

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 235/GT/2013**

**Coram**

**Shri Gireesh B. Pradhan, Chairperson**

**Shri A. K. Singhal, Member**

**Shri A.S. Bakshi, Member**

**Date of hearing: 11.09.2014**

**Date of order: 11.12.2015**

**In the matter of**

Revision of tariff of Tanda Thermal Power Station (440 MW) for the period from 1.4.2009 to 31.3.2014 after truing-up exercise

**And**

**In the matter of**

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

**...Petitioner**

Vs

Uttar Pradesh Power Corporation Ltd.  
Shakti Bhawan,  
14, Ashoka Road,  
Lucknow – 226001

**...Respondent**

**Parties present:**

**For Petitioner:**

Shri Ajay Dua, NTPC  
Shri Bhupinder Kumar, NTPC  
Shri Abhay Srivastava, NTPC  
Ms. Rakhi Dua, NTPC

**For Respondents:**

None

**ORDER**

This petition has been filed by the petitioner, NTPC Ltd, for revision of tariff of Tanda TPS (440 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 as “the 2009 Tariff Regulations”).

2. The generating station with a capacity of 440 MW comprises of four units of 110 MW each.

The dates of commercial operation of the different units of the generating station are under:

Unit-I	21.3.1988
Unit-II	11.3.1989
Unit-III	28.3.1990
<b>Unit-IV/ Generating station</b>	<b>20.2.1998</b>

3. The Commission by order dated 17.10.2012 in Petition No. 229/2009 had approved the tariff for the generating station for the period from 1.4.2009 to 31.3.2014 based on admitted capital cost of ₹94506.05 lakh as on 1.4.2009.

4. Aggrieved by the said order, the petitioner filed review petition (R.P. No.28/2012) seeking review of the order dated 17.10.2012 on the following issues, namely:

(a) Allowance of ₹48.14 lakh on account of Air-conditioning of Thyristor room in the year 2010-11 mistakenly, instead of the year 2011-12, as claimed by the petitioner.

(b) Application of depreciation rate of 3.5439% for 2009-14 tariff period based on the depreciation rate of 2004-09 instead of depreciation rate based on Regulations 2009.

5. The Commission by order dated 15.3.2013, the review petition was allowed and tariff of the generating station was revised based on the capital cost of ₹94506.05 lakh (after removal of un-discharged liabilities of ₹776.50 lakh) as on 1.4.2009. The capital cost and the annual fixed charges for the generating station for the period 2009-14 approved by order dated 15.3.2013 is as under:

#### Capital Cost

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital cost	94506.05	97882.64	104763.74	112457.60	114363.79
Additional Capital Expenditure Allowed	3376.59	6881.11	7693.86	1906.19	1500.00
<b>Closing Capital cost</b>	<b>97882.64</b>	<b>104763.74</b>	<b>112457.60</b>	<b>114363.79</b>	<b>115863.79</b>
<b>Average Capital cost</b>	<b>96194.34</b>	<b>101323.19</b>	<b>108610.67</b>	<b>113410.70</b>	<b>115113.79</b>



## Annual Fixed Charges

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	4950.33	5222.56	5605.30	2835.13	2971.39
Interest on Loan	784.17	616.86	616.89	562.99	482.19
Return on Equity	6776.22	7137.51	7650.86	7988.99	8108.96
Interest on Working Capital	4233.57	4280.43	4347.58	4328.26	4375.75
O&M Expenses	11550.00	12210.00	12909.60	13648.80	14427.60
Secondary Fuel Oil	1694.99	1694.99	1699.64	1694.99	1694.99
Separate Compensation Allowance	0.00	0.00	0.00	0.00	0.00
Special Allowance	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>29989.28</b>	<b>31162.35</b>	<b>32829.87</b>	<b>31059.17</b>	<b>32060.88</b>

6. Against the said order dated 17.10.2012 in Petition No.229/2009, the petitioner also filed Appeal No. 97/2013 before the Appellate Tribunal for Electricity (the Tribunal) on the following issues:

*“(i) Disallowance of additional capitalization claimed in regard to Installation of Chlorine Leak Absorption System amounting to ₹29.91 lakh*

*“(ii) Disallowance of additional capitalization claimed in respect of Sulphur & Nitrogen Oxide (SOx and NOx) Analyzer amounting to ₹57.75 lakh*

*“(iii) Disallowance of the expenditure on the procurement of one Generator Transformer;*

*“(iv) Disallowance of additional capitalization claimed in respect of Construction of Employees Development Centre amounting to ₹ 96.11 lakh*

*“(v) Disallowance of capital expenditure incurred on various items relating to township and colony forming part of the generating station at Tanda including expenditure on substation, boundary wall, roads, parking areas, auditorium, tube wells, sewer pipelines, cabling, switchgear, distribution line, land development etc as more fully set out in the petition filed before the Central Commission”*

7. The Tribunal by judgment dated 1.5.2015 while rejecting the prayer of the petitioner on issues at (i) to (iv) above, allowed the prayer of the petitioner as regards the disallowance of capital expenditure of township and colony and remanded the matter to the Commission for reconsideration. The relevant portion of the judgment is extracted as under.

*“30. The fifth issue is regarding disallowance of capital expenditure of township and colony.*

*(a) xxx*

*xxx*



*(d) According to Section 2(3) of the Electricity Act, the definition of generating station includes any building used for housing operating staff of a generating station. Therefore, if the Central Commission has allowed expenditure incurred towards renovation and modernization of main plant equipment and auxiliaries of the generating station, the expenditure on the renovation and modernization of the housing colony should also have been considered as it is an essential part of the power plant. Accordingly, we direct the Central Commission to reconsider allowance of expenditure to the extent incurred on renovation and modernization of the township. The matter is remanded to the Central Commission for reconsideration of this issue."*

8. In order to consider the allowance of expenditure on R&M of township and colony, the petitioner was directed by letter dated 11.6.2015 to furnish the item-wise details of the expenditure incurred under the head R&M of township and colony. In response, the petitioner vide affidavit dated 6.7.2015 has submitted the item-wise break-up details of the actual expenditure incurred on account of R&M of township and colony related works.

9. 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."*

10. The petitioner in accordance with the proviso to Regulation 6(1) of the 2009 Tariff Regulations has filed the petition for revision of tariff of the generating station based on the capital cost admitted as on 31.3.2009, the actual capital expenditure incurred (on cash basis) during the years 2009-10 to 2011-12 and the projected additional capital expenditure to be incurred during the years 2012-13 and 2013-14. The petitioner has also vide affidavit dated 20.7.2015 submitted revised tariff filing forms, Form-1, 1A, Form-9, Form-12 and 13 along with details of additional capital expenditure reconciled with the gross block. Accordingly, the capital cost and the annual fixed charges claimed by the petitioner for the period 2009-14 are as under:



## Capital Cost

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	94506.05	98110.96	106307.26	108699.27	116902.65
Add: Additional capital expenditure	3604.91	8196.30	2392.01	8203.38	4798.18
<b>Closing Capital Cost</b>	<b>98110.96</b>	<b>106307.26</b>	<b>108699.27</b>	<b>116902.65</b>	<b>121700.83</b>
<b>Average Capital Cost</b>	<b>96308.51</b>	<b>102209.11</b>	<b>107503.27</b>	<b>112800.96</b>	<b>119301.74</b>

## Annual Fixed Charges

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	4956.21	5268.23	5548.15	2706.14	3202.54
Interest on Loan	785.55	632.89	563.30	536.4	590.29
Return on Equity	6784.26	7116.82	7399.66	7764.31	8211.78
Interest on Working Capital	4233.88	4281.28	4340.03	4320.33	4384.95
O&M Expenses	11550.00	12210.00	12909.60	13648.80	14427.60
Cost of Secondary Fuel Oil	1694.99	1694.99	1699.64	1694.99	1694.99
Compensation Allowance	0.00	0.00	0.00	0.00	0.00
Special Allowance	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>30004.89</b>	<b>31204.21</b>	<b>32460.37</b>	<b>30671.04</b>	<b>32512.15</b>

11. The petitioner has filed the additional information as sought for by the Commission and had served copies of the same on the respondents. Reply has been filed by the respondent, UPPCL and the petitioner has filed its rejoinder to the same. Based on the submissions of the parties and the documents available on record (including the affidavit dated 6.7.2015), we proceed to determine the tariff of the generating station after truing-up, after prudence check, as stated in the subsequent paragraphs.

### Capital Cost as on 1.4.2009

12. The last proviso to Regulation 7 of the 2009 Tariff Regulations, 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.”*

13. The annual fixed charges claimed by the petitioner is based on opening capital cost of ₹94506.05 lakh as considered in order dated 17.10.2012 in Petition No. 229/2009. Further, the petitioner in its petition has furnished the value of capital cost and liabilities as on 1.4.2009 as per



books at Form-9A. The details of liabilities and capital cost have been reconciled with the information available with the records of the Commission as under:

	(₹ in lakh)	
	As per Form-9A	As per records of Commission
Capital cost as on 1.4.2009 as per books	95505.09	95505.09
Liabilities included above	776.95	776.95

14. It is evident from the above that there is no variation in the capital cost and liabilities position as on 1.4.2009 as per books and the details available with the Commission. Further, out of un-discharged liabilities amounting to ₹776.95 lakh included in gross block as on 1.4.2009, the approved capital cost of ₹95282.55 lakh as on 31.3.2009 is inclusive of un-discharged liabilities amounting to ₹776.50 lakh (all pertaining to tariff period 2004-09). The balance liability of ₹0.45 lakh pertains to works/assets disallowed.

15. Accordingly, in terms of the last proviso of Regulation 7 of the 2009 Tariff Regulations, the capital cost as on 1.4.2009, after removal of un-discharged liabilities of ₹776.50 lakh, works out to ₹94506.05 lakh on cash basis. The liabilities discharged, if any, would form part of additional capital expenditure during the year of discharge. Out of un-discharged liabilities amounting to ₹776.50 lakh deducted as on 1.4.2009, the petitioner has discharged ₹0.48 lakh, ₹82.97 lakh, ₹342.30 lakh during the years 2009-10, 2010-11, and 2011-12 respectively. These discharges along with the discharges corresponding to assets admitted on cash basis during the tariff period 2009-14 is allowed as additional capital expenditure during the respective years.

### **Additional Capital Expenditure**

16. 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.”

(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.”

17. The actual/projected additional capital expenditure allowed by Commission’s order dated

15.3.2013 in Petition No.28/RP/2012 is as under:

(₹ in lakh)

Sl. No.	Head of work/ Equipment	Actual/Projected Capital Expenditure					Total
		2009-10 (actual)	2010-11 (actual)	2011-12	2012-13	2013-14	
<b>A</b>	<b>R&amp;M Schemes</b>						
1 to 63	Assets under R & M schemes (list of assets enclosed at Annex-I)	2626.75	6131.30	4344.40	706.43	0.00	13808.88
	De-capitalization	140.47	449.03	370.52	81.24	0.00	1041.26
(a)	<b>Net Amount allowed</b>	<b>2486.28</b>	<b>5682.27</b>	<b>3973.88</b>	<b>625.19</b>	<b>0.00</b>	<b>12767.62</b>
72	Renovation of ESP Unit#3	104.12	0.48	0.00	0.00	0.00	104.60
73	Renovation of ESP Unit#4	0.00	582.55	0.00	0.00	0.00	582.55
74	Renovation of ESP Unit#2	0.00	0.00	379.34	0.00	0.00	379.34
	De-capitalisation of ESPs	11.97	67.05	43.62	0.00	0.00	122.67
b)	Net amount allowed on ESPs	92.15	515.98	335.72	0.00	0.00	943.85
(a) + (b)	Total amount allowed on R&M (Net basis) <b>-(A)</b>	<b>2578.43</b>	<b>6198.25</b>	<b>4309.60</b>	<b>625.19</b>	<b>0.00</b>	<b>13711.47</b>
<b>(B)</b>	<b>Ash Handling</b>						
64	First Raising of Ash Dyke –A	797.68	0.00	600.00	0.00	0.00	<b>1397.68</b>
65	First Raising of Ash Dyke –B	0.00	563.87	0.00	0.00	0.00	563.87
66	Contingency raising of Ash Dyke-A	0.00	0.00	89.90	0.00	0.00	89.90
67	2 <sup>nd</sup> raising of Ash Dyke-A	0.00	0.00	0.00	1281.00	0.00	1281.00
68	2 <sup>nd</sup> raising of Ash Dyke –B	0.00	0.00	0.00	0.00	1500.00	1500.00
	<b>Total (B)</b>	<b>797.68</b>	<b>563.87</b>	<b>689.90</b>	<b>1281.00</b>	<b>1500.00</b>	<b>4832.45</b>
<b>(C)</b>	<b>Change in Law</b>						
71	Procurement, Installation & commissioning of automatic continuous Air quality Monitoring	0.00	96.53	0.00	0.00	0.00	96.53





	system (AAQMS)						
75	Sox & Nox Analyzer-ESP side – 4 nos. for four units	0.00	0.00	0.00	0.00	0.00	0.00
77	Chlorine leak absorption system	0.00	0.00	0.00	0.00	0.00	0.00
69	Dry Ash Evacuation System	0.00	0.00	2694.36	0.00	0.00	2694.36
70	Ash Brick Making machine	0.00	0.00	0.00	0.00	0.00	0.00
	<b>Total (C)</b>	0.00	96.53	2694.36	0.00	0.00	2790.89
	<b>Others</b>	0.00	0.00	0.00	0.00	0.00	0.00
76	Supply of electricity under 5 Km radius scheme	0.00	0.00	0.00	0.00	0.00	0.00
	<b>Net Additional Capitalization allowed (A+B+C)</b>	<b>3376.11</b>	<b>6858.65</b>	<b>7693.86</b>	<b>1906.19</b>	<b>1500.00</b>	<b>21334.81</b>

18. Considering the capital expenditure on R&M of Township & Colony in terms of the judgment of the Tribunal dated 1.5.2015, the petitioner has revised the actual/projected additional capital expenditure claimed as follows:

	(₹ in lakh)				
	2009-10 (Actual)	2010-11 (Actual)	2011-12 (Actual)	2012-13 (Projected)	2013-14 (Projected)
Additional capital expenditure claimed	3604.43	8128.11	2048.38	8203.38	4798.18
De-capitalization	0.00	14.78	0.00	0.00	0.00
Net Additional capital expenditure claimed	3604.43	8113.32	2048.38	8203.38	4798.18
Discharge of liabilities by way of payment on allowed items before 1.4.2009	0.48	20.58	276.84	0.00	0.00
Discharges of liabilities by way of payment on claimed items after 1.4.2009	0.00	61.07	47.18	0.00	0.00
Total discharge of liabilities by way of payment	0.48	81.65	324.02	0.00	0.00
<b>Total</b>	<b>3604.91</b>	<b>8196.30</b>	<b>2392.01</b>	<b>8203.38</b>	<b>4798.18</b>

19. The category-wise break-up of the above actual/projected additional capital expenditure claimed for the period 2009-14 is as under:

		(₹ in lakh)				
SI no	Head of works / Equipments	2009-10	1010-11	2011-12	2012-13	2013-14
		Actual	Actual	Actual	Projected	Projected
<b>A: R&amp;M Schemes</b>						
1	R&M of SG Unit#1	115.67	8.28	0.00	101.47	0.00
2	R&M of SG Unit#3	58.99	20.97	0.00	66.12	0.00
3	R&M of SG Unit#2	0.00	0.00	0.00	3904.79	0.00
4	R&M of SG Unit#4	0.00	3478.70	6.19	49.45	0.00
5	Additional HT, LT & Control Cable for SG+C&I	0.00	0.00	0.00	12.00	0.00
6	HP heaters Unit#1	9.01	0.00	0.00	4.80	0.00
7	HP heaters Unit#2	403.25	0.00	0.00	0.00	0.00
8	HP heaters Unit#3	8.99	0.00	0.00	0.00	0.00
9	Renovation of Generator Rotor of Unit # 2	0.00	0.00	0.00	304.71	0.00
10	Generator Seal oil pressure	0.00	0.00	0.00	127.01	0.00



	regulator					
11	Guide Wheels for MP Turbine Stage 9th to 20th Unit#2	0.00	0.00	0.00	23.89	0.00
12	Servo Motors for QCV & CV U#3	58.05	0.00	0.00	0.00	0.00
13	Set of Guide Wheels for HP/MP/ LP Turbine for Unit#1	0.49	0.00	0.00	0.00	0.00
14	Set of Guide Wheels for LP Turbine 1,1A,2,2A,3,3A,4 & 4A	0.00	0.00	0.00	40.00	0.00
15	R&M of HP Rotor of Unit 1	243.63	0.00	0.00	0.00	0.00
16	R&M of MP Rotor of Unit 1	0.00	0.00	268.00	0.00	31.08
17	R&M of MP Rotor of Unit 2	0.00	0.00	0.00	0.00	188.45
18	R&M of LP Rotor of Unit 3	212.57	1.43	548.17	0.00	0.00
19	R&M works of TG & Aux of U#1	92.93	0.00	0.00	0.00	0.00
20	R&M works of TG & Aux of Unit#4	0.00	160.76	0.00	0.00	0.00
21	R&M works of TG & Aux of Unit#2 including Diaphragms of HP/MP/LP Turbine of Unit#2	0.00	0.00	0.00	266.70	0.00
22	R&M works of TG & Aux of Unit#3	0.00	12.21	0.00	0.00	0.00
23	R&M works of TG & Aux of U#2 including Diaphragms of HP/MP/LP Turbine of Unit#2	0.00		0.00	27.72	0.00
24	R&M of HP Rotor of Unit#2	0.00	0.00	0.00	190.30	0.00
25	Labyrinth rings for HP Rotor Front Glands.	0.00	0.00	105.99		0.00
26	Supply, Erection Testing and Commissioning of PLC for CHP	54.19	0.00	0.00	2.73	0.00
27	Elevator for ADM Building and Service Building & Consultation charges towards Hoist way & Machine room	0.00	0.00	53.97	5.40	0.00
28	DDCMIS for Unit#1& 3	27.09	59.26	0.00	0.00	0.00
29	DDCMIS for Unit#4	0.00	322.96	0.00	33.41	0.00
30	DDCMIS for Unit 1 & 2 and DAS for Unit 4	0.00	0.00	0.00	33.39	0.00
31	DDCMIS for Unit 1 & 2 and DAS for Unit 4	0.00	0.00	0.00	50.45	0.00
32	Civil work for installation of DDCIMS Unit#2	0.00	0.00	1.65	0.00	0.00
33	Civil work for installation of DDCIMS for Unit #4	0.00	9.06	0.00	0.00	0.00
34	Electro Hydraulic Turbine Governing system for 3 Units & up-gradation of existing Controller of Unit - 1 to make it compatible with 2,3 & 4	0.00	0.00	0.00	605.00	0.00



35	Construction of Clarification plant for circulating water and chemical dozing system	0.00	266.83	0.00	57.98	0.00
36	Air washer system for Unit # 3 & 4.	0.00	0.00	0.00	126.11	0.00
37	Ash Water Recirculation System	0.00	0.00	0.00	10.00	0.00
38	Addl. Fire Fighting System (Amended)	1206.53	2.38	0.00	0.00	0.00
39	Stacker-cum-reclaimer	0.00	1888.87	2.36	14.30	0.00
40	Construction of Sewerage treatment plant.	0.00	0.00	0.00	125.91	0.00
41	Stone aggregate filling & anti-weed treatment in switchyard	0.00	0.00	0.00	22.99	0.00
	<b>Total (A)</b>	<b>2491.39</b>	<b>6231.71</b>	<b>986.33</b>	<b>6206.63</b>	<b>219.53</b>
<b>B: Capital addition Scheme</b>						
42	Procurement of 1 no Overhead 5 ton EOT Crane for newly constructed Maintenance workshop Loco Maintenance Workshop	0.00	59.01	0.00	0.00	0.00
43	Construction of 16 Nos. Residential Building Type - C & 32 no type d quarters	0.00	0.00	0.00	0.00	200.00
44	Construction of 2 nos Barracks, mess, store and approaches for CISF Fire Wing.	0.00	0.00	80.99	0.00	0.00
45	Air Condition of Thyristor room	0.00	0.00	0.00	39.59	25.00
	<b>Total (B)</b>	<b>0.00</b>	<b>59.01</b>	<b>80.99</b>	<b>39.59</b>	<b>225.00</b>
<b>C: Ash Handling system</b>						
46	First Raising of Ash dyke -A	739.21	0.00	0.00	1.18	0.00
47	First Raising of Ash dyke -B	0.00	568.94	0.00	9.91	0.00
48	Contingency raising of Ash dyke-A	0.00	0.00	122.12	0.00	0.00
49	2nd raising of Ash dyke-A	0.00	0.00	0.00	1107.54	0.00
50	2nd raising of Ash dyke -B	0.00	0.00	0.00	0.00	800.00
51	Dry Ash Evacuation System	0.00	0.00	0.00	0.00	3,000.02
	<b>Total (C)</b>	<b>739.21</b>	<b>568.94</b>	<b>122.12</b>	<b>1118.63</b>	<b>3800.02</b>
<b>D: Change in Law</b>						
52	Procurement, Installation & commissioning of automatic continuous Air quality Monitoring system (AAQMS)	0.00	86.52	0.56	0.00	0.00
53	Renovation of ESP Unit#3	82.60	0.49	0.36	1.22	0.00
54	Renovation of ESP Unit#4	0.00	604.95	0.00	2.29	0.00
55	Renovation of ESP Unit#2	0.00	0.00	0.00	553.15	0.00
	<b>Total R&amp;M of ESPs</b>	<b>82.60</b>	<b>605.44</b>	<b>0.36</b>	<b>556.66</b>	0.00
	<b>Total (D)</b>	<b>82.60</b>	<b>691.96</b>	<b>0.92</b>	<b>556.66</b>	0.00
56	Supply of electricity 5km. around plant	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	0.00



<b>New Works (E)</b>						
57	Safety/security related items	0.17	20.54	0.00	0.00	0.00
58	Road for Township	0.00	0.00	0.00	0.00	30.00
59	Construction of ET Hostel	0.00	0.00	0.00	0.00	325.00
60	Design, Supply, Erection & Commission of audio, video & lifting system of auditorium	0.00	0.00	0.00	0.00	0.00
61	Chlorinators for T/S	0.00	0.00	0.00	0.95	0.00
62	Renovation of store Shed in Central Store	0.00	0.00	0.00	78.64	0.00
	<b>Total (E)</b>	<b>0.17</b>	<b>20.54</b>	<b>0.00</b>	<b>79.59</b>	<b>355.00</b>
63	<b>Adjustments</b>	<b>14.74</b>	<b>7.61</b>	<b>-</b>	<b>-</b>	<b>-</b>
	<b>Total Additional capitalisation claimed</b>	<b>3298.63</b>	<b>7564.55</b>	<b>1190.36</b>	<b>8001.10</b>	<b>4599.55</b>
<b>De-capitalisation of Items (F)</b>						
64	R&M of SG Unit-4	0.00	9.00	0.00	0.00	0.00
65	DDCMIS for Unit-4	0.00	2.00	0.00	0.00	0.00
66	R&M of ESP Unit 4	0.00	1.00	0.00	0.00	0.00
67	Steam Generator (BHEL make 110 MW)-Unit 1	0.00	2.78	0.00	0.00	0.00
	<b>Total De-capitalisation</b>	<b>0.00</b>	<b>14.78</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
	<b>Net Additional capitalisation</b>	<b>3298.63</b>	<b>7549.76</b>	<b>1190.36</b>	<b>8001.10</b>	<b>4599.55</b>
68	<b>R&amp;M of Generator Transformer</b>	<b>0.00</b>	<b>0.00</b>	<b>757.61</b>	<b>0.00</b>	<b>0.00</b>
<b>Claims pursuant to the judgment of Tribunal dated 1.5.2015</b>						
69	Laying of sewer pipeline in township	0.00	0.00	0.00	193.27	0.00
70	Construction of auditorium in township	0.00	250.08	0.00	0.00	0.00
71	Cable laying & installation of feeder pillar for domestic power	0.00	165.72	1.67	0.00	0.00
72	11 kV/433 V Sub-station	165.43	0.00	0.01	0.00	0.00
73	Construction of boundary wall, CC Roads & Parking in township	63.69	0.00	18.64	0.00	0.00
74	Construction of seating gallery in Ram Lila ground	0.00	0.00	79.86	6.19	0.00
75	Development of tube wells in township	22.59	17.57	0.00	0.00	0.00
76	Cabling for new 6.6 kV CHP Switchgear and 11 kV colony Switchgear	54.08	0.00	0.00	0.00	0.00
77	Construction of boundary wall 300 buildings	0.00	0.87	0.00	2.82	0.00
78	Construction of swimming pool	0.00	129.33	0.24	0.00	0.00
	<b>Total</b>	<b>305.79</b>	<b>563.57</b>	<b>100.42</b>	<b>202.28</b>	<b>198.63</b>
	<b>Grand Total</b>	<b>3604.42</b>	<b>8113.33</b>	<b>2048.39</b>	<b>8203.38</b>	<b>4798.18</b>

20. It is noticed from the above that as against the actual / projected additional capital expenditure of ₹22498.71 lakh allowed in order dated 17.10.2012/15.3.2013 in Petition No. 229/2009/Petition No.28/RP/2012, the petitioner vide affidavit dated 20.7.2015 has claimed



₹26782.48 lakh including the additional capital expenditure of ₹1370.69 lakh towards R&M of Township & Colony pursuant to the judgment of the Tribunal dated 1.5.2015. Thus, there is an increased claim of ₹4283.77 lakh (26782.48-22498.71) in Form-9 submitted by the petitioner vide affidavit dated 20.7.2015. This increase is on account of (i) Additional expenditure of ₹1370.69 lakh for R&M of Township (ii) Expenditure on new claims for ₹530.19 lakh (i.e construction of ET Hostel, store shed, road for township, safety/security related items etc., and (iii) capital expenditure of ₹1677.18 lakh on account of change in liability, variation in ERV and variation in actual/projected additional capital expenditure for reasons such as the delay in R&M activities, amount lying in CWIP and towards the actual capital expenditure of ₹757.61 lakh for Generator Transformer for Unit-I in 2011-12. No claim has been made by the petitioner in affidavit dated 20.7.2015 against the projected additional capital expenditure of ₹51.90 lakh allowed in 2012-13 for design, Supply, Erection & Commissioning audio, video & lifting system. However, there is variation in the actual additional capital expenditure claimed during the years 2009-10 and 2010-11 as against the additional capital expenditure allowed vide order dated 17.10.2012 in Petition No. 229/2006. The petitioner vide affidavit dated 25.4.2014 has clarified that the said variation in the actual additional capital expenditure during 2009-10 and 2010-11 is on account of liability and variation in ERV.

21. The actual/projected additional capital expenditure claimed by the petitioner for 2009-14 is examined on prudence check, based on the submissions of the parties as stated in the subsequent paragraphs.

### **R&M Schemes**

22. The petitioner has claimed actual additional capital expenditure ₹16135.59 lakh (₹2491.39 lakh in 2009-10, ₹6231.71 lakh in 2010-11, ₹986.33 lakh in 2011-12 and projected additional capital expenditure of ₹6206.63 lakh in 2012-13 and ₹219.53 lakh in 2013-14 towards R&M of Steam Generator of all the four units, HP Heater of Units-I, II, & II R&M of HP Rotor, MP Rotor, LP Rotor TG & Auxiliaries, Supply, Erection Testing & Commissioning of PLC in Coal handling



plant (Sl. No. 1 to 41 of the table under para 19 above) as against the actual additional capital expenditure of ₹13808.88 lakh (₹2626.75 lakh in 2009-10 and ₹6179.44 lakh in 2010-11 and projected additional capital expenditure of ₹4296.26 lakh in 2011-12, ₹706.43 lakh in 2012-13 allowed in order dated 17.10.2012 in Petition No. 229/2009 and order dated 15.3.2013 in Petition No. 28/RP/2012 [sl. No.(A) 1 to 63 of the table under para 17 above]. The petitioner vide affidavit dated 25.4.2014 has submitted that the projection made earlier were inadvertently based on the budgeted cash expenditure for the relevant years and is presently claimed on the awarded value to M/s BHEL. It has also submitted that some amount was lying under CWIP which was not considered in the earlier submissions.

23. The submissions have been considered. It is noticed that the Commission in order dated 17.10.2012 in Petition No.229/2009 had allowed the capitalisation of the R&M schemes along with the corresponding de-capitalization value of 11.5% as claimed by the petitioner mainly on the ground that these R&M schemes are required for the sustenance of efficient performance of the generating station under Regulation 9(2) in exercise of the 'Power to Relax' in terms of Regulation 44 of the 2009 Tariff Regulations. In the instant case, the petitioner has claimed the additional capital expenditure on these schemes, but has not furnished the gross block of the old assets replaced by new assets under the R&M schemes. However, the petitioner vide affidavit dated 6.7.2015 has clarified that the generating station was taken over by the petitioner on 14.1.2000 from the erstwhile Uttar Pradesh Electricity Board (UPSEB) and hence the capitalization values for the old items are not available. Considering the submissions of the petitioner and since these R&M schemes are necessary for sustenance of the performance of the generating station, we are inclined to allow the capitalisation of the expenditure claimed by the petitioner as allowed in order dated 17.10.2012. Also, in line with the methodology adopted in order dated 17.10.2012 in Petition No. 229/2009, the corresponding de-capitalization value of 11.5% as claimed by the petitioner has been considered in cases where the gross value of old asset replaced by the new assets are not available, The de-capitalized value of old assets has been derived from the gross block of the new assets wherever applicable. In this background and



in line with the decision contained in order dated 17.10.2012, the net actual additional capital expenditure of ₹2342.24 lakh (i.e actual additional capital expenditure of ₹2491.63 lakh *minus* the corresponding de-capitalization of ₹149.15 lakh) in 2009-10, ₹5733.59 (₹6231.71 lakh *minus* the corresponding de-capitalization of ₹498.12 lakh) in 2010-11, ₹878.50 lakh (₹986.33 lakh *minus* corresponding de-capitalization of ₹107.83 lakh) in 2011-12 and the projected additional capital expenditure of ₹5520.07 lakh (₹6183.64 lakh *minus* the corresponding de-capitalization of ₹686.56 lakh) in 2012-13, ₹194.28 lakh (₹219.53 lakh *minus* the corresponding de-capitalization of ₹25.25 lakh) in 2013-14 has been allowed.

### **Renovation of ESPs**

24. The petitioner has claimed actual additional capital expenditure of ₹1245.06 lakh (₹82.60 lakh in 2009-10, ₹605.44 lakh in 2010-11 and ₹0.36 lakh in 2011-12 on actual basis) and projected additional capital expenditure of ₹556.66 lakh in 2012-13) as against the actual additional capital expenditure of ₹1066.49 lakh (₹104.12 lakh in 2009-10, ₹583.03 lakh in 2010-11 and projected additional capital expenditure of ₹379.34 lakh in 2011-12) allowed vide order dated 17.10.2012 in Petition No. 229/2009 and order dated 15.3.2013 in Petition No. 28/RP/2012 for R&M of ESPs. The petitioner vide affidavit dated 25.4.2014 has submitted that the variation in actual additional capital expenditure during 2009-10 and 2010-11 is on account of change in liability and change in ERV. In addition, the petitioner vide affidavit dated 25.4.2014 has clarified that the variation in the claim of actual / projected additional capital expenditure of ₹557.58 lakh (actual expenditure of ₹0.36 lakh in 2011-12 and projected capital expenditure of ₹556.66 lakh during 2012-13) as against the projected additional capital expenditure of ₹379.34 lakh allowed vide order dated 17.10.2012 in Petition No. 229/2009 is due to delay in R&M activities which escalated the cost as shut down of unit was not permitted on account of stability of grid. The petitioner has not furnished the gross block of old assets replaced by new assets under R&M schemes. However, the petitioner vide affidavit dated 6.7.2015 has submitted that the generating station was taken over by the petitioner on 14.1.2000 from the erstwhile Uttar Pradesh Electricity Board (UPSEB) and hence the capitalization values for old items are not available.



25. The submissions have been considered. The Commission in order dated 17.10.2012 in Petition No.229/2009 had allowed the capitalisation under this head on the ground that the work of Renovation of ESPs claimed is in continuation of the R&M work allowed during the period 2004-09 along with the corresponding de-capitalization value of 11.5% as claimed by the petitioner. In line with this decision and since the gross value of old assets replaced by the new assets are not available, the estimated de-capitalization value of 11.5% has been considered on the gross block of new assets wherever applicable. Accordingly, the actual capital expenditure of ₹69.25 lakh (₹82.60 lakh minus the corresponding de-capitalization of ₹13.35 lakh) in 2009-10, ₹531.93 lakh (₹605.44 lakh minus the corresponding de-capitalization of ₹73.51 lakh) in 2010-11, ₹0.32 lakh (₹0.36 lakh minus corresponding de-capitalization of ₹0.04 lakh) in 2011-12 and the projected additional capital expenditure of ₹492.64 lakh (₹556.66 lakh minus the corresponding de-capitalization of ₹64.02 lakh) in 2012-13 for R&M of ESPs has been allowed.

26. The additional capital expenditure on R&M schemes including Renovation of ESPs as above have been allowed under Regulation 9(2) in exercise of the 'Power to Relax' in terms of Regulation 44 of the 2009 Tariff Regulations, in line with the decision contained in order dated 17.10.2012 in Petition No.229/2009.

### **Capital Addition Schemes**

#### **Procurement of Overhead 5 Ton EOT-Crane (1 no)**

27. As against the actual additional capital expenditure of ₹62.43 lakh allowed vide orders dated 17.10.2012 and 15.3.2013 in Petition No.229/2009 and Review Petition No. 28/2012 under "Assets under R&M schemes", the petitioner has claimed the actual additional capital expenditure of ₹59.01 lakh for procurement of 5-Ton EOT Crane during 2010-11. The petitioner vide affidavit dated 25.4.2014 has clarified that the variation in the actual capital expenditure claimed as against those allowed by the Commission's order, is on account of variation in the liability of ₹5.64 lakh and variation in ERV of ₹2.22 lakh. In view of the justification furnished by the petitioner, the actual additional capital expenditure of ₹59.01 lakh for procurement of 5-Ton EOT crane has been allowed.





### **Construction of residential building Type-C quarters**

28. The petitioner has claimed projected additional capital expenditure of ₹200.00 lakh for Construction of residential building Type-C quarters during 2013-14 as against the projected additional capital expenditure of ₹422.84 lakh allowed under 'Assets under R&M schemes" vide order dated 17.10.2012 in Petition No. 229/2009 and order dated 15.3.2013 in Review Petition No. 28/2012. In justification of the same, the petitioner vide affidavit dated 29.10.2013 has clarified that the work is likely to be deferred beyond 2013-14 due to poor mobilization of gang. The matter has been considered. It is observed that the projected additional capital expenditure claimed by the petitioner is lesser than the projected additional capital expenditure allowed in the order dated 17.10.2012. However, as the said expenditure of ₹200.00 lakh is to be capitalized during the tariff period 2014-19, the same has not been considered in this order. The petitioner is granted liberty to claim the said expenditure for capitalization and the same will be considered in terms of the provisions of the 2014 Tariff Regulations applicable for the period 2014-19.

### **Construction of Barracks, mess, store and approaches to CISF Fire Wing**

29. The petitioner has claimed actual additional capital expenditure of ₹89.99 lakh for construction of Barracks, mess, store and approaches to CISF Fire Wing during 2011-12 as against the projected additional capital expenditure of ₹29.42 lakh allowed under Assets under R&M schemes in order dated 17.10.2012 in Petition No. 229/2009 and order dated 15.3.2013 in Review Petition No. 28/2012. The petitioner vide affidavit dated 29.10.2013 has submitted that this work which was based on estimates and allowed by the Commission has been claimed now based on the actual awarded rates and the same has been indicated. From the actual claim made by the petitioner, it is observed that there is an increase of about 175% ( $\frac{₹80.99}{29.42} * 100$ ) in the amount claimed by the petitioner as against the amount allowed in order dated 17.10.2012. However, no justification or reason for the increase in claim has been submitted by the petitioner. Considering the fact that the same has been allowed as part of R&M schemes in order dated 17.10.2012, the claim of the petitioner for ₹80.99 lakh is allowed. However, the petitioner is



directed to furnish the reason(s) for such an increase in claim at the time of revision of tariff based on true-up exercise in terms of Regulation 6(1) of the 2009 Tariff Regulations.

### **Air Conditioning of Thyristor Room**

30. The petitioner has claimed the projected additional capital expenditure of ₹64.59 lakh (₹39.59 lakh in 2012-13 and ₹25.00 lakh in 2013-14 lakh) as against the projected additional capital expenditure of ₹48.14 lakh allowed under 'Assets under R&M schemes' vide order dated 17.10.2012 in Petition No. 229/2009 and order dated 15.3.2013 in Review Petition No. 28/2012 for this asset. In justification of the said claim, the petitioner vide affidavit dated 29.10.2013 has submitted that the expenditure for the said work was earlier claimed based on estimates and presently, the actual awarded rates have been indicated. In view of the justification of the petitioner and in terms of the order dated 17.10.2012, the projected additional projected capital expenditure of ₹64.59 lakh has been allowed.

### **Ash Handling System under the Regulation 9(2)(III)**

#### **(a) 1<sup>st</sup> raising of Ash Dyke-A**

31. The petitioner has claimed actual additional capital expenditure of ₹739.21 lakh in 2009-10 and projected additional capital expenditure of ₹1.18 lakh in 2012-13 for 1<sup>st</sup> raising of Ash dyke as against the actual additional capital expenditure of ₹797.68 lakh allowed vide earlier orders dated 17.10.2012 and 15.3.2013. In justification of the same, the petitioner vide affidavit dated 25.4.2014 has submitted that the variation in the actual additional capital expenditure during 2009-10 is due to change in ERV amount from (-) ₹61.63 lakh to (-) ₹3.54 lakh and change in liabilities from ₹14.66 lakh to ₹15.04 lakh. In view of the above submission, the actual additional capital expenditure of ₹739.21 lakh in 2009-10 and the projected additional capital expenditure of ₹1.18 lakh towards balance payment in 2012-13 have been allowed.

32. The petitioner has not claimed additional capital expenditure as against the projected additional capital expenditure of ₹600.00 lakh allowed vide the said order dated 17.10.2012 in 2011-12. In justification of the same, the petitioner vide affidavit dated 25.4.2014 has submitted



that the work of Ash Pond-B for ₹600 lakh proposed to be carried out in 2011-12 has been temporarily postponed. In view of the submission of the petitioner, no additional capital expenditure has been allowed in 2011-12.

**(b) 1<sup>st</sup> raising of Ash Dyke-B**

33. The petitioner has claimed actual additional capital expenditure of ₹568.94 lakh in 2010-11 and projected additional capital expenditure of ₹9.91 lakh in 2012-13 for 1<sup>st</sup> raising of Ash Dyke - 'B' as against the actual additional capital expenditure of ₹563.87 lakh allowed vide earlier orders dated 17.10.2012 and 15.3.2013 in 2010-11. In justification of the same, the petitioner vide affidavit dated 25.4.2014 has submitted that the variation of ₹5.07 lakh in 2010-11 is on account of ERV variation. In view of the above submission, the actual additional capital expenditure of ₹568.94 lakh in 2010-11 has been allowed. The petitioner vide affidavit dated 29.10.2013 has submitted that the expenditure for the said work was earlier claimed based on estimates and presently, the actual awarded rates have been claimed. In view of the justification submitted by the petitioner, the actual additional projected capital expenditure of ₹568.94 lakh in 2010-11 and the projected additional capital expenditure of ₹9.91 lakh in 2012-13 has been allowed.

**Contingency raising of Ash Dyke-A**

34. The petitioner has claimed actual capital expenditure of ₹122.12 lakh in 2011-12 towards the contingency raising of Ash dyke-Á' as against the projected additional capital expenditure of ₹89.90 lakh allowed vide earlier orders dated 17.10.2012 and 15.3.2013. The petitioner vide affidavit dated 25.4.2014 has submitted that the awarded value for this work was ₹99.99 lakh as against the estimated expenditure of ₹89.90 lakh. It has also submitted that subsequently, there was requirement for strengthening the dyke by putting stone boulders on the inner slope of contingency dyke for safety of the dyke. The submissions have been considered. It is observed from the LOI dated 11.8.2011 and the Bill of Quantities (BOQ) submitted vide the said affidavit that the awarded value is ₹110.53 lakh as against the claim for ₹122.12 lakh. However, in the Auditor certificate, the actual additional capital expenditure under this head is shown as ₹122.12



lakh in 2011-12. Accordingly, in line with the earlier orders dated 17.10.2012 and 15.3.2013 and based on the Auditor certificate, the additional capital expenditure of ₹122.12 lakh in 2011-12 has been allowed.

### **2<sup>nd</sup> raising of Ash Dyke-A**

35. The petitioner has claimed projected additional capital expenditure of ₹1107.54 lakh during 2012-13 for 2<sup>nd</sup> raising of Ash Dyke-A' as against the estimated additional capital expenditure of ₹1281.00 lakh allowed vide earlier orders dated 17.10.2012 and 15.3.2013. In justification, the petitioner vide affidavit dated 29.10.2013 has submitted that the expenditure for the said work was earlier claimed based on estimates and presently, the actual awarded rates have been claimed. It is noticed that the expenditure claimed by the petitioner is lesser than the expenditure allowed vide order dated 17.10.2012 in Petition No. 229/2009 for this work. In view of this, projected additional capital expenditure of ₹1107.54 lakh during 2012-13 on this count has been allowed.

### **2<sup>nd</sup> raising of Ash Dyke-B**

36. The petitioner has claimed projected additional capital expenditure of ₹800.00 lakh in 2013-14 and ₹300.00 lakh (approx) which is to be capitalized beyond 31.3.2014 for this item/work as against the projected additional capital expenditure of ₹1500.00 lakh allowed vide earlier order dated 17.10.2012 and 15.3.2013. In justification of the same, the petitioner vide affidavit dated 29.10.2013 has submitted that the expenditure for the said work was earlier claimed based on estimates and presently, the actual awarded rates have been claimed. It is noticed that the expenditure claimed by the petitioner is lesser than the expenditure allowed vide order dated 17.10.2012 for this work. In view of this, the projected additional capital expenditure of ₹800 lakh during 2013-14 for 2<sup>nd</sup> raising of Ash Dyke-B, has been allowed. However, the expenditure of ₹300 lakh will be considered in terms of the provisions of the 2014 Tariff Regulations applicable for the period 2014-19 as the expenditure is expected to be incurred and capitalised beyond 31.3.2014.



## **Dry Ash Evacuation System**

37. The petitioner has claimed projected additional capital expenditure of ₹3002.02 lakh in 2013-14 for Dry Ash Evacuation system as against the projected additional capital expenditure of ₹2694.36 lakh allowed vide earlier orders dated 17.10.2012. In justification of the same, the petitioner vide affidavit dated 29.10.2013 has submitted that the expenditure for the said work was earlier claimed based on estimates and presently, the actual awarded rates have been claimed. In view of this, the projected additional capital expenditure of ₹3002.02 lakh has been allowed.

## **Change-in-Law**

### **Procurement, installation & Commissioning of Automatic Continuous Ambient Air Quality Monitoring System (AAQMS)**

38. The petitioner has claimed actual additional capital expenditure ₹87.08 lakh for installation of AAQMS (₹86.52 lakh in 2010-11 and ₹0.56 lakh in 2011-12) as against the actual additional capital expenditure of ₹96.53 lakh allowed in order dated 17.10.2012 in Petition No. 229/2009. The petitioner vide affidavit dated 25.4.2014 has submitted that the variation in the additional capital expenditure claimed as against the amount allowed vide order dated 17.10.2012 is on account of liability. In consideration of this submission, the actual additional capital expenditure of ₹87.08 lakh (₹86.52 lakh in 2010-11 and ₹0.56 lakh in 2011-12) has been allowed.

## **New items / works**

### **Safety/ Security Related Works**

39. The petitioner has claimed actual additional capital expenditure of ₹0.17 lakh in 2009-10 and ₹20.54 lakh in 2010-11 for items such as hand held metal detector, explosive detector, bullet proof jackets, door frame metal detector etc. on the ground that these are safety & security related equipments essentially required by CISF for safety of plant and men in today's environment of increased threat perception. The respondent UPPCL has submitted that the petitioner has been allowed normative O&M with escalation and therefore those items which have no link with the efficiency of the plant but still required, may be covered under O&M. Accordingly,



it has submitted that the items towards safety & security, ET Hostel, Road and Renovation of store may be disallowed from capitalisation. We have examined the matter. The provisions of Regulation 9(2) of the 2009 Tariff Regulations do not provide for capitalisation of these items of expenditure after the cut-off date of the generating station. Moreover, the petitioner has not substantiated by way of documentary evidence as to how the expenditure is admissible under change in law. In short, the change to the applicable laws, on account of which the expenditure has been incurred or considered necessary, has not been indicated by the petitioner. Hence, the expenditure claimed has been disallowed.

### **Road for Township**

40. The petitioner has claimed projected additional capital expenditure of ₹30.00 lakh towards construction of roads to approach C & D Type quarters during 2013-14 on the ground that these roads are required to make C & D type quarters approachable. The respondent UPPCL has objected to the capitalisation of this expenditure. The provisions of Regulation 9(2) of the 2009 Tariff Regulations do not provide for capitalisation of this item of expenditure after the cut-off date of the generating station. However, keeping in view that the said work is related to renovation & modernisation of the housing colony in the background of the judgment of the Tribunal dated 1.5.2015 in Appeal No. 97 of 2013, we are inclined to allow the said expenditure. Accordingly, the projected additional capital expenditure of ₹30.00 lakh for 2013-14 has been allowed.

### **Construction of ET Hostel**

41. The petitioner has claimed projected additional capital expenditure of ₹325.00 lakh in 2013-14 for Construction of ETs hostel and has submitted that ET hostel has been under construction to give accommodation to ETs who have been inducted for operating & maintenance on regular basis for O&M of plant as well as for fulfilling the requirement of various services of the department. The respondent, UPPCL has objected to the capitalisation of this expenditure. The matter has been examined. The generating station has not been allowed Special Allowance/ Compensation Allowance to meet such expenditure of capital nature. Accordingly, additional



capital expenditure of ₹325.00 lakh for construction of ET hostel is allowed for efficient and successful operation of the generating station. Similar additional capital expenditure was allowed by the Commission vide order dated 10.12.2012 in Review Petition No. 3/2011 in respect of Badarpur Thermal Power Station.

#### **Chlorination for T/S**

42. The petitioner has claimed projected additional capital expenditure of ₹0.95 lakh in 2012-13 related to chlorination plant without indicating the provisions of Regulation 9 of CERC Tariff Regulations, 2009. In justification of the same, the petitioner has submitted that the capitalized of the asset was allowed by Commission during 2004-09. It has also submitted that a small amount of ₹0.95 lakh has been incurred to remove the bio-fouling of water to make it potable. In the absence of proper justification and since the said expenditure is not towards balance payment, the projected additional capital expenditure of ₹0.95 lakh in 2012-13 has not been allowed.

#### **Renovation of store shed in Central Store**

43. The petitioner ha claimed projected additional capital expenditure of ₹78.64 lakh towards the Renovation of shed in central store during 2012-13. In justification of the same, the petitioner has submitted that the condition of store shed was in very bad shape at the time of taking over of plant from the erstwhile UPSEB. It has also submitted that in order to facilitate safe storage of various costly and vital machinery spares, R&M of store shed was necessary and vital for reliable operation of the plant. The respondent, UPPCL has objected to the above and has submitted that the same is in the nature of O&M expenses and may not be allowed. The matter has been considered. The provisions of Regulation 9(2) of the 2009 Tariff Regulations do not provide for capitalisation of this item of expenditure after the cut-off date of the generating station. Hence, additional capital expenditure of ₹78.64 lakh has not been allowed.



## Generator Transformer

44. It is noticed that the petitioner in Form-9 of the affidavit dated 20.7.2015 has claimed actual additional capital expenditure of ₹757.61 lakh in 2011-12, excluding the un-discharged liability of ₹29.01 lakh for R&M of Generator Transformer.

45. It is pertinent to mention that the expenditure for ₹1022.00 lakh during 2011-12 on spare Generator Transformer procured from M/s BHEL was claimed by the petitioner in Petition No.229/2009 and the Commission by order dated 17.10.2012 had rejected the said claim of the petitioner on the ground that capital spares after the cut-off date are not permissible in terms of Regulation 9(2) of the 2009 Tariff Regulations.

46. Aggrieved by the disallowance of the said expenditure towards Generator transformer, the petitioner in its submissions before the Tribunal in Appeal No.97/2003 was as under:

*“ The generator Transformer had been in operation in Tanda Station for more than 20 years and during the capital overhaul of the Generator Transformer, insulation was found affected due to ageing and fatigue, and this may lead to failure of Generator Transformer. The sudden outage of the Generator Transformer will lead to extensive repair & restoration time and there will be significant loss of generation over a period of time. It was therefore, necessary to procure one spare Generator Transformer from BHEL and keep the same in stock. There is, therefore, full justification for procurement of one Generator Transformer as claimed by the Appellant.”*

47. However, the Tribunal in its judgment dated 1.5.2015 had rejected the said claim of the petitioner and held as under.

*“ We find that that additional capital expenditure on account of Spare Generator Transformer is not permissible under the Tariff Regulations, 2009. The example of Rihand Super Thermal Power Station where additional capital expenditure on account of Spare Generator Transformer was allowed will not be applicable in the present case as in case of Rihand additional capitalization was allowed under the Tariff Regulations, 2004 wherein such capital expenditure was permissible. Therefore, we do not find any infirmity in the finding of the Central Commission.”*

48. In the background of the above decision of the Tribunal, there is no merit in the claim of the petitioner for capitalization of expenditure towards spare Generator Transformer. Accordingly, the claim of the petitioner for ₹757.61 lakh is disallowed. In view of this, the liability of ₹29.01 lakh has also not been allowed.





## Supply of Electricity under 5 Km Scheme

49. The petitioner in Petition No. 229/2009 had claimed an expenditure of ₹50.00 lakh during 2011-12, ₹635.33 lakh during 2012-13 and ₹635.32 lakh during 2013-14 for provision of supply of electricity in 5 km area around Central Power plants in terms of the notification dated 27.4.2010 of the Government of India. However, the Commission in order dated 17.10.2012 had disallowed the said claim and held as under:

*“32. ....As per the scheme, the petitioner is required to create infrastructure for supply of reliable power to the rural households of the villages within a radius of 5 km of existing and new power stations and the Appropriate Commission shall consider the expenditure incurred for implementation of such scheme for the purpose of determining tariff of the generating station. The petitioner is at liberty to approach the Commission through an appropriate application, as and when the expenditure is actually incurred and the same would be considered in accordance with law. In view of this, the expenditure on this count is not allowed in the present petition.”*

50. The petitioner has not claimed any capital expenditure under this head for the period 2009-14 in this petition. However, the petitioner has submitted that the work covered under Regulation 9(2)(ix) has already been awarded and is under execution. It has also submitted that the actual capitalization may stretch beyond March, 2014 and if the amount is capitalized in the period 2009-14, the same shall be indicated during final truing up of tariff.

51. In terms of the liberty granted by the Commission in order dated 17.10.2012, the petitioner by affidavit dated 25.7.2013 has submitted as under:

*“It is submitted that DPR for the work for strengthening infrastructure in the 5 km area for Tanda TPS was prepared after taking inputs from the local distribution utilities and was approved by the State Government. Thereafter, the work was awarded for execution on 17.1.2012. The same is under implementation. The work is likely to be completed in 2013-14 period. As per DPR, the estimated cost of implementation would be Rs 13.20 crore.*

*It is submitted that the expenditure for creating infrastructure for supply of reliable power to rural households within 5 km radius of Tanda TPS has been undertaken on the basis of the GOI scheme which provides for consideration of such expenditure for tariff purposes and not intended to be carried out under Corporate Social Responsibility. Further, the schemes to be implemented under CSR have been tied up and there is no scope to carry out such work under CSR. The Hon'ble Commission may therefore consider and allow the projected expenditure in 2013-14 under Regulation 9(2)(ix) of the Tariff Regulations, 2014.”*

52. Subsequently, the petitioner by affidavit dated 11.3.2014 has submitted as under:

*“NTPC further submit that the projection of Rs 13.20 crore filed in the instant petition for the period 2009-14 was revised to nil projection in the instant petition. However, as per current progress the scheme is likely to be completed /capitalized at anticipated cost of Rs 14.10 crore in the year 2013-14.*



53. The matter has been examined. It is evident from the submissions of the petitioner that the anticipated expenditure for this scheme has been claimed in terms of the liberty granted by the Commission in order dated 17.10.2012. Though the Govt. of India by notification dated 25.3.2013 had directed the withdrawal of the said scheme, it has, by notification dated 5.3.2014, granted exemption from withdrawal of the said scheme in respect of eight generating stations of the petitioner, including this generating station. As the said notification dated 5.3.2014 provides for capitalization of the expenditure for the scheme after completion and handing over the assets to the concerned state power utilities, we are inclined to consider the actual additional capital expenditure incurred on this count during 2013-14 at the time of revision of tariff truing-up in terms of Regulation 6(1) of the 2009 Tariff Regulations. The petitioner is also directed to furnish the copy of the letter as regards the handing over of the said assets from the Management of the State power utilities at the time of truing-up for consideration of the said expenditure.

#### **Adjustments**

54. The petitioner has adjusted an amount of (-) ₹14.74 lakh in 2009-10 on account of cost of returned material issued for strengthening of Ash Pond-B and for additional work of DM Plant and (-) ₹7.61 lakh in 2010-11 on account of cost of returned material issued for works of false ceiling, works of garage in Township & works of raising of Ash pond-A. The adjustments of (-) ₹4.74 lakh in 2009-10 and (-) ₹7.61 lakh in 2010-11 is in order and hence allowed.

#### **De-capitalization**

55. The petitioner has de-capitalized an amount of (-) ₹14.78 lakh [(-) ₹9.00 lakh towards R&M of SG-4, (-) ₹2.00 lakh towards DDCMIS of Unit-4, (-) ₹1.00 lakh towards ESP of Unit-4 and (-) ₹2.78 lakh towards SG Unit-1] on account of these assets becoming unserviceable. As assets which do not render any useful service to the generating station is not be considered in the capital cost, the de-capitalization of ₹14.78 lakh is in order and is thus allowed. However, the petitioner has not furnished the gross value of the old assets replaced by new assets, complete in all respects under the R&M schemes. Accordingly, the petitioner is directed to furnish the



corresponding de-capitalization along with the accumulated depreciation for de-capitalized assets during the period 2009-14 at the time of revision of tariff truing-up in terms of Regulation 6(1) of the 2009 Tariff Regulations.

### **Claims pursuant to the judgment of the Tribunal dated 1.5.2015 in Appeal No. 97 of 2013**

56. As stated, the Commission in order dated 17.10.2012 in Petition No.229/2009 had disallowed the capital expenditure incurred on various items relating to township and colony forming part of the generating station while determining the tariff of the generating station for 2009-14. In this regard, the Tribunal by judgment dated 1.5.2015 in Appeal No.97/2013 remanded the matter to the Commission observing as under:

*“30.(d) According to Section 2(3) of the Electricity Act, the definition of generating station includes any building used for housing operating staff of a generating station. Therefore, if the Central Commission has allowed expenditure incurred towards renovation and modernization of main plant equipment and auxiliaries of the generating station, the expenditure on the renovation and modernization of the housing colony should also have been considered as it is an essential part of the power plant. Accordingly, we direct the Central Commission to reconsider allowance of expenditure to the extent incurred on renovation and modernization of the township. The matter is remanded to the Central Commission for reconsideration of this issue.”*

57. Pursuant to the above observations, the Commission by letter dated 11.6.2015 directed the petitioner to submit information on the following:

*“(a) Item-wise detail break-up of actual expenditure incurred on Renovation & Modernization of Township and Colony under each head such as:*

- (i) Laying of sewer pipelines in township;*
- (ii) Construction of Auditorium in township;*
- (iii) Cable laying & installation of feeder pillar for domestic power;*
- (iv) 11 kV/0.433V Sub-station;*
- (v) Construction of boundary wall, CC roads & parking in township;*
- (vi) Construction of seating gallery in Ram Lila ground.*

*(b) Gross Block of old asset replaced by a new asset if any, along with date of asset put to use, date when taken out from service and depreciation recovered.”*

58. The petitioner by affidavit dated 6.7.2015 has claimed additional actual/projected additional capital expenditure incurred on R&M towards works indicated in Sl. Nos 69 to 74 (table under para 19 above). In addition to this, the petitioner has claimed actual/projected additional capital expenditure incurred on R&M towards works indicated in Sl. Nos 75 to 78 (table under



para 19 above). However, in respect of works namely, construction of swimming pool, distribution lines and peripheral grids for new infrastructure works, land development for new infrastructural works, sewers for new infrastructural works, the petitioner has submitted that the works envisaged earlier in 2011-12 have not been taken up presently and hence not claimed. The petitioner has also submitted that the capitalization values for the old items are not available as the generating station was taken over by the petitioner from *erstwhile* UPSEB on 14.1.2000.

59. The claim of the petitioner has been examined and it is noticed that the expenditure incurred / projected to be incurred are in respect of R&M of Township and colony. Accordingly, in line with the observations contained in the judgment of the Tribunal dated 1.5.2015, the actual / projected additional capital expenditure along with corresponding estimated de-capitalization value of 11.50% of the gross block of new asset since the gross block of the old asset replaced by the new asset is not available being a taken over station, is allowed as considered by the Commission in order dated 17.10.2012 in Petition No. 229/2009. Hence on net basis actual/ projected additional capital expenditure amounting to ₹1286.10 lakh (₹1370.69 lakh - ₹84.59 lakh) is allowed (actual capital expenditure of ₹268.21 lakh in 2009-10 (₹305.79 lakh with corresponding de-capitalization of ₹37.58 lakh), ₹542.01 lakh in 2010-11 (₹563.57 lakh with corresponding de-capitalization of ₹21.56 lakh), ₹97.52 lakh in 2011-12 (₹100.42 lakh with corresponding de-capitalization of ₹2.90 lakh), ₹179.73 lakh in 2012-13 (₹202.83 lakh with corresponding de-capitalization of ₹22.55 lakh and ₹198.63 in 2013-14 towards R&M of Township & Colony in respect of works indicated in Sl. No. 69 to 78 of the table under para 19 above is allowed.

#### **Reconciliation of actual additional capital expenditure for the period 2009-12**

60. The reconciliation of the actual additional capital expenditure for the years 2009-10, 2010-11 and 2011-12 with the books of accounts, as submitted by the petitioner is as under:



	(₹ in lakh)		
	2009-10 (actual)	2010-11 (actual)	2011-12 (actual)
Opening Gross Block as on 1st April of year (A)	95505.10	99842.64	108755.45
Closing Gross Block as on 31 <sup>st</sup> March of year (B)	99842.64	108755.45	112609.79
Additions during the year (as per books of accounts) C= (B-A)	4337.54	8912.81	3854.34
Exclusions (D)	871.52	833.44	2651.55
Un-discharged Liabilities (E)	167.38	529.62	12.44
<b>Additional capital expenditure claimed , on cash basis (C-D-E)</b>	<b>3298.64</b>	<b>7549.75</b>	<b>1190.35</b>

61. The reconciliation of the actual additional capital expenditure for the years 2009-10, 2010-11 and 2011-12 stands revised based on the claims made by the petitioner vide affidavit dated 6.7.2015 and affidavit dated 20.7.2015 pursuant to the judgment of the Tribunal dated 1.5.2015 is as under:

	(₹ in lakh)		
	2009-10 (actual)	2010-11 (actual)	2011-12 (actual)
Opening Gross Block as on 1st April of the year (A)	95505.10	99842.64	108755.45
Closing Gross Block as on 31 <sup>st</sup> March of the year (B)	99842.64	108755.45	112609.79
Additions during the year (as per books of accounts) C= (B-A)	4337.54	8912.81	3854.34
Exclusions (D)	544.74	251.61	1757.83
Un-discharged Liabilities (E)	188.38	547.89	48.13
<b>Additional capital expenditure claimed , on cash basis (C-D-E)</b>	<b>3604.42</b>	<b>8113.32</b>	<b>2048.38</b>

62. It is evident from the above that the actual additional capital expenditure claimed by the petitioner is at variance with the additional capital expenditure as per books of accounts. This is due to exclusion of certain expenditure and un-discharged liabilities considered for the purpose of tariff.

### Exclusions

63. The summary of exclusions from books of accounts claimed for the years 2009-10, 2010-11 and 2011-12 under different heads are as under:

		(₹ in lakh)		
Sl. No.	Year / Description	2009-10	2010-11	2011-12
1	<b>Items disallowed by CERC</b>			
a	Construction of employee development centre	0.00	0.00	188.30
b	Ash Brick making machine	0.00	33.36	0.00
c	Chlorine leak absorption system	0.00	30.83	0.00



2	Hospital related works	2.47	4.48	0.71
3	FERV	(-) 48.40	(-) 214.27	735.86
4	Capitalization of spares	601.87	254.94	671.80
5	De-capitalisation of items such as Communication Equipments, PCs & Type Writers etc. (part of capital cost)	(-) 24.74	(-) 5.95	(-) 0.94
6	De-capitalisation of items such as Communication Equipments, PCs & Type Writers etc (not part of capital cost)	(-) 109.24	0.00	(-) 20.51
7	Capitalisation of MBOA items	128.38	161.32	179.05
10	Inter-Unit Transfer	(-) 5.60	(-) 0.92	3.56
11	De-capitalisation of assets condemned	0.00	(-)11.46	0.00
12	Assets condemned and held for disposal	0.00	1.15	0.00
13	Liability reversal	0.00	(-) 1.87	0.00
	<b>Total Exclusions claimed</b>	<b>544.74</b>	<b>251.61</b>	<b>1757.83</b>

### Items disallowed

64. The petitioner has excluded in the books of accounts an amount of ₹188.30 lakh in 2011-12 including liability of ₹2.32 lakh for Construction of employee development centre, ₹33.36 lakh including liability of ₹6.27 lakh for Ash brick making machine during 2010-11 and ₹30.83 lakh including liability of ₹6.49 lakh for Chlorine leak absorption system during 2010-11. The exclusion sought by the petitioner on these counts is in order and hence allowed.

### Hospital related works

65. The petitioner has capitalized in books of accounts amounts of ₹2.47 lakh in 2009-10, ₹4.48 lakh including liability of ₹1.34 lakh in 2010-11 and ₹0.71 lakh in 2011-12 respectively. The works related to hospital are not allowed for the purpose of tariff after the cut-off date of the generating station. Since the assets which were not allowed to be capitalized do not form part of the capital cost of the generating station, the exclusion sought is in order and hence allowed.

### FERV

66. The petitioner has excluded amounts of (-) ₹48.40 lakh in 2009-10, (-) ₹214.27 lakh in 2010-11 and ₹735.86 lakh in 2011-12 on account of impact of FERV. As the petitioner has billed the said amount directly to the beneficiaries in accordance with the 2004 Tariff Regulations, the exclusion of FERV is in order and has been allowed.



### **Capitalization of Capital Spares**

67. The petitioner has capitalized capital spares in books of accounts amounting to ₹601.87 lakh in 2009-10, ₹254.94 lakh including liability of ₹6.82 lakh in 2010-11 and ₹671.80 lakh including liability of ₹4.64 lakh in 2011-12. Since the capitalization of capital spares over and above initial spares procured after cut-off date of the generating station are not allowed for the purpose of tariff, the exclusion of the said amounts are in order and is allowed.

### **De-capitalisation of items as part of Capital Cost**

68. The petitioner has de-capitalized in the books of account items such as communication equipment, PCs and typewriters etc. amounting to (-) ₹24.74 lakh during 2009-10, (-) ₹5.95 lakh in 2010-11 and (-) ₹0.94 lakh in 2011-12 on these items becoming unserviceable. From the details of de-capitalization of these items furnished by the petitioner in the petition, it is observed that these items were allowed in tariff as part of the capital cost. Hence, the de-capitalization of these items which were allowed in tariff and forming part of capital cost has not been allowed under exclusions.

### **De-capitalisation of Capital Spares**

69. The petitioner has de-capitalized in the books of accounts capital spares amounting to (-) ₹109.24 lakh in 2009-10. The petitioner in the petition has submitted the details of de-capitalization of spares. It is observed from the details of de-capitalization of spares that these spares do not form part of the capital cost of the generating station. Hence, the de-capitalization of spares for (-) ₹109.24 lakh in 2009-10 which were not allowed and thereby not forming part of capital cost of the generating station for the purpose of tariff has been allowed under exclusion.

### **De-capitalisation of items not part of capital cost**

70. The petitioner has de-capitalized in the books of accounts items amounting to (-) ₹20.51 lakh on IT equipments in 2011-12 on account of these items becoming unserviceable. From the details of de-capitalization of items furnished by the petitioner in the petition, it is observed that these items were not part of the capital cost of the generating station. Hence, the de-capitalization



of (-) ₹20.51 lakh in 2011-12 which were not allowed and thereby not forming part of capital cost of the generating station for the purpose of tariff, has been allowed under exclusion.

### **Capitalization of MBOA items**

71. The petitioner has capitalized MBOA items in books of accounts amounting to ₹128.38 lakh including liability of ₹0.95 lakh in 2009-10, ₹161.32 lakh including liability of ₹2.32 lakh in 2010-11 and ₹179.05 lakh including liability of ₹21.47 lakh in 2011-12. Since the capitalization of MBOA items after the cut-off date of the generating station are not allowed for the purpose of tariff, the exclusion for the said amount are in order and is allowed.

### **Inter-Unit Transfers**

72. The petitioner has excluded amounts of (-) ₹5.60 lakh on account of inter-unit transfer of 1.5 Ton window AC from Aravali station and Satellite modem and DMP printer including Laptop to Singrauli etc. in 2009-10, (-) ₹0.92 lakh on account of inter-unit transfer of Computer-HP Compaq to Northern Region Headquarter (NRHQ) in 2010-11 and ₹3.56 lakh on account of inter-unit transfer of laptop and UPS (10 nos.) to NRHQ in 2011-12. The Commission while dealing with the tariff petitions for additional capitalization of expenditure in respect of other generating stations of the petitioner had decided that both positive and negative entries arising out of inter-unit transfers of temporary nature shall be ignored for the purposes of tariff. In consideration of the said decisions, the exclusion of (-) ₹5.60 lakh in 2009-10, (-) ₹0.92 lakh in 2010-11, ₹3.56 lakh in 2011-12 on account of inter-unit transfers have been allowed.

### **De-capitalisation of assets condemned**

73. The petitioner has de-capitalized in the books of accounts an amount of (-) ₹11.46 lakh [(-) ₹1.02 lakh for Jeep, (-) ₹5.50 lakh for tower crane and (-) ₹4.94 lakh for AC ambassador car] on these assets becoming un-serviceable. In justification of the same, the petitioner has submitted that since the capitalization of replaced items is not allowed, the corresponding de-capitalisation may be kept under exclusion. From the submission of the petitioner, it emerges that





these items were not allowed and thereby not forming part of capital cost. Hence, the exclusion sought for by the petitioner for these items is in order and is allowed.

### Assets condemned and held for disposal

74. The petitioner has de-capitalized in the books of accounts ₹1.45 lakh (₹0.55 lakh for tower crane, ₹0.49 lakh for AC Ambassador car and ₹0.10 lakh for jeep) for assets condemned and held for disposal. In justification of the same, the petitioner has submitted that as per the accounting policy, the assets such as Jeep, Tower Crane and AC Ambassador car have been de-capitalized in gross block and again restored at 10% of the book value. In view of this, the exclusion sought by the petitioner is in order and is allowed.

### Liability Reversal

75. There is no reversal of liabilities during the years 2009-10 and 2011-12. However, the petitioner has excluded liability reversal of (-) ₹1.78 lakh during 2010-11 in metering package of Township and the same is allowed.

76. Accordingly, the details of exclusions claimed vis-à-vis allowed on cash basis is as under:

	(₹ in lakh)		
	2009-10	2010-11	2011-12
Exclusions claimed (A)	544.74	251.61	1757.83
Exclusions allowed (B)	569.48	269.02	1758.77
<b>Exclusions not allowed (A-B)</b>	<b>(-) 24.74</b>	<b>(-) 17.41</b>	<b>(-) 0.94</b>

77. Based on the above discussions, the actual additional capital expenditure for the period 2009-10 to 2011-12 and the projected additional capital expenditure for 2012-13 and 2013-14, are allowed as under:

Sl. No	Head of work/ Equipments	(₹ in lakh)				
		Actual / Projected additional capital expenditure				
		2009-10 (Actual)	2010-11 (Actual)	2011-12 (Actual)	2012-13 (Projected)	2013-14 (Projected)
<b>A</b>	<b>R&amp;M Scheme</b>					
1 to 41	Assets under R&M schemes (list of assets enclosed at Annexure-I)	2491.39	6231.71	986.33	6206.63	219.53
	De-capitalization (as enclosed at Annexure-I)	149.15	498.12	107.83	686.56	25.25
<b>(a)</b>	<b>Net amount allowed</b>	<b>2342.24</b>	<b>5733.59</b>	<b>878.50</b>	<b>5520.07</b>	<b>194.28</b>
53	Renovation of ESP Unit-3	82.60	0.49	0.36	1.22	0.00
54	Renovation of ESP Unit-4	0.00	604.95	0.00	2.29	0.00
55	Renovation of ESP Unit-2	0.00	0.00	0.00	553.15	0.00



	<b>Total (53+54+55)</b>	<b>82.60</b>	<b>605.44</b>	<b>0.36</b>	<b>556.66</b>	<b>0.00</b>
	Total De-capitalisation of ESPs (as enclosed at Annexure-I)	13.35	73.51	0.04	64.02	0.00
<b>(b)</b>	<b>Net amount allowed for ESPs</b>	<b>69.25</b>	<b>618.45</b>	<b>0.32</b>	<b>492.64</b>	<b>0.00</b>
<b>(a) + (b)</b>	<b>Net amount allowed on R&amp;M – (A)</b>	<b>2411.49</b>	<b>6265.52</b>	<b>878.82</b>	<b>6012.71</b>	<b>194.28</b>
<b>B</b>	<b>Capital Addition Schemes</b>					
42	Procurement of 1 no. Overhead 5 Ton EOT Crane for Loco Maintenance Workshop	0.00	59.01	0.00	0.00	0.00
43	Construction of 16 nos. Residential Building type-C quarters	0.00	0.00	0.00	0.00	200.00
44	Construction of 2 nos. of Barracks, Mess, Store and approach for CISF Fire Wing	0.00	0.00	80.99	0.00	0.00
45	Air Conditioning of Thyristor Room	0.00	0.00	0.00	39.59	25.00
	<b>Total B (42+43+44+45)</b>	<b>0.00</b>	<b>59.01</b>	<b>80.99</b>	<b>39.59</b>	<b>225.00</b>
<b>C</b>	<b>Ash Handling System</b>					
46	First raising of Ash Dyke –A	739.21	0.00	0.00	1.18	0.00
47	First raising of Ash Dyke –8	0.00	568.94	0.00	9.91	0.00
48	Contingency raising of Ash Dyke A	0.00	0.00	122.12	0.00	0.00
49	2 <sup>nd</sup> raising of Ash Dyke –A	0.00	0.00	0.00	1107.54	0.00
50	2 <sup>nd</sup> raising of Ash Dyke –8	0.00	0.00	0.00	0.00	800.00
51	Dry Ash Evacuation System	0.00	0.00	0.00	0.00	3000.02
	<b>Total (C)</b>	<b>739.21</b>	<b>568.94</b>	<b>122.12</b>	<b>1118.63</b>	<b>3800.02</b>
<b>D</b>	<b>Change in Law</b>					
52	Procurement, Installation & commissioning of automatic continuous Air quality Monitoring system (AAQMS)	0.00	86.52	0.56	0.00	0.00
	<b>Total D</b>	<b>0.00</b>	<b>86.52</b>	<b>0.56</b>	<b>0.00</b>	<b>0.00</b>
<b>E</b>	<b>5 km Scheme</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
56	Supply of electricity under 5 Km scheme	0.00	0.00	0.00	0.00	0.00
<b>F</b>	<b>New Works</b>					
57	Safety/Security related items	0.00	0.00	0.00	0.00	0.00
58	Road for Township	0.00	0.00	0.00	0.00	30.00
59	Construction of ET Hostel	0.00	0.00	0.00	0.00	325.00
60	Design, Supply, Erection & Commissioning of audio, video & lifting system of auditorium	0.00	0.00	0.00	0.00	0.00
61	Chlorinators for T/S	0.00	0.00	0.00	0.00	0.00
62	Renovation of store Shed in Central Store	0.00	0.00	0.00	0.00	0.00
	<b>Total (F)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>355.00</b>
63	R&M of Generator Transformer	0.00	0.00	0.00	0.00	0.00
64	Adjustments (G)	(-) 14.74	(-) 7.61	0.00	0.00	0.00
	<b>Total Additional Capital Expenditure allowed (H)= (A+B+C+D+E+F+G)</b>	<b>3135.96</b>	<b>6972.38</b>	<b>1082.49</b>	<b>7170.93</b>	<b>4574.30</b>
<b>H</b>	<b>Claims pursuant to the judgment of the Tribunal dated 1.5.2015 in Appeal No. 97 of 2013</b>					
65	Laying of sewer pipeline in township	0.00	0.00	0.00	171.04	0.00
66	Construction of auditorium in township	0.00	250.08	0.00	0.00	198.63
67	Cable laying & installation of feeder pillar for domestic power	0.00	146.28	1.48	0.00	0.00
68	11 kV/433 V Sub-station	144.14	0.00	(-)0.09	0.00	0.00
69	Construction of boundary wall, CC Roads & Parking in township	56.21	0.00	16.03	0.00	0.00
70	Construction of seating gallery in Ram Lila ground	0.00	0.00	79.86	6.19	0.00
71	Development of tube wells in township	19.99	15.55	0.00	0.00	0.00
72	Cabling for new 6.6 kV CHP Switchgear and 11 kV colony Switchgear	47.86	0.00	0.00	0.00	0.00
73	Construction of boundary wall 300 buildings	0.00	0.77	0.00	2.50	0.00
74	Construction of swimming pool	0.00	129.33	0.24	0.00	0.00



	Total	268.20	542.01	97.52	179.73	198.63
	<b>Grand Total (H)</b>	<b>3404.16</b>	<b>7499.61</b>	<b>1180.01</b>	<b>7350.66</b>	<b>4772.93</b>
<b>J</b>	<b>De-capitalisation of items</b>					
75	R&M of SG Unit-4	0.00	(-)9.00	0.00	0.00	0.00
76	DDCMIS for Unit-4	0.00	(-)2.00	0.00	0.00	0.00
77	R&M of ESP Unit-4	0.00	(-)1.00	0.00	0.00	0.00
78	Steam Generator Unit -1	0.00	(-)2.78	0.00	0.00	0.00
	<b>Total De-capitalisation (I)</b>	0.00	(-)14.78	0.00	0.00	0.00
	<b>Grand total (J)= (H-I)</b>	<b>3404.16</b>	<b>7499.61</b>	<b>1180.01</b>	<b>7350.66</b>	<b>4772.93</b>
	Exclusion not allowed (K)	24.74	17.41	0.94	0.00	0.00
	<b>Net Additional Capital Expenditure allowed (J-K)</b>	<b>3379.42</b>	<b>7482.20</b>	<b>1179.07</b>	<b>7350.66</b>	<b>4772.93</b>

78. The actual /projected additional capital expenditure allowed after considering the discharges of liabilities is as under:

	<i>(Rs. in lakh)</i>				
	2009-10	2010-11	2011-12	2012-13	2013-14
Additional capital expenditure allowed (excluding discharge of liabilities)	3479.42	7482.20	1179.07	7350.66	4772.93
Add: Discharges of liabilities (against allowed assets / works)	0.48	82.97	342.30	0.00	0.00
<b>Net Additional Capital Expenditure allowed</b>	<b>3379.90</b>	<b>7565.17</b>	<b>1521.37</b>	<b>7350.66</b>	<b>4772.93</b>

79. Based on the above, the capital cost allowed for 2009-14 is as under:

	<i>(₹ in lakh)</i>				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	94506.05	97923.71	105530.95	107055.20	114428.42
Add: Additional Capital Expenditure	3379.90	7565.17	1521.37	7350.66	4772.93
<b>Closing Capital Cost</b>	<b>97885.95</b>	<b>105451.12</b>	<b>106972.49</b>	<b>114323.15</b>	<b>119096.08</b>
<b>Average Capital Cost</b>	<b>96196.00</b>	<b>101668.54</b>	<b>106211.81</b>	<b>110647.82</b>	<b>116709.62</b>

## Debt–Equity

80. The gross loan and equity amounting to ₹66697.78 lakh and ₹28584.76 lakh respectively as on 31.3.2009 considered vide order dated 29.4.2011 in Petition No. 186/2009 has been considered as gross loan and equity as on 1.4.2009. However, un-discharged liabilities amounting ₹776.50 lakh has been deducted from the capital cost as on 1.4.2009 and adjusted in the debt-equity ratio of 50:50 for assets/works capitalised prior to 2004 and in the debt-equity ratio of 70:30. As such the gross normative loan and equity as on 1.4.2009 is revised to



₹66154.23 lakh and ₹28351.81 lakh respectively. Further the additional expenditure approved above has been allocated in debt-equity ratio of 70:30.

### Return on Equity

81. In terms 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	28351.81	29365.79	31635.44	32091.91	34297.11
Addition of equity due to additional capital expenditure	1013.97	2269.66	456.46	2205.20	1431.88
Normative Equity - Closing	29365.79	31635.44	32091.91	34297.11	35728.99
Average Normative Equity	28858.80	30500.62	31863.68	33194.51	35013.05
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%
<b>Return on Equity (Pre Tax)- (annualized)</b>	<b>6776.34</b>	<b>7079.19</b>	<b>7310.80</b>	<b>7616.15</b>	<b>8221.41</b>

\*For 2013-14, the petitioner has considered pre-tax ROE of @ 22.944%, However, considering the actual tax rate for 2013-14, the pre tax ROE works out to 23.481%, and the same is considered

### Interest on loan

82. 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 ₹66154.23 lakh as on 1.4.2009 has been considered.
- (b) Cumulative repayment amounting to ₹49371.50 lakh as on 31.3.2009 as considered in order dated 29.4.2011 in Petition No.186/2009 has been considered as Cumulative repayment as on 1.4.2009. However, after taking in to account proportionate adjustment (duly taking into account the liability and debt position as on 1.4.2004 along with additions during the period 2004-09) 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 ₹49041.09 lakh.
- (c) Accordingly, the net normative opening loan as on 1.4.2009 works out to ₹17113.14 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) Weighted average rate of interest has been computed after providing appropriate accounting adjustments for interest capitalized corresponding to assets allowed for the purpose of tariff.

83. Necessary calculations for interest on loan are as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross opening loan	66154.23	68520.17	73816.04	74881.12	80026.59
Cumulative repayment of loan upto previous year / period	49041.09	53834.33	58646.48	64167.73	66763.15
<b>Net Loan Opening</b>	<b>17113.14</b>	<b>14685.84</b>	<b>15169.56</b>	<b>10713.38</b>	<b>13263.44</b>
Addition due to Additional capitalisation	2365.94	5295.86	1065.08	5145.47	3341.05
Repayment of loan during the year	4950.41	5240.37	5481.52	2595.41	3058.30
Less: Repayment adjustment on account of de-capitalization	157.38	437.78	78.07	0.00	0.00
Add: Repayment adjustment on discharges corresponding to un-discharged liabilities deducted as on 1.4.2009	0.20	9.56	117.80	0.00	0.00
<b>Net Repayment</b>	<b>4793.24</b>	<b>4812.15</b>	<b>5521.25</b>	<b>2595.41</b>	<b>3058.30</b>
<b>Net Loan Closing</b>	<b>14685.84</b>	<b>15169.56</b>	<b>10713.38</b>	<b>13263.44</b>	<b>13546.19</b>
<b>Average Loan</b>	<b>15899.49</b>	<b>14927.70</b>	<b>12941.47</b>	<b>11988.41</b>	<b>13404.82</b>
Weighted Average Rate of Interest on Loan	3.2172%	0.4517%	3.8693%	4.2320%	4.1358%
<b>Interest on Loan</b>	<b>511.51</b>	<b>67.43</b>	<b>500.74</b>	<b>507.34</b>	<b>554.39</b>

### Depreciation

84. In terms of Regulation 17 of the 2009 Tariff Regulations, the Cumulative depreciation as on 31.3.2009, as considered in order dated 29.4.2011 in Petition No. 186/2009 is ₹49902.93 lakh. 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 as on 1.4.2009 works out to ₹49488.98 lakh. Further, the value of freehold land as considered in order dated 29.4.2011 as on 31.3.2009 is ₹1674.71 lakh and the same has been considered for calculating the depreciable value. Necessary calculations in support of depreciation are as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	94506.05	97885.96	105451.48	106973.03	114323.69
Add: Additional Capital Expenditure	3379.91	7565.52	1521.54	7350.67	4772.93
<b>Closing Capital Cost</b>	<b>97885.96</b>	<b>105451.48</b>	<b>106973.03</b>	<b>114323.69</b>	<b>119096.63</b>



Average Capital Cost	96196.00	101668.72	106212.25	110648.36	116710.16
Rate of Depreciation	85069.17	89994.61	94083.79	98076.29	103531.91
Depreciable value @ 90%	15.79	14.79	13.79	12.79	11.79
Balance depreciable value (ex-land) @90%	35580.19	35646.99	34765.83	33185.25	36045.46
Depreciation (annualized)	<b>4950.41</b>	<b>5240.37</b>	<b>5481.52</b>	<b>2595.41</b>	<b>3058.30</b>
Cumulative depreciation at the end	54439.39	59587.99	64799.49	67486.45	70544.75
Less: Cumulative depreciation adjustment on account of un-discharged liabilities	(-)0.26	(-)11.97	(-)147.59	0.00	0.00
Less: Cumulative Depreciation reduction due to de-capitalization	92.03	281.99	56.03	0.00	0.00
<b>Cumulative depreciation (at the end of the period)</b>	<b>54347.62</b>	<b>59317.97</b>	<b>64891.04</b>	<b>67486.45</b>	<b>70544.75</b>

### Normative Annual Plant Availability Factor

85. The Normative Annual Plant Availability Factor of 85% as considered in order dated 17.10.2012 has been considered for the purpose of tariff.

### O&M Expenses

86. O&M expenses as considered in order dated 17.10.2012 in Petition No.229/2009 as stated below has been considered.

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
11550.00	12210.00	12909.60	13648.80	14427.60

### Interest on Working Capital

87. In accordance with sub-clause (a) of clause (1) of Regulation 18 of the 2009 Tariff Regulations, working capital in case of Coal based/Lignite fired generating stations shall cover:

- (i) Cost of coal or lignite and limestone, if applicable for one and half months for pit-head generating stations and two months for non pit-head generating stations, for generation corresponding to the normative annual plant availability factor;
- (ii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;
- (iii) Maintenance spares @ 20% of operation and maintenance expenses specified in regulation 19;
- (iv) Receivables equivalent to two months of capacity charges and energy charges for sale of electricity calculated on the normative annual plant availability factor, and



(v) Operation and maintenance expenses for one month.

88. Clauses (3) and (4) of Regulation 18 of the 2009 Tariff Regulations Under the 2004 regulations, the rate of interest on working capital shall be equal to the short-term Prime Lending Rate of State Bank of India as on 1.4.2009 or on 1<sup>st</sup> April of the year in which the generating station or a unit thereof is declared under commercial operation, whichever is later. Interest on working capital shall be payable on normative basis notwithstanding that the generating company has not taken working capital loan from any outside agency.

89. Working capital has been calculated considering the following:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Coal Cost -2 months	13003.29	13003.29	13038.91	13003.29	13003.29
Oil stock -2 months	282.50	282.50	283.27	282.50	282.50

### Maintenance Spares

90. The maintenance spares has been worked out and allowed as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
	2310.00	2442.00	2581.92	2729.76	2885.52

### Receivables

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

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Variable Charges- 2 months	13003.29	13003.29	13038.91	13003.29	13003.29
Fixed Charges- 2 months	4951.86	5093.35	5372.97	5062.84	5389.68
<b>Total</b>	<b>17955.15</b>	<b>18096.64</b>	<b>18411.88</b>	<b>18066.13</b>	<b>18392.97</b>

### O & M Expenses (1 month)

92. O & M expenses for 1 month as considered in order dated 17.10.2012 is considered as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
	962.50	1017.50	1075.80	1137.40	1202.30



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

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Coal Stock- 2 months	13003.29	13003.29	13038.91	13003.29	13003.29
Oil stock-2 Months	282.50	282.50	283.27	282.50	282.50
O & M expenses- 1 Months	962.50	1017.50	1075.80	1137.40	1202.30
Spares	2310.00	2442.00	2581.92	2729.76	2885.52
Receivables- 2 Months	17955.15	18096.64	18411.88	18066.13	18392.97
<b>Total Working Capital</b>	<b>34513.43</b>	<b>34841.93</b>	<b>35391.78</b>	<b>35219.07</b>	<b>35766.58</b>
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
<b>Total Interest on Working capital</b>	<b>4227.90</b>	<b>4268.14</b>	<b>4335.49</b>	<b>4314.34</b>	<b>4381.41</b>

#### Annual Fixed Charges for 2009-14

94. 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	4950.41	5240.37	5481.52	2595.41	3058.30
Interest on Loan	511.51	67.43	500.74	507.34	554.39
Return on Equity	6776.34	7079.19	7310.80	7616.15	8221.41
Interest on Working Capital	4227.90	4268.14	4335.49	4314.34	4381.41
O&M Expenses	11550.00	12210.00	12909.60	13648.80	14427.60
Cost of Secondary Fuel Oil	1694.99	1694.99	1699.64	1694.99	1694.99
<b>Total</b>	<b>29711.15</b>	<b>30560.12</b>	<b>32237.79</b>	<b>30377.03</b>	<b>32338.10</b>

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

95. The Energy Charge Rate of 270.611 paise/kWh as determined by order dated 17.10.2012 shall remain unchanged.

96. The difference in the annual fixed charges determined by order dated 17.10.2012/ 15.3.2013 and those determined by this order shall be adjusted in accordance with Regulation 6 (6) of the 2009 Tariff Regulations.

97. Petition Nos. 235/GT/2014 is disposed of in terms of the above.

**-Sd/-**  
**(A.S. Bakshi)**  
**Member**

**-Sd/-**  
**(A.K.Singhal)**  
**Member**

**-Sd/-**  
**(Gireesh B. Pradhan)**  
**Chairperson**

