bridges over gurgaon canal and Agra canal under deposit works by UPID & Haryana ID	449.62	0.00	449.62
4	UPS	20.91	0.00	20.91
5	Ash dyke 1st raising of Ash Dyke Phase-V.	12.73	0.00	12.73
6	Pay Loaders (2 Nos.)	48.51	5.17	43.34
7	Procurement of Portable Environment Monitoring Instruments	5.85	0.00	5.85
8	Instruments	10.81	1.08	9.73
9	Ambient Air Quality Monitoring System	1.11	0.00	1.11
	Total	624.15	16.06	608.09

New Claims during 2010-11

51. In addition to the approved R&M schemes, the petitioner has claimed expenditure on new items / works as detailed below:

(₹ in lakh)

Sl. No.	Name of work	Capitalization/ De-capitalization amount	Liabilities	Net Additional Capitalization claimed on cash basis
	Equipment for ET Hostel	17.88	3.47	14.41
1	Centrifuge Machine	0.37	0.00	0.37
2	Binocular Microscope std complete set 6V 20W light	0.62	0.00	0.62
3	Heavy Duty Nebuliser	0.19	0.00	0.19
4	Pulse Oxymeter	0.25	0.00	0.25
5	Hospital Equipment with associated accessories	0.63	0.00	0.63
6	X-RAY Film Drying Cabinet	0.12	0.00	0.12
7	Foot Step Single Non Skid Al Sheet	0.18	0.00	0.18
8	Carbon Dioxide Cylinder Size B	0.08	0.00	0.08
9	Laboratory Equipment Table	1.01	0.00	1.01
10	Mayo's Trolley	3.67	0.00	3.67
11	Stretcher Hand Folding-Metal Poles-STD	0.04	0.00	0.04
12	Total (Hospital Equipment)	7.15	0.00	7.15
13	Under Vehicle Trolley Inspection Mirror	0.11	0.00	0.11
14	Door Frame Metal Detector	0.45	0.00	0.45
15	Bomb Suppression Blanket Size 150-200 CMS	0.96	0.00	0.96
16	Safety Bullet Proof Jacket	1.73	0.00	1.73
17	Spike Road Block	0.13	0.00	0.13
	Total (1+12+13+14+15+16+17)	28.43	3.47	24.96

52. The actual expenditure on new claims/works for 2010-11 is discussed as under:

Equipment for ET Hostel

53. The petitioner has claimed actual expenditure of ₹14.41 lakh, excluding liability of ₹3.47 lakh under Regulation 10 of the 2009 Tariff Regulations towards procurement of equipments for ET Hostel. The petitioner by its affidavit dated 18.1.2013 has submitted that the said expenditure is in respect of balance work of additional capitalization for 2008-09. The petitioner has submitted that the expenditure incurred for converting the old quarters to ET hostel and procuring equipment for the same was of capital nature and was accordingly capitalized. Since no proper justification has been submitted by the petitioner for the said claim and as the expenditure incurred on these equipments do not appear to be the balance work, the expenditure incurred on this count has not been allowed.

Hospital Equipments

54. The petitioner has claimed actual expenditure of ₹7.15 lakh, towards Hospital Equipments under Regulation 10 of the 2009 Tariff Regulations. Since the items procured for Hospital equipments are minor in nature, the expenditure of ₹7.15 lakh has not been allowed.

Minor Assets

55. The petitioner has claimed actual expenditure of ₹3.39 lakh towards minor assets such as Vehicle trolley, Metal detector, bomb suppression blanket and bullet proof jacket and spike rod under Regulation 10 of the 2009 Tariff Regulations. Since, the items procured are minor in nature, the expenditure of ₹3.39 lakh has not been allowed.

De-capitalization

56. The petitioner has de-capitalized expenditure of ₹0.13 lakh during 2010-11 towards the Renovation of 'A' type quarters for ET Hostel as the same has been rendered un-serviceable. In view of this, the de-capitalization of ₹0.13 lakh on this count has been allowed. Accordingly, the actual expenditure allowed for the year 2010-11 towards new claims is 'nil'.

2011-12

57. The actual capital expenditure claimed on approved R&M schemes under Regulation 10 of the Tariff Regulations, 2009 is as under:

(₹ in lakh)						
Sl. No	Name of work	Capitalization / De-capitalization amount	Liability in Additional Capitalization	Net Additional Capitalization on cash basis	Allowed in order dated 23.5.2012 (Projected)	Variation
1	Construction of boundary wall for balance portion of ash dyke.	89.73	7.25	82.48	5.00	Difference was lying in CWIP)
2	Shunting Loco WDS-6 (1No)	934.23	-	934.23	930.00	₹934.23 (₹930 lakh claimed in 2012-13 on Projected basis)
3	Inter connection to all under ground tanks for drinking water supply from Delhi Jal Board Mains.	18.68	-	18.68	40.00	Claimed ₹63.68 (₹18.68 in 2011-12+₹45 lakh in 2012-13)
4	Dry Fly Ash Extraction System	1826.28	296.44	1529.84	1951.00	Less claim
5	New Coal Handling Plant	47.82	-	47.82	68.00	Less claim
6	Energy Management System	37.69	3.00	34.69	40.00	Less claim
7	Differential Pressure Transmitter (Lab Instruments)	15.51	1.67	13.84	20.00	Minor difference
8	Laser based shaft alignment Instrument (Lab Instruments)	3.21	-	3.21		
9	L/A 198 kV Surge Counter & Current Meter (Lab Instruments)	0.77	-	0.77		
10	Dual Channel vibration analyzer cum data collector with software.	13.97	-	13.97	20.00	Less claim
11	Condenser Tubes - 210 MW (U-4)	973.50	-	973.50	0.00	Part of R&M of main plant. Maybe allowed in the next tariff period
Total		3961.39	308.36	3653.03	3074.00	579.03

Ash Dyke

58. The petitioner has claimed actual capital expenditure of ₹82.48 lakh, excluding liabilities of ₹7.25 lakh against the projected expenditure of ₹5.00 lakh for R&M schemes approved under Regulation 10 of the 2009 Tariff Regulations. The petitioner in its affidavit dated 31.1.2013 has submitted that the difference was lying under CWIP. Now after capitalization of this amount lying under CWIP has been reflected as capitalized amount during 2011-12. In view of this, expenditure of ₹82.48 lakh has been allowed under Regulation 10 of the 2009 Tariff Regulations.

Shunting Loco

59. The petitioner in this petition has claimed actual capital expenditure of ₹934.23 lakh during 2011-12 towards Shunting loco against the projected expenditure of ₹930.00 lakh for the said asset during 2012-13 under the R&M scheme. The actual expenditure for ₹934.23 lakh has been allowed along with the corresponding de-capitalization of ₹93.42 lakh (estimated gross value of old assets @ 10% of the new asset). Accordingly, on net basis, the actual capital expenditure of ₹ 840.81 lakh (934.23-93.42) has been allowed.

60. The petitioner has claimed total expenditure of ₹1662.82 lakh (₹18.68 lakh for inter-connection to all ground tanks, ₹1529.84 for dry ash extraction system, ₹47.82 lakh for New coal handling plant (ILMS), ₹34.69 lakh for Energy Management System, ₹31.81 lakh for lab instruments (Sl. No. 7 to 10 of the above table) under various heads of the R&M schemes which were allowed by Commission's order dated 23.5.2012 in Petition No. 332/2009. It is observed that there are nominal variations between the expenditure claimed and those allowed by order dated 23.5.2012. However, the expenditure of ₹34.69 lakh for Energy Management System (EMS), excluding liability of ₹ 3.00 lakh has not been allowed as the benefit of reduction in the auxiliary power consumption due to EMS is not passed on to the beneficiaries during the tariff period 2009-14 and the same should be borne by the petitioner. In view of this, the actual capital expenditure of ₹1628.13 (1662.82-34.69) lakh, excluding liabilities during 2011-12, is allowed.

Condenser Tubes

61. The petitioner has claimed actual capital expenditure of ₹973.50 lakh towards Condenser tubes for Unit-4 (as at Sl. No. 11 of the above table) during 2011-12. This expenditure on condenser tubes was not allowed in the R&M schemes approved by the Commission in order dated 12.5.2011 in Petition No. 324/2009, as this is related to R&M of Main Plant Package. Since the benefit of R&M would accrue to the beneficiaries only during the next tariff 2014-19

and not during the current tariff period 2009-14, the expenditure has not been allowed. However, the prayer of the petitioner shall be considered only during next tariff period. Based on the above discussions, the net actual additional capital expenditure allowed for 2011-12 is summarized as under:

(₹ in lakh)				
Sl. No	Name of work	Amount Allowed Excl. liability	Estimated de-capitalization @ 10%	Net amount allowed
1	Construction of boundary wall for balance portion of ash dyke.	82.48	0.00	82.48
2	Shunting Loco WDS-6 (1No)	934.23	93.42	840.41
3	Inter connection to all under ground tanks for drinking water supply from Delhi Jal Board Mains.	18.68	0.00	18.68
4	Dry Fly Ash Extraction System	1529.84	0.00	1529.84
5	New Coal Handling Plant	47.82	0.00	47.82
6	Energy Management System	0.00	0.00	0.00
7	Differential Pressure Transmitter (Lab Instruments)	13.84	0.00	13.84
8	Laser based shaft alignment Instrument (Lab Instruments)	3.21	0.00	3.21
9	L/A 198 kV Surge Counter & Current Meter (Lab Instruments)	0.77	0.00	0.77
10	Dual Channel vibration analyzer cum data collector with software.	13.97	0.00	13.97
11	Condenser Tubes - 210 MW (U-4)	0.00	0.00	0.00
	Total	2644.54	93.42	2551.42

New Claims during 2011-12

62. In addition to the approved R&M schemes as above, the petitioner has claimed expenditure on new items / works which are examined as detailed below:

(₹ in lakh)			
Name of work	Capitalization/ De-capitalization amount	Liabilities	Net Additional Capitalization claimed on cash basis
S & E of Weighbridge Fully Electronic pitless type	9.00	0.53	8.48
Cable Drag Chain System for Tripper	8.31	1.42	6.89
Approach road to Ash Silo Area	3.56	-	3.56
Coal pick stone boundary wall for Ash Silo areas	11.71	-	11.71
CISF Room in Ash Silo Area	3.04	-	3.04
ECG Machine	1.15	0.16	0.99
Hospital Equipment (Syringe & Needle destroyer)	0.04	-	0.04
Radio visiographi M/C	1.52	0.19	1.33
Slit lamp	3.63	0.42	3.21
Instrument Cabinets Glass door	0.35	-	0.35
Examination Table details head rest ADJ	0.33	-	0.33

Walkie Talkie Set 6CH, 66-88/146-174 MHZ	0.23	-	0.23
CCTV system – Des/Eng/Supply/Erec/Comm/Test	50.71	4.51	46.20
Total	-	-	86.36

63. The petitioner has claimed actual capital expenditure of ₹8.47 lakh for S&E Weigh-Bridge and ₹6.89 lakh for cable chain drag system during 2011-12. Since the asset is minor in nature, the expenditure on this count has not been allowed.

64. The petitioner has claimed actual capital expenditure of ₹18.31 lakh (₹3.56 lakh, ₹11.71 lakh & ₹3.04 lakh) for Ash Silo related works under Regulation 9(2)(iii) of the 2009 Tariff Regulations during 2011-12. Accordingly, the expenditure of ₹18.31 lakh claimed under this head is allowed.

65. The petitioner has claimed expenditure for ₹6.55 lakh towards hospital equipments. Since the asset is minor in nature the said expenditure on this count has not been allowed.

66. The petitioner has claimed expenditure of ₹0.23 lakh on Walkie Talkie during 2011-12. Since the asset is minor in nature, the expenditure on this count has not been allowed.

67. The petitioner has claimed expenditure of ₹46.20 lakh towards CCTV system on cash basis, during 2011-12 under Regulation 9(2)(ii) i.e. Change-in law, on the ground that these are required for safety of plant and personnel and the increased threat perception. In view of this, the expenditure of ₹46.20 lakh on this count is allowed. Accordingly, the net additional capital expenditure allowed on new claims during 2011-12 is as under:

(₹ in lakh)	
Name of work	Allowed on cash basis
S & E of Weighbridge Fully Electronic pitless type	0.00
Cable Drag Chain System for Tripper	0.00
Approach road to Ash Silo Area	3.56
Coal pick stone boundary wall for Ash Silo areas	11.71
CISF Room in Ash Silo Area	3.04
ECG Machine	0.00
Hospital Equipment (Syringe & Needle destroyer)	
Radio visiograph M/C	

Slit lamp	
Instrument Cabinets Glass door	
Examination Table details head rest ADJ	
Walkie Talkie Set 6CH, 66-88/146-174 MHZ	0.00
CCTV system – Des/Eng/Supply/Erec/Comm/Test	46.20
Total	64.51

68. Based on the discussions in the above paragraphs, the actual capital expenditure allowed during 2009-10, 2010-11 and 2011-12 on cash basis on approved R&M schemes (Regulation 10) is summarized as under:

		(₹ in lakh)		
		2009-10	2010-11	2011-12
Approved R&M schemes (Regulation 10)				
1	Capital Expenditure claimed	217.22	649.12	3739.39
2	De-capitalization	4.60	0.13	0.00
3	Net additional capital expenditure claimed (1-2)	212.62	648.99	3739.39
4.	Capitalization disallowed	85.32	24.97	1030.04
5	Capitalization allowed (3-4)	127.30	624.02	2709.35
6	Estimated de-capitalization @ 10% of the value of new assets	3.07	16.06	93.42
7	Net additional capitalization allowed (5-6)	124.24	607.96	2615.93

Projected Additional Capital Expenditure during 2012-13 and 2013-14

69. The projected capital expenditure claimed on approved R&M schemes under Regulation 10 of the Tariff Regulations, 2009 is as under:

		(₹ in lakh)	
Sl. No.	Head of Work/Equipment	Projected additional capital expenditure	
		2012-13	2013-14
1	Approved Main Plant R&M Package	4867.77	480.00
Other Schemes			
2	Plant Schemes	251.29	120.00
5	Plant Civil Works	520.00	0.00
6	Other Works	854.01	5.19
	Net Additional capitalization allowed (4+5+6)	6493.07	605.19

2012-13

Main Plant package (R&M)

70. The petitioner has claimed projected additional capital expenditure of ₹4867.77 lakh (₹3440.00 lakh for augmentation of ESP, ₹1189.00 lakh for R&M of 220 kV switchyard, ₹34.66 lakh for replacement of existing lighting fixtures, ₹68.10 lakh for replacement of goods lift, ₹36.01 lakh for supply & Installation of ILMS and ₹100.00 for repair & refurbishment of CHP coal

Hopper) during 2012-13. Since, the benefits of R&M would be passed on to the beneficiaries only after completion of R&M of Main Plant Package during the next tariff period (2014-19), the expenditure of ₹4867.77 lakh during 2012-13 projected to be incurred for R&M of Main Plant Package could only be considered during the next tariff period.

Other Schemes

(a) Plant Works

71. The petitioner has claimed projected additional capital expenditure of ₹251.29 lakh during 2012-13 (₹9.60 lakh for procurement of Portable Environment Monitoring Instruments, ₹38.50 lakh for instruments, ₹65.00 lakh for passenger lift No. 2 of TG hall of unit-5, ₹90.00 lakh for shunting Loco, and ₹48.19 lakh for Electrical works of colony). Out of total projected additional capital expenditure of ₹251.29 lakh, an expenditure of ₹48.10 for instruments and the balance expenditure of ₹203.19 lakh (₹65.00 lakh for passenger lift, ₹90.00 lakh for shunting loco, ₹48.19 lakh for electrical works in employee's colony) with corresponding estimated de-capitalization of ₹20.32 lakh (estimated 10%) has been considered for capitalization. Hence, on net basis, expenditure of ₹48.10 lakh and ₹182.87 lakh (203.19-20.32) thereby totaling ₹230.97 lakh has been allowed for these works under Regulation 10 of the 2009 Tariff Regulations as these works were approved vide Commission's order dated 12.5.2011 in Petition No. 324/2009.

(b) Plant Civil Works

72. The petitioner has claimed projected additional capital expenditure totalling ₹520.00 lakh (₹45.00 lakh for interconnection of underground tanks, ₹15.00 lakh for construction of rain water harvesting structure and ₹460.00 lakh for ash dyke raising phase-I). Since these works were approved vide Commission's order dated 12.5.2011 in Petition No. 324/2009, the projected additional capital expenditure of ₹520.00 lakh is allowed for the said works under Regulation 10 of the 2009 Tariff Regulations. This is subject to truing up in terms of Regulation 6(1) of the 2009 Tariff Regulations.

(c) Other Works

73. The petitioner has claimed projected additional capital expenditure totalling ₹854.01 lakh (₹11.20 lakh for ventilation system in CHP, ₹657 lakh for bridges over Gurgaon canal, ₹20.00 lakh for Lab instruments, ₹151.00 lakh for Dry Ash Extraction System, and ₹14.81 lakh for Misc works of Energy Audit implementation). Since these works were approved vide Commission's order dated 12.5.2011 in Petition No. 324/2009, the projected total expenditure of ₹854.01 lakh has been allowed for these works under Regulation 10 of the 2009 Tariff Regulations, subject to truing up as per Regulation 6(1) of the 2009 Tariff Regulations.

2013-14

(a) Main Plant package (R&M)

74. The petitioner has claimed projected additional capital expenditure totalling ₹480.00 lakh (₹382.00 lakh for augmentation of ESP, ₹83.00 lakh for R&M of 220 kV switchyard, ₹15.00 lakh for replacement of existing lighting fixtures) during 2013-14. Considering the fact that the benefits of R&M would be passed on to the beneficiaries only after completion of R&M of Main Plant Package during the next tariff period (2014-19), the projected expenditure of ₹480.00 lakh during 2013-14 for R&M of Main Plant Package has not been allowed.

Plant Works

75. The petitioner has claimed total expenditure ₹120.00 lakh (₹30.00 lakh for installation of line monitoring instruments in Chimney, ₹55.00 lakh for fire tenders, ₹25.00 lakh for firefighting of stage-II LDO & HSD tank and ₹10.00 lakh for electrical works) during 2013-14. Since these works approved vide Commission's order dated 12.5.2011 in Petition No. 324/2009, the projected expenditure of ₹120.00 lakh has been allowed for these works under Regulation 10 of the 2009 Tariff Regulations, subject to truing up as per Regulation 6(1) of the 2009 Tariff Regulations.

Other Works

76. The petitioner has claimed projected expenditure of ₹5.19 lakh towards the implementation of energy audit recommendations. Since the expenditure in respect of the said work has been approved vide Commission's order dated 12.5.2011 in Petition No. 324/2009, the projected expenditure of ₹5.19 lakh has been allowed under Regulation 10 of the 2009 Tariff Regulations, subject to truing up as per Regulation 6(1) of the 2009 Tariff Regulations.

77. Based on the above discussions, the projected additional capital expenditure allowed for the period 2012-13 and 2013-14 is summarized as under:

(₹ in lakh)			
Sl. No.	Head of Work/Equipment	Projected additional capital expenditure	
		2012-13	2013-14
1	Approved Main Plant R&M Packages	0.00	0.00
	Other Schemes		
2	Plant Schemes	251.29	120.00
3	De-capitalization	20.32	0.00
4	Additional Capitalization allowed	230.97	120.00
5	Plant Civil Works	520.00	0.00 *
6	Other Works	854.01	5.19
	Net Additional Capitalization allowed (4+5+6)	1604.98	125.19

* no claim during the year

78. The actual additional capital expenditure for the years 2009-10, 2010-11 and 2011-12 and the projected additional capital expenditure for the years 2012-13 and 2013-14 has been allowed as under:-

(₹ in lakh)						
Sl. No.		2009-10	2010-11	2011-12	2012-13	2013-14
		Actual			Projected	
1	Net expenditure allowed on R&M schemes approved vide Commission's order dated 12.5.2011 in Petition No. 324/2009.	127.99	624.15	2644.84	0.00	0.00
2	Amount allowed on other than R&M schemes.	3.91	0.00	64.51	1625.30	125.19
3	Total	131.90	624.15	2709.35	1625.30	125.19
4	De-capitalization	4.60	0.13	0.00	0.00	0.00
5	Amount allowed	127.31	624.02	2709.35	1625.30	125.19
6	De-capitalization on replacement items	3.07	16.06	93.42	20.32	0.00
7	Additional Capital Expenditure allowed (5-6)	124.24	607.96	2615.93	1604.98	125.19

8	Exclusions not allowed	116.76	52.26	34.32	0.00	0.00
9	Net Additional Capital Expenditure allowed (7-8)	7.48	555.70	2581.61	1604.98	125.19

Discharge of liabilities

79. The discharge of liabilities amounting to ₹41.36 lakh, ₹26.90 lakh and ₹24.15 lakh during the years 2009-10, 2010-11 and 2011-12 respectively, out of the un-discharged liabilities pertaining to capital cost of the allowed capital assets has been considered as additional capital expenditure during the respective years.

80. Accordingly, the capital cost considered for the purpose of tariff for the period 2009-14 is as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital cost	45165.68	45214.51	45797.11	48402.87	50007.85
Additional Capital Expenditure allowed on cash basis	48.83	582.60	2605.76	1604.98	125.19
Closing Capital cost	45214.51	45797.11	48402.87	50007.85	50133.04
Average Capital cost	45190.10	45505.81	47099.99	49205.36	50070.45

Debt-Equity Ratio

81. 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.

82. Accordingly, the gross loan and net equity amounting to ₹23,337.14 lakh and ₹17129.53 lakh respectively as on 31.3.2009 as considered in order dated 10.12.2012 in Review petition no. 3/2011 in Petition No.194/2009 has been considered as gross loan and net equity as on 1.4.2009. However, the un-discharged liabilities amounting to ₹62.93 lakh pertains to assets/works allowed for the purpose of tariff till 31.3.2009. Further, out of the un-discharged liabilities of ₹62.93 lakh, ₹19.93 lakh pertains to liabilities prior to 1.4.2004 and ₹42.99 lakh pertains to liabilities for the period 2004-09. The un-discharged liabilities have been adjusted in the debt-equity ratio of 50:50 for liabilities pertaining to the period prior to 1.4.2004 and 70:30 for liabilities pertaining to period 2004-09. As such, the gross normative loan and net equity, on cash basis, considered for tariff as on 1.4.2009 is revised to ₹23297.08 lakh and ₹17106.66 lakh respectively. Further, the admitted actual and the projected additional expenditure 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

83. 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.”

84. As per methodology under NFA approach, return would be provided on constant equity component till the loans are fully paid and once the loans are fully repaid subsequent depreciation recovery would be utilized towards notional reduction in equity. In other words, return on equity would be calculated on reducing equity base once the loan is fully repaid notionally. The gross equity as on 1.4.2009 is ₹21891.47 and the cumulative re-payment of equity as on 1.4.2009 is ₹4761.94. Hence, the net equity as on 1.4.2009 is worked out as Rs. ₹17129.53 which is inclusive of un-discharged liabilities of ₹22.87 lakh as discussed above. As such, the net equity on cash basis as on 1.4.2009 considered for purpose of tariff is ₹17106.66 lakh. The grossing up of the base rate has been done with respect to the actual tax rate applicable to the petitioner for the years 2009-10, 2010-11 and 2011-12. For the rest of the years, same rate of grossing up as applicable for the year 2011-12 has been considered same. This is subject to truing up as per Regulation 6(1) of the 2009 Tariff Regulations. Accordingly, return on equity has been worked out on the normative net equity as on 1.4.2009 after accounting for the admitted actual and projected additional capital expenditure for the period 2009-14 as above. Return on Equity has been computed as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Notional Net Equity	17106.66	14949.86	13164.01	13393.73	12439.08
Addition of Equity due to additional capital expenditure	14.65	174.78	781.73	481.49	37.56
Repayment of Equity (balance of depreciation after repayment of loan)	2171.45	1960.63	552.01	1436.14	2535.61
Closing Normative Net Equity	14949.86	13164.01	13393.73	12439.08	9941.04
Average Normative Equity	16028.26	14056.94	13278.87	12916.41	11190.06
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)	3763.60	3262.62	3046.70	2963.54	2567.45

Interest on loan

85. 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.

86. Interest on loan has been worked out as under:

- (a) The gross normative loan of ₹23337.14 lakh as on 1.4.2009 has been considered, which includes liability of ₹40.06 lakh.

- (b) Cumulative repayment as on 31.3.2009 amounting to ₹23177.84 lakh as considered in order dated 10.12.2012 in Review Petition No. 3/2011 in Petition No. 194/2009 has been considered as cumulative repayment as on 1.4.2009. However, the same is adjusted by an amount of ₹38.88 lakh as an adjustment in the cumulative depreciation on account of removal of un-discharged liabilities from the capital cost as on 1.4.2009. As such, the cumulative repayment as on 1.4.2009 is revised to ₹23138.96 lakh.
- (c) Accordingly, the net normative opening loan as on 1.4.2009 works out to ₹158.11 lakh.
- (d) Addition to normative loan on account of additional capital expenditure approved above has been considered on year to year basis.
- (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 of liabilities considered during the respective years on account of cumulative repayment adjusted as on 1.4.2009. Also, proportionate adjustment has been made to the repayments on account of de-capitalizations considered in the additional capital expenditure approved above.
- (f) There is no loan portfolio existing during the tariff period 2009-14. Therefore, the weighted average rate of interest @ 10.5 % p.a. as considered in order dated 10.12.2012 in Review Petition No. 3/2011 (in Petition No.194/2009) has been considered as rate of interest for the tariff period 2009-14.

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

		(₹ in lakh)				
SI No.		2009-10	2010-11	2011-12	2012-13	2013-14
1	Gross opening loan	23297.08	23331.26	23739.08	25563.11	26686.60
2	Cumulative repayment of loan up to previous year	23138.96	23331.26	23739.08	25563.11	26686.60
3	Net loan Opening	158.11	0.00	0.00	0.00	0.00
4	Addition due to additional capitalisation	34.18	407.82	1824.04	1123.49	87.63
5	Repayment of loan during the period (before adjustment)	184.96	420.36	1915.61	1141.77	87.63
6	Less: Repayment adjustment on account of de-capitalisation	20.30	23.54	91.82	18.29	0.00
7	Add: Repayment adjustment on account of discharges / reversals corresponding to un-discharged liabilities deducted as on 1.4.2009	27.63	11.00	0.25	0.00	0.00
8	Repayment of Loan during the period (Net) (5-6+7)	192.30	407.82	1824.04	1123.49	87.63
9	Net Closing Loan (3+4-8)	0.00	0.00	0.00	0.00	0.00
10	Average Loan	79.06	0.00	0.00	0.00	0.00
11	Weighted Average Rate of Interest on Loan	10.50%	10.50%	10.50%	10.50%	10.50%
	Interest on Loan	8.30	0.00	0.00	0.00	0.00

Depreciation

88. 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.”

89. The cumulative depreciation as on 31.3.2009 has been worked out as ₹27939.78 for computation of the depreciation in order dated 10.12.2012 in Review Petition No. 3/2011 in Petition No.194/2009. This has been considered as cumulative depreciation as on 1.4.2009. Further, proportionate adjustment of ₹38.87 lakh has been made to this cumulative depreciation on account of un-discharged liabilities deducted as on 1.4.2009. Accordingly, the revised cumulative depreciation as on 1.4.2009 works out to ₹27900.91 lakh. The depreciation has been calculated based on Straight Line Method and at rates specified in Appendix to the 2009 Tariff Regulations. Further, the proportionate adjustment has been made to the cumulative depreciation corresponding to discharges 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 on account of de-capitalization considered during the period 2009-14 for the purpose of tariff. The necessary calculations in support of depreciation are as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Average capital cost	45190.10	45505.81	47099.99	49205.36	50070.45
Value of Freehold Land	0.00	0.00	0.00	0.00	0.00
Depreciable value @ 90%	40671.09	40955.23	42389.99	44284.83	45063.40
Balance depreciable value	12770.18	10692.66	9756.95	9275.69	7494.63
Rate of Depreciation	5.2144%	5.2323%	5.2391%	5.2391%	5.2391%
Depreciation (annualized)	2356.41	2381.00	2467.61	2577.92	2623.24
Cumulative depreciation at the end of the period (before adjustment)	30257.32	32643.57	35100.65	37587.06	40192.01
Add: Cumulative depreciation adjustment on account of discharges out of un-discharged liabilities deducted as on 1.4.2009	25.55	13.01	0.31	-	-
Less: Cumulative depreciation adjustment on account of de-capitalization	20.30	23.54	91.82	18.29	-
Cumulative depreciation after adjustment (at the end of the period)	30262.57	32633.04	35009.14	37568.77	40192.01

O&M Expenses

90. The Operation & Maintenance expenses considered for the purpose of tariff is summarized as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
O&M expenses	22101.75	22736.25	23384.85	24054.60	24738.45

Interest on Working Capital

91. Regulation 18 (1) (b) of the 2009 Tariff Regulations provides that the working capital for Open-cycle Gas Turbine/Combined Cycle thermal generating stations shall cover:

“(i) Fuel cost for one month corresponding to the normative annual plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel;

“(ii) Liquid fuel stock for ½ month corresponding to the normative annual plant availability factor, and in case of use of more than one liquid fuel, cost of main liquid fuel.

“(iii) Maintenance spares @ 30% of operation and maintenance expenses specified in regulation 19.

“(iv) Receivables equivalent to two months of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel, and

“(v) Operation and maintenance expenses for one month

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

"Rate of interest on working capital shall be on normative basis and shall be considered as follows:

(i) SBI short-term Prime Lending Rate as on 01.04.2009 or on 1st April of the year in which the generating station or unit thereof or the transmission system, as the case may be, is declared under commercial operation, whichever is later, for the unit or station whose date of commercial operation falls on or before 30.06.2010.

(ii) SBI Base Rate plus 350 basis points as on 01.07.2010 or as on 1st April of the year in which the generating station or a unit thereof or the transmission system, as the case may be, is declared under commercial operation, whichever is later, for the units or station whose date of commercial operation lies between the period 01.07.2010 to 31.03.2014.

Provided that in cases where tariff has already been determined on the date of issue of this notification, the above provisions shall be given effect to at the time of truing up

93. The cost of coal for two months as shown below has been considered:

<i>(₹ in lakh)</i>					
	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of Coal for two Months	15992.09	15992.09	16035.91	15992.09	15992.09

94. The Cost of secondary fuel oil (for two months) as shown below has been considered.

<i>(₹ in lakh)</i>					
	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of Secondary Fuel oil 2 months	317.80	317.80	318.67	317.80	317.80

95. Maintenance spares have been considered for the purpose of tariff as under.

<i>(₹ in lakh)</i>					
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spare	4420.35	4547.25	4676.97	4810.92	4947.69

96. Receivables have been worked out on the basis of two months of fixed and energy charges as shown below:

<i>(₹ in lakh)</i>					
	2009-10	2010-11	2011-12	2012-13	2013-14
Variable Charges -2 months	15992.10	15992.10	16035.91	15992.10	15992.10
Fixed Charges - 2 months	5931.26	5960.49	6055.41	6175.20	6235.91
Total	21923.35	21952.59	22091.32	22167.30	22228.01

O&M Expenses

97. O&M expenses for 1 month for the purpose of working capital are allowed as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
O&M Expenses (one month)	1841.81	1894.69	1948.74	2004.55	2061.54

98. 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 – 2 months	15992.09	15992.09	16035.91	15992.09	15992.09
Cost of secondary fuel oil – 2 month	317.80	317.80	318.67	317.80	317.80
O&M expenses – 1 month	1841.81	1894.69	1948.74	2004.55	2061.54
Maintenance Spares	4420.35	4547.25	4676.97	4810.92	4947.69
Receivables – 2 months	21923.35	21952.59	22091.32	22167.30	22228.01
Total working capital	44495.40	44704.41	45071.61	45292.65	45547.12
Rate of interest	12.2500%	12.2500%	12.2500%	12.2500%	12.2500%
Interest on working capital	5450.69	5476.29	5521.27	5548.35	5579.52

Annual Fixed charges for 2009-14

99. The annual fixed charges allowed 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	2356.41	2381.00	2467.61	2577.92	2623.24
Interest on Loan	8.30	0.00	0.00	0.00	0.00
Return on Equity	3763.60	3262.62	3046.70	2963.54	2567.45
Interest on Working Capital	5450.69	5476.29	5521.27	5548.35	5579.52
O&M Expenses	22101.75	22736.25	23384.85	24054.60	24738.45
Cost of Secondary fuel oil	1906.79	1906.79	1912.02	1906.79	1906.79
Total	35587.54	35762.95	36332.46	37051.20	37415.45

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

101. The difference in the annual fixed charges determined by order dated 8.2.2013 and those determined by this order shall be adjusted in accordance with Regulation 6(6) of the 2009 Tariff Regulations.

102. Petition No. 18/GT/2013 is disposed of in terms of the above.

Sd/-
[M.Deena Dayalan]
Member

Sd/-
[V. S. Verma]
Member