

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 329/GT/2014

**Coram
Shri Gireesh B. Pradhan, Chairperson
Shri A. K. Singhal, Member
Dr. M.K. Iyer, Member**

Date of order: 23rd August, 2016

In the matter of

Revision of tariff of Tanda Thermal Power Station (440 MW) for the period from 2004-09 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:

Shri Ajay Dua, NTPC
Shri Nishant Gupta, NTPC
Shri Ajay Mehta, NTPC
Shri Shankar Saran, NTPC
Shri Neeraj Kumar, NTPC
Shri S.P. Kesarwani, NTPC
Shri Manish Garg, UPPCL

ORDER

This petition has been filed by the petitioner, NTPC Ltd, for revision of tariff of Tanda TPS(440 MW) (“the generating station”) for the period 2009-14 after truing-up in terms of



the proviso to Regulation 6(1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (“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
Unit-IV/ Generating station	20.2.1998

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. Aggrieved by the said order, the petitioner filed review petition (R.P. No.28/2012) seeking review of the order dated 17.10.2012 and the Commission by order dated 15.3.2013, allowed the review petition and accordingly revised tariff of the generating station 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 petitioner also filed Appeal No. 97/2013 before the Appellate Tribunal for Electricity (the Tribunal) on certain issues and the Tribunal by its judgment dated 1.5.2015 had rejected the prayer of the petitioner on other issues, 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. Thereafter, the Commission by order dated 11.12.2015 in Petition No. 235/GT/2013 determined the tariff of the generating station for the period 2009-14, after truing-up exercise based on the actual additional capital expenditure incurred for the period 2009-12 and projected capital expenditure for 2012-13 and 2013-14 in accordance with the proviso to Regulation 6(1) of the 2009 Tariff Regulations, including the prayer of the petitioner for capitalization of expenditure towards



township and colony as per directions of the Tribunal. The capital cost and the annual fixed charges for the generating station for the period 2009-14 approved by order dated 11.12.2015 in Petition No. 235/GT/2013 is as under:

Capital Cost

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

Annual Fixed Charges

	(₹ 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
Secondary Fuel Oil	1694.99	1694.99	1699.64	1694.99	1694.99
Total	29711.15	30560.12	32237.79	30377.03	32338.10

4. Clause (1) of Regulation 6 of the 2009 Tariff Regulations provides as under:

"6. Truing up of Capital Expenditure and Tariff

(1) The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up.

Provided that the generating company or the transmission licensee, as the case may be, may in its discretion make an application before the Commission one more time prior to 2013-14 for revision of tariff."

5. The petitioner has filed the petition for revision of tariff of the generating station in accordance with Regulation 6(1) of the 2009 Tariff Regulations, based on the capital cost admitted as on 31.3.2009 and actual capital expenditure incurred (on cash basis) during the period 2009-14. 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	97805.17	105436.58	106950.95	114845.75
Add: Additional capital expenditure	3299.12	7631.41	1514.37	7894.80	2637.10
Closing Capital Cost	97805.17	105436.58	106950.95	114845.75	117482.85
Average Capital Cost	96155.61	101620.88	106193.76	110898.35	116164.30

Annual Fixed Charges

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	4948.34	5237.91	2579.71	2968.89	2968.89
Interest on Loan	780.75	616.66	527.36	537.83	665.53
Return on Equity	6773.49	7075.86	7309.53	7633.35	8182.96
Interest on Working Capital	4233.40	4279.45	4335.99	4314.99	4381.05
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
Total	29980.97	31114.87	32262.68	30409.69	32321.02

6. Reply to the petition 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, we proceed to determine the tariff of the generating station after true-up, on prudence check, as stated in the subsequent paragraphs.

Capital Cost as on 1.4.2009

7. 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 true up by excluding un-discharged liability, if any, as on 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14, as may be admitted by the Commission, shall form the basis for determination of tariff.”

8. The 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 No. 235/GT/2013 had furnished the value of capital cost and liabilities as on 1.4.2009 as per books in Form-9A. The details of liabilities and capital cost



have been reconciled with the information available with the records of the Commission as under:

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

9. It is evident from the above that there is no variation in the capital cost and the liabilities position as on 1.4.2009 as per books of accounts 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 the tariff period 2004-09). The balance liability of ₹0.45 lakh pertains to works/assets disallowed for the purpose of tariff.

10. 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. Further, out of un-discharged liabilities amounting to ₹776.50 lakh deducted as on 1.4.2009, the petitioner has discharged ₹0.48 lakh, ₹20.58 lakh, ₹276.84 lakh, 291.96 lakh, 0.48 lakh during the years 2009-10, 2010-11, 2011-12, 2012-13, and 2013-14 respectively. The discharges along with the discharges corresponding to assets admitted on cash basis during the period 2009-14 is allowed as additional capital expenditure during the respective years.

Actual Additional Capital Expenditure

11. Regulation 9 (2) of the 2009 Tariff Regulations, as amended on 21.6.2011 and 31.12.2012 provides as under:

“9.(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.”

12. The Commission in its order dated 11.12.2015 in Petition No.235/GT/2013 had revised the annual fixed charges based on the actual additional capital expenditure incurred for the years 2009-10, 2010-11 and 2011-12 after reconciliation with the books of accounts. The break-up details of the actual additional capital expenditure for the years



2009-10, 2010-11 and 2011-12 and the projected additional capital expenditure for the years 2012-13 and 2013-14 allowed by order dated 11.12.2015 is as under:

(₹ in lakh)

Sl. No	Head of work/ Equipments	Actual / Projected additional capital expenditure				
		2009-10 (Actual)	2010-11 (Actual)	2011-12 (Actual)	2012-13 (Projected)	2013-14 (Projected)
A	R&M Scheme					
1 to 41	Assets under R&M schemes (<i>list of assets enclosed at Annexure-I</i>)	2491.39	6231.71	986.33	6206.63	219.53
	De-capitalization (<i>as enclosed at Annexure-I</i>)	149.15	498.12	107.83	686.56	25.25
(a)	Net amount allowed	2342.24	5733.59	878.50	5520.07	194.28
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
	Total (53+54+55)	82.60	605.44	0.36	556.66	0.00
	Total De-capitalization of ESPs (<i>as enclosed at Annexure-I</i>)	13.35	73.51	0.04	64.02	0.00
(b)	Net amount allowed for ESPs	69.25	618.45	0.32	492.64	0.00
(a) + (b)	Net amount allowed on R&M – (A)	2411.49	6265.52	878.82	6012.71	194.28
B	Capital Addition Schemes					
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
	Total B (42+43+44+45)	0.00	59.01	80.99	39.59	225.00
C	Ash Handling System					
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 nd raising of Ash Dyke –A	0.00	0.00	0.00	1107.54	0.00
50	2 nd 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
	Total (C)	739.21	568.94	122.12	1118.63	3800.02
D	Change in Law					
52	Procurement, Installation & commissioning of automatic continuous Air quality Monitoring system (AAQMS)	0.00	86.52	0.56	0.00	0.00
	Total D	0.00	86.52	0.56	0.00	0.00
E	5 km Scheme					
56	Supply of electricity under 5 Km scheme	0.00	0.00	0.00	0.00	0.00
F	New Works					
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
	Total (F)	0.00	0.00	0.00	0.00	355.00
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
	Total Additional Capital Expenditure allowed (H)= (A+B+C+D+E+F+G)	3135.96	6972.38	1082.49	7170.93	4574.30
H	Claims pursuant to the judgment of the Tribunal dated 1.5.2015 in Appeal No. 97 of 2013					
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
	Grand Total (H)	3404.16	7499.61	1180.01	7350.66	4772.93
J	De-capitalization of items					
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
	Total De-capitalization (I)	0.00	(-)14.78	0.00	0.00	0.00
	Grand total (J)= (H-I)	3404.16	7499.61	1180.01	7350.66	4772.93
	Exclusion not allowed (K)	24.74	17.41	0.94	0.00	0.00
	Net Additional Capital Expenditure allowed (J-K)	3379.42	7482.20	1179.07	7350.66	4772.93

13. The actual additional capital expenditure claimed by the petitioner in the present petition is as under:



(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)
Additional capital expenditure claimed	3298.64	7564.54	1190.35	7559.5	2377.38
De-capitalization	0.00	14.78	0.00	2.21	0.12
Net Additional capital expenditure claimed	3298.64	7549.75	1190.35	7557.29	2377.26
Discharge of liabilities by payment on items allowed prior to 1.4.2009	0.48	20.58	276.84	291.96	0.48
Discharges of liabilities by payment on items claimed after 1.4.2009	0.00	61.07	47.18	45.55	259.36
Total discharge of liabilities by payment	0.48	81.65	324.02	337.51	259.84
Total	3299.12	7631.41	1514.37	7894.80	2637.10

14. The category-wise break-up of the actual additional capital expenditure (excluding discharges) claimed for the period 2009-14 is as under:

(₹ in lakh)

Sl. No	Head of Works/Equipment's	2009-10	1010-11	2011-12	2012-13	2013-14
		Actual	Actual	Actual	Actual	Actual
A: R&M Schemes						
1	R&M of SG Unit-1	115.67	8.28		97.83	2.86
2	R&M of SG Unit-3	58.99	20.97		64.79	
3	R&M of SG Unit-2				3498.82	0.25
4	R&M of SG Unit-4		3478.70	6.19	49.75	
5	Additional HT, LT & Control Cable for SG+C&I					
6	HP heaters Unit-1	9.01			4.85	
7	HP heaters Unit-2	403.25				
8	HP heaters Unit-3	8.99			-	-
9	Renovation of Generator Rotor of Unit- 2					515.55
10	Generator Seal oil pressure regulator.				84.58	4.35
11	Guide Wheels for MP Turbine Stage 9th to 20th Unit-2				0.00	0.00
12	Servo Motors for QCV & CV Unit-3	58.05			0.00	0.00
13	Set of Guide Wheels for HP/MP/ LP Turbine for Unit-1	0.49			0.00	0.00
14	Set of Guide Wheels for LP Turbine 1,1A,2,2A,3,3A,4 &4A				0.00	0.00
15	R&M works of TG & Aux including diaphragms of HP/MP/LP turbine of Unit-2				353.35	26.13
16	R&M works of TG & Aux including diaphragms of HP/MP/LP turbine of Unit-2					
17	R&M of HP Rotor of Unit 1	243.63			5.40	
18	R&M of MP Rotor of Unit 1			268.00	0.00	0.00



19	R&M of MP Rotor of Unit 2					
20	R&M of LP Rotor of Unit 3	212.57	1.43	548.17		
21	R&M works of TG & Aux of Unit-1	92.93				4.35
22	R&M works of TG & Aux of Unit-4		160.76		0.00	
23	R&M works of TG & Aux of Unit-3		12.21		0.00	0.00
24	R&M of HP Rotor of Unit 2					252.66
25	Labyrinth rings for HP Rotor Front glands.			105.99	0.00	0.00
26	Supply, Erection Testing and Commissioning of PLC for CHP	54.19			2.76	0.00
27	Elevator for ADM Building and Service Building & Consultation charges towards Hoistway & Machine room			53.97	5.40	0.00
28	DDCMIS for Unit-1& 3	27.09	59.26		0.00	0.00
29	DDCMIS for Unit-4		322.96		0.00	
30	DDCMIS for Unit 1 &2 and DAS for Unit 4				510.52	61.24
31	DDCMIS for Unit 1 &2 and DAS for Unit 4					
32	Civil work for installation of DDCIMS Unit-2			1.65	2.22	
33	Civil work for installation of DDCIMS for Unit-4		9.06		-	0.00
34	Electro Hydraulic Turbine Governing system for 3 Units & upgradation of existing Controller of Unit-1 to make it compatible with Units 2,3 & 4				910.18	0.00
35	Construction of Clarification plant for circulating water and chemical dozing system		266.83		41.81	0.00
36	Air washer system for Units- 3 & 4				0.00	0.00
37	Ash Water Recirculation System				8.56	0.00
38	Addl. Fire Fighting system (amended)	1206.53	2.38		0.74	2.29
39	Stacker-cum-reclaimer		1888.87	2.36	11.92	3.06
40	Construction of Sewerage treatment plant				113.82	0.00
	Sub Total A	2491.39	6231.71	986.33	5761.92	868.39
	B: Capital addition scheme					
41	Procurement of 1 no Overhead 5 ton EOT Crane for newly constructed Maintenance workshop, Loco Maintenance workshop		59.01			
42	Construction of 16 Nos. residential Building Type - C & 32 no type quarters					0.00
43	Construction of 2 nos Barracks, mess, store and approaches for CISF Fire Wing.			80.99		



44	Air Condition of Thyristor room	0			39.92	3.20
45	Chlorinators for T/S	0			1.36	0.08
	Sub Total B	0.00	59.01	80.99	41.27	3.28
C: Ash Handling system						
46	First Raising of Ash Dyke -A	739.21			1.18	
47	First Raising of Ash Dyke -B		568.94		9.28	
48	Contingency raising of ash Dyke-A			122.12		
49	2nd raising of Ash Dyke-A				1129.14	98.69
50	2nd raising of Ash Dyke -B					0.00
51	Dry Ash Evacuation System					0.00
	Sub Total C	739.21	568.94	122.12	1139.60	98.69
D: Change in Law						
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	1.33	0.00
54	Renovation of ESP Unit-4		604.95	-	2.41	0.00
55	Renovation of ESP Unit-2		-	-	511.99	3.06
	Sub Total D	82.60	691.96	0.92	515.73	3.06
E: 5Km works						
56	Supply of electricity within 5 km. around plant	-	-	-	775.70	
F: New Works						
57	Safety/Security related items	0.17	20.54			48.52
58	Road for Township	0.00			8.40	30.73
59	Construction of ET Hostel	0.00			0.00	310.74
60	Design, Supply, Erection & Commissioning of audio, video & lifting system of auditorium	0.00			0.00	198.63
61	Renovation of store shed in Central store	0.00			71.23	0.00
	Sub -Total F	0.17	20.54	0.00	79.59	355.00
	New works					
62	Stone aggregate in switchyard				21.35	39.64
	Adjustments					
	Adjustments	(-) 14.74	(-) 7.61		(-) 2.21	(-) 0.12
	Additional capital expenditure claimed	3298.64	7564.54	1190.35	7557.29	2377.26
	De-capitalisation					
	R&M of SG Unit-4		(-) 9.00			
	DDCMIS of SG Unit-4		(-) 2.00			
	R&M of ESP Unit-4		(-) 1.00			
	Steam Generator		(-) 2.78			
	SAP Licence				(-) 2.21	
	Elevator for EDM					(-) 0.12
	Grand Total	3298.64	7549.75	1190.35	7555.07	2377.14

15. The Commission in order dated 11.12.2015 in Petition No. 235/GT/2013 had revised the tariff of the generating station after truing-up of tariff based on the actual additional



capital expenditure incurred for the years 2009-10, 2010-11 and 2011-12. Accordingly, in this order, we proceed to revise the tariff based on actual additional capital expenditure incurred for the years 2012-13 and 2013-14 after truing-up exercise, as discussed in subsequent paragraphs.

R&M schemes including Renovation of ESPs

16. It is noticed that the Commission in order dated 17.10.2012 in Petition No.229/2009 had allowed the capitalised of the R&M schemes including Renovation of ESPs 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 Regulation. Similarly, the Commission in its order dated 11.12.2015 in Petition No. 235/GT/2013 had allowed the claim of the petitioner for additional capital expenditure on R&M schemes including Renovation of ESPs 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. The relevant portion of the order dated 11.12.2015 is extracted as under:

*"19. We have examined the matter. The generating station was taken over by the petitioner on 14.1.2000 in a very depleted condition. Therefore, the Commission while determining tariff of the generating station by its orders for the previous tariff periods considering the additional capital expenditure, has considered the useful life of the generating station as 25 years from the date of takeover (14.1.2000). The proposed additional capitalization on R&M of the generating station is in continuation of R&M of Phase-II. In view of this, the submission of the respondent that the additional capital expenditure is to be treated as life extension of the generating station under Regulation 10 (3), is not acceptable. The projected expenditure claimed are mainly for the replacement of old assets, which are for sustenance of efficient performance of the generating station. Accordingly, we consider the claims of the petitioner towards R&M schemes and Renovation of ESPs in terms of the **provisions of Regulation 9(2) of the 2009 Tariff Regulations by invoking the power of relaxation, as stated below**".*



R&M schemes

17. The petitioner has claimed actual additional capital expenditure of ₹5761.92 lakh in 2012-13 and ₹908.03 lakh in 2013-14 towards R&M of Steam Generator of Units-1, 2 3 &4, HP Heater of Unit-I, Generator seal oil pressure, R&M of TG & Auxiliaries of Unit-II , Supply, Erection Testing & commissioning of PLC in coal handling plan, DDCMIS for Unit-I&II & DAS for Unit-IV, Electro Hydraulic Turbine Governing system for 3 Units & upgradation of existing controller of Unit-I to make it compatible with other 3 Units, Construction of clarification plant & Sewerage treatment plant etc., (under Sl. No. 1 to 40 in table-A under para 14 above) as against the projected additional capital expenditure of ₹6426.16 lakh (₹6206.63 lakh with corresponding de-capitalization of ₹686.56 lakh in 2012-13 and ₹219.53 lakh with corresponding de-capitalization of ₹25.25 lakh in 2013-14 allowed in order dated 11.12.2015. In justification of the same, the petitioner vide affidavit dated 14.8.2014 has submitted that the deviation is due to the difference between projection based on estimates / budgeted cash expenditure, change in scope of work etc. and the actual execution during the relevant years. It has also submitted that there was also some amount lying under CWIP which was inadvertently not considered earlier in the projected additional capital expenditure claims for the period 2009-14. The respondent, UPPCL has submitted that on account of wrong projections by the petitioner, the claim for interest under Regulation 6(4) may not be allowed.

18. The matter has been examined. As stated, the Commission in its order dated 17.10.2012 in Petition No.229/2009 and 11.12.2015 in Petition No. 235/GT/2013 had allowed the capitalisation of the R&M schemes along with the corresponding de-capitalization value of 11.5% as claimed by the petitioner, under Regulation 9(2) in exercise of the 'Power to Relax' in terms of Regulation 44 of the 2009 Tariff Regulations, mainly on the ground that these R&M schemes are required for the sustenance of efficient



performance of the generating station. Though the petitioner has claimed the additional capital expenditure on these R&M schemes, it has not furnished the gross block of the old assets replaced by new assets under the R&M schemes. It is observed that 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. In line with our decisions in orders dated 17.10.2012 and 11.12.2015 and considering the fact that these R&M schemes are necessary for sustenance of the performance of the generating station, we allow the capitalisation of the expenditure claimed by the petitioner. Also, in line with the methodology adopted in our earlier orders, 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. Also, the de-capitalized value of old assets has been derived from the gross block of the new assets wherever applicable.

19. In this background and in line with the decisions in Commission's orders dated 17.10.2012 and 11.12.2015, we allow the actual additional capital expenditure of ₹5761.90 lakh and ₹868.39 lakh with corresponding de-capitalization of ₹682.80 lakh and 100.45 lakh for 2012-13 and 2013-14 respectively. Accordingly, on net basis, the actual capital expenditure of ₹5079.10 lakh (5761.90- 682.80) in 2012-13 and ₹767.94 lakh (868.39 - 100.45) in 2013-14 is allowed under Regulation 9(2) in exercise of 'Power to Relax' under Regulation 44 of the 2009 Tariff Regulations.

Renovation of ESPs

20. The petitioner has claimed actual additional capital expenditure of ₹515.73 lakh in 2012-13 and ₹3.06 lakh in 2013-14 for Renovation of ESPs (sl. No. 53 to 55 of the table-under para 14 above), as against the projected additional capital expenditure of ₹556.66



lakh with corresponding de-capitalization of ₹64.02 lakh in 2012-13 allowed in order dated 11.12.2015 in Petition No.235/GT/2013. The petitioner vide affidavit dated 14.8.2014 has submitted that the deviation is due to the variation in Liability & ERV variation and some amount was lying under CWIP which was inadvertently not considered in the projected additional capital expenditure for the period 2009-14.

21. The submissions have been considered. As stated above, the Commission in its orders dated 17.10.2012 and 11.12.2015 had allowed capitalization of expenditure 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 actual additional capital expenditure along with the estimated de-capitalization value of 11.5% has been considered on the gross block of new assets wherever applicable. Accordingly, the actual additional capital expenditure of ₹515.73 lakh with corresponding de-capitalization of ₹59.31 lakh in 2012-13 and the actual additional capital expenditure of ₹3.06 lakh with corresponding de-capitalization of ₹0.35 lakh in 2013-14 is allowed. Accordingly, on net basis, the actual capital expenditure of ₹456.42 lakh (515.73-59.31) in 2012-13 and ₹2.71 lakh (3.06-0.35) in 2013-14 is allowed under Regulation 9(2) in exercise of 'Power to Relax' under Regulation 44 of the 2009 Tariff Regulations.

Air Condition of Thyristor Room

22. As against the projected additional capital expenditure of ₹39.59 lakh in 2012-13 and ₹25.00 lakh in 2013-14 allowed in order dated 11.12.2015 in Petition No. 235/GT/2013, the petitioner has claimed actual additional capital expenditure of ₹39.92 lakh in 2012-13 and ₹3.20 lakh in 2013-14 for Air conditioning of Thyristor room. In justification of the said claim,



the petitioner vide affidavit dated 14.8.2014 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 11.12.2015, the actual additional projected capital expenditure of ₹43.12 lakh in 2012-14(39.92 lakh in 2012-13 and ₹3.20 lakh in 2013-14) is allowed.

Chlorination for T/S

23. As against the projected additional capital expenditure of ₹0.95 lakh in 2012-13 dis allowed in order dated 11.12.2015 in Petition No. 235/GT/2013, the petitioner has claimed actual additional capital expenditure of ₹1.36 lakh in 2012-13 and ₹0.08 lakh for Chlorination plant. In justification of the same, the petitioner has submitted that the capitalization of the asset was allowed by Commission during 2008-09. It has also submitted that a small amount of ₹0.95 lakh in 2012-13 and ₹0.08 lakh in 2013-14 has been incurred to remove the bio-fouling of water to make it potable and towards the final bill adjustment. In the absence of proper justification with documentary evidence, the actual additional capital expenditure of ₹1.36 lakh in 2012-13 and ₹0.08 lakh in 2013-14 is disallowed.

Regulation 9(2)(III)- Ash Handling System

(a) 1st raising of Ash Dyke-A

24. As against the projected additional capital expenditure of ₹1.18 lakh allowed in order dated 11.12.2015 in Petition No. 235/GT/2013, the petitioner has claimed actual additional capital expenditure of ₹1.18 lakh in 2012-13 for 1st raising of Ash Dyke. In justification of the same, the petitioner vide affidavit dated 14.8.2014 has submitted that the payment of ₹1.18 lakh made in 2012-13 was towards balance payment. In view of the submission, the actual additional capital expenditure of ₹1.18 lakh as balance payment in 2012-13 is allowed.



(b) 1st raising of Ash Dyke-B

25. As against projected additional capital expenditure of ₹9.92 in 2012-13 allowed vide order dated 11.12.2015 in Petition No. 235/GT/2013, the petitioner has claimed actual additional capital expenditure of ₹9.28 lakh in 2012-13 for 1st raising of Ash Dyke -'B'. In justification of the same, the petitioner vide affidavit dated 14.8.2014 has submitted that the reason for variation in 2010-11 is due to ERV variation. It has therefore submitted that the deviation may be allowed as the expenditure claimed is lesser than the projected additional capital expenditure allowed earlier. It is noticed that the expenditure claimed by the petitioner is lesser than the expenditure allowed vide order dated 11.12.2015 for this work. In view of the submission of the petitioner, the actual additional capital expenditure of ₹9.28 lakh during 2012-13 on this count is allowed.

2nd raising of Ash Dyke-A

26. As against the projected additional capital expenditure of ₹1107.54 lakh in 2012-13 allowed in order dated 11.12.2015 , the petitioner has claimed actual additional capital expenditure of ₹1129.14 lakh in 2012-13 and ₹98.69 lakh in 2013-14 for 2nd raising of Ash Dyke-Á'. In justification of the same, the petitioner has submitted that the minor deviation may be permitted. In view of the submissions of petitioner and since the expenditure for the said work allowed earlier was based on estimates and presently, the actual awarded rates have been claimed, the actual additional capital expenditure of ₹1129.14 lakh in 2012-13 and ₹98.69 lakh in 2013-14 is allowed.

2nd raising of Ash Dyke- B

27. The petitioner has not claimed actual additional capital expenditure during the years 2012-13 and 2013-14 under this head. However, the petitioner has submitted that an amount of ₹7.13 crore is lying in CWIP and shall be capitalized in the year 2014-15. Hence, no amount has been considered.



Dry Ash Evacuation System

28. The petitioner has not claimed actual additional capital expenditure during the years 2012-13 and 2013-14 under this head. However, the petitioner has submitted that an amount of ₹31.77crore is lying in CWIP and is expected to be capitalized during the tariff period 2014-19. Hence, no amount has been considered.

Change-in-Law

New items / works

Safety/ Security Related Works

29. The petitioner has claimed actual additional capital expenditure of ₹48.52 lakh in 2013-14 for CCTV system on the ground that these are safety & security related equipments recommended by CISF for security of plant. The respondent, UPPCL has submitted that the recommendations of CISF are not a statutory promulgation and therefore, the expenditure may be disallowed. 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 is not allowed.

Road for Township

30. The Commission in its order dated 11.12.2015 in Petition No. 235/GT/2013 had allowed the projected additional capital expenditure of ₹30.00 lakh in 2013-14 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. Against this, the petitioner has claimed the actual additional capital expenditure of ₹8.40



lakh in 2012-13 and 30.73 lakh in 2013-14 towards construction of roads to approach C & D Type quarters. In line with the decision of the Commission in order dated 11.12.2015, we are allow the actual additional capital expenditure of ₹8.40 lakh in 2012-13 and 30.73 lakh in 2013-14.

Construction of ET Hostel

31. The petitioner has claimed actual additional capital expenditure of ₹310.74 lakh in 2013-14 towards the Construction of ETs hostel as against projected additional capital expenditure of ₹325.00 lakh allowed vide order dated 11.12.2015 in Petition No. 235/GT/2014 in the background of the judgment of the Tribunal dated 1.5.2015 in Appeal No.97 of 2013. In justification of the same, the petitioner has submitted that ET Hostel has been under construction to give accommodation to new ETs inducted owing to Stage-II works and the Commission has allowed similar additional capital expenditure in case of Badarpur TPS. The respondent, UPPCL has submitted that the need for additional executive trainees is on account of Stage-II units and to accommodate newly recruited ETs additional ET hostel been constructed. Accordingly, the respondent has submitted that the cost of construction of new ET hostel must be capitalized as part of the capital cost of Stage-II and should not be loaded in to Stage-I (this generating station). The respondent has therefore prayed that that the claim may be disallowed as the expenditure form part of Stage-II project which is under construction.

32. The matter has been examined. The Commission in its order dated 11.12.2015 in Petition No. 235/GT/2013 had allowed the projected additional capital expenditure of ₹325.00 lakh in 2013-14 on the submission of the petitioner that the ETs hostel under construction would be used to give accommodation to ETs for operating and maintenance on regular basis for O&M of plant as well as for fulfilling the various services of the



department. The petitioner had not disclosed that the ETs hostel was with regard to manpower positioning and owing to Stage-II works. Considering the fact that the actual capital expenditure incurred by the petitioner towards the Construction of ETs hostel pertains to Stage-II units of the petitioner, we are of the considered view that the expenditure claimed cannot be loaded onto the respondent, UPPCL. In this background, the submission of the petitioner that the expenditure for similar works has been allowed by the Commission in case of Badarpur TPS does not hold good. Accordingly, the actual additional capital expenditure of ₹310.74 lakh is not allowed in Stage-I.

Design, Supply, Erection & Commissioning of audio, video & lifting system of Auditorium

33. The Commission in order dated 11.12.2015 in Petition No. 235/GT/2013 had considered some of the claim for 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 terms of the judgment of the Tribunal dated 1.5.2015 in Appeal No.97/2013. Accordingly, the actual/projected additional capital expenditure incurred on R&M towards works as submitted by the vide affidavit dated 6.7.2015 which included works namely “*Construction of Auditorium in township*” was considered on the ground that these expenditure incurred are in respect of R&M of Township and colony.

34. The petitioner in this petition has claimed actual additional capital expenditure of ₹198.63 lakh (₹42.63 lakh for Auditorium interior decoration & boundary wall, ₹89.98 lakh for Air condition of auditorium and ₹66.02 lakh for Design, supply, Erection & Commissioning of audio, video & lifting system of auditorium) in 2013-14 under Regulation 9(2) in exercise of ‘Power to Relax’ under Regulation 44 of the 2014 Tariff Regulations. In justification of the same, the petitioner has submitted that considering remote location of



this generating station from developed cities, auditorium was constructed to facilitate social inter-action of township residents. The respondent, UPPCL has submitted that the petitioner has not claimed the said expenditure in Petition No. 229/2009 and Petition No. 235/GT/2013. It has further submitted that the nature of expenditure is not eligible to be considered under any of the provisions of Regulation 9(2) of the 2014 Tariff Regulations.

35. We have considered submissions. It is noticed that the Commission in terms of the judgment of the Tribunal dated 1.5.2015 in Appeal No. 97/2013 had considered the claim of the petitioner and allowed the projected additional capital expenditure of ₹198.63 lakh in 2013-14 vide order dated 11.12.2015 in Petition No. 235/GT/2013 for Construction of Auditorium. Now the claim of the petitioner has been made based on the actual additional capital expenditure of ₹198.63 lakh relating to the same work of construction of Auditorium. Accordingly, we allow the actual additional capital expenditure of ₹198.63 lakh in the year 2013-14 as part of the R&M scheme of Township & colony.

Renovation of store shed in Central Store

36. As against the projected additional capital expenditure of ₹78.64 in 2012-13 disallowed in order dated 11.12.2015 in Petition No. 235/GT/2013, the petitioner has claimed actual additional capital expenditure of ₹71.23 lakh in 2012-13 for Renovation of shed in central store. In justification of the same, the petitioner has submitted that to facilitate safe storage of various costly & vital machinery spares, R&M of store shed was necessary. The submissions of petitioner on this count was considered and disallowed in order dated 11.12.2015. 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. Accordingly, the additional capital expenditure of ₹71.23 lakh in 2012-13 is not allowed.



Regulation 9(2)(ix)

Implementation of scheme for provision of supply of electricity within 5 km around central power plants

37. The petitioner in Petition No. 235/GT/2013 had initially not claimed any capital expenditure under this head for the period 2009-14. However, the petitioner had submitted that the work covered under Regulation 9(2)(ix) has already been awarded and is under execution. It had 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. Subsequently, the petitioner by affidavit dated 11.3.2014 in Petition No. 235/GT/2013 had submitted that the projection of ₹13.20 crore filed for the period 2009-14 was revised to nil projection. However, as per current progress the scheme is likely to be completed /capitalized at anticipated cost of ₹14.10 crore in the year 2013-14. Accordingly, the Commission by order dated 11.12.2015 disposed of the prayer of the petitioner and observed as under:

“53.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”

38. The petitioner has claimed actual additional capital expenditure of 775.70 lakh in 2013-14 towards implementation of 5 km scheme for provision of supply of electricity within the radius of 5 km of the generating station. The petitioner has also submitted that 5 km electrification scheme has been completed during the year 2013-14, but as the handing over of assets by the petitioner to the local authorities is a time taking activity, the work for



only ₹775.70 lakh could be capitalized on cash basis, during the period 2009-14 and the balance work will be capitalized during the tariff period 2014-19.

39. We have examined the matter. The scheme for supply of electricity within 5 km radius around central generating stations was withdrawn vide Ministry of Power, Government of India notification dated 25.3.2013. 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, subject to orders of this Commission. Similar claim of the petitioner was considered by the Commission in Petition No. 315/GT/2014 (revision of tariff of Singrauli STPS (2000 MW) for the period 2009-14 and the Commission vide order dated 21.12.2015 had allowed the said claim observing as under:

“23. We are of the considered view that since the petitioner has incurred the expenditure for creation of the infrastructure, the same should be allowed. However, instead of servicing the same as part of the capital cost, we are of the view that the said expenditure should be reimbursed by the beneficiaries in proportion to their share, in the remaining three years of the tariff period 2014-19, in equal monthly installments beginning from April, 2016, along with regular bills, with the weighted average rate of interest on loan applicable for the relevant years as indicated in the table under para 54 of this order. The reimbursement directed as above is in relaxation of Regulation 9 (2) (ix) of the 2009 Tariff Regulations and shall not be cited as precedent in future”

40. In line with the above decision and since the expenditure has been incurred and capitalized by the petitioner for creation of the infrastructure, we are of the view that the said expenditure of ₹775.70 lakh should be reimbursed by the beneficiaries in proportion to their share, in the remaining three years of the tariff period 2014-19, in equal monthly installments along with regular bills, with the weighted average rate of interest on loan applicable for the relevant years as indicated in the table under para 63 of this order till the date of capitalization of asset. As regards the claim for balance expenditure during 2014-19, the same will be considered in accordance with law based on the justification and the



documentary evidence in support of the handing over the said entire assets to the state utility. The petitioner shall also ensure the security and safety of assets till the same is formally handed over to the State utility so that the said assets capitalized are neither removed nor destroyed.

Adjustment and De-capitalization

41. The petitioner has adjusted an amount of (-) ₹2.21 lakh (in Form-9 of the petition vide affidavit dated 14.8.2014) on account of final adjustment for SAP license in 2012-13 and (-) ₹0.12 lakh on account of material returned & contract closing for Elevator for ADM building in 2013-14. Further, the petitioner has de-capitalized (in Form-9) an amount of (-) ₹2.21 lakh in 2012-13 for SAP license and (-) ₹0.12 lakh in 2013-14 for Elevator ADM building. However, it is observed from the details of additional capitalization duly certified by the auditor on 23.9.2014 that the petitioner has de-capitalized (-) ₹2.21 lakh towards SAP license in 2012-13 and (-) ₹0.12 lakh towards Elevator for ADM building in 2013-14. Accordingly, the de-capitalization of the said amounts in 2012-13 and 2013-14 respectively are in order and has been allowed. However, adjustments of some amounts have not been considered as the adjustments have not been found in the details of the Auditor certificate furnished by the petitioner.

Reconciliation of actual additional capital expenditure for the period 2012-13 & 213-14

42. The petitioner has submitted the reconciliation statement of actual additional capital expenditure for the years 2012-13 and 2013-14 with the books of accounts as detailed below:-

	(₹ in lakh)	
	2012-13 (actual)	2013-14 (actual)
Closing Gross Block as per Audited balance sheet as on 31.3.2012	112609.79	122974.92



Less: unserviceable assets regrouped from Fixed Assets to Current Assets	3.38	0.00
Opening Gross Block as on 1st April of year (A)	112606.41	122974.92
Closing Gross Block as on 31 st March of year (B)	122974.92	128401.43
Additional capital expenditure during the year as per books of accounts (C)=(B-A)	10368.50	5426.52
Exclusions (D)	2345.90	2999.33
Un-discharged liabilities (E)	165.32	49.92
Additional capital expenditure reclaimed on cash basis (C-D-E)	7557.28	2377.26

Exclusions

43. The summary of exclusions from books of accounts claimed for the years 2012-13 and 2013-14 under different heads are as under:

(₹ in lakh)							
Sl. No.	Year / Description	Gross block		Liabilities		Net additional capital expenditure	
		2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
1	Items disallowed by Commission						
a	Construction of boundary wall	2.82	0.00	0.00	0.00	2.82	0.00
b	Construction of seating gallery in Ram lila ground	6.19	-	0.00		6.19	0.00
c	Construction of EDC	13.14	-	0.00	-	13.14	0.00
d	Laying of sewer pipeline in township	195.54	0.00	2.27	-	193.27	0.00
e	Sox & Nox analyser	58.22	(-) 0.01	0.00	-	58.21	(-)0.01
f	Procurement of generator transformer	30.28	-	0.00	-	30.28	0.00
	Sub-Total	306.19	(-)0.01	-	-	303.91	(-)0.01
2	FERV	1315.44	946.40	-	-	1315.44	946.40
3	Capitalization of spares	518.87	1944.12	8.05	142.03	510.82	1802.09
4	Capitalisation of spares = bill adjustment	-	2.58	-	-	-	2.58
5	De-capitalisation of spares - part of tariff	-	(-)9.00	-	-	-	(-)9.00
6	Capitalisation of MBOA items	210.84	135.27	24.95	18.08	185.89	117.19
7	De-capitalisation of MBOA items - part of tariff	-	(-)10.91	-	-	-	(-)10.91
8	De-capitalisation of MBOA items - not part of tariff	-	(-)4.20	-	-	-	(-)4.20
9	Capitalisation Misc. Plant & Machinery	8.84	0.00	-	-	-	0.00
10	De-capitalisation of MBOA : not part of tariff	(-)10.27	0.00	-	-	(-)1.11	0.00
11	Inter-unit transfer	(-)1.11	(-)2.81	-	-	-	(-)2.81
12	Liability reversal	(-)2.91	(-)2.10	-	-	(-)2.91	(-)2.10
	Total Exclusion claimed	2345.89	2999.33	35.28	160.11	2310.61	2839.22



Items disallowed

44. The petitioner has excluded in the books of accounts an amount of 306.19 lakh (₹2.82 lakh for Construction of boundary wall, ₹6.19 lakh for Construction of seating gallery, ₹13.14 lakh for Construction of EDC, ₹195.54 lakh including liability of ₹2.27 lakh for laying of sewer pipeline in township, ₹58.22 lakh for Sox & Nox analyser, ₹30.28 lakh for procurement of generator transformer in 2012-13 and (-) ₹0.01 lakh for Sox & Nox analyser in 2013-14 respectively. However, the Tribunal in its judgment dated 1.5.2015 in Appeal No. 97 of 2013 had directed the Commission to reconsider the expenditure incurred on Construction of boundary wall, Construction of seating gallery and Laying of sewer pipeline in township. Accordingly, the Commission in its order dated 11.12.2015 had allowed the additional capital expenditure on these assets/ works. In view of this, the exclusion for ₹2.82 lakh for Construction of boundary wall, ₹6.19 lakh for Construction of seating gallery and ₹195.54 lakh for Laying of sewer pipeline in township is not allowed as these assets form part of capital cost.

45. Other assets such as Construction of EDC, Sox & Nox analyzer and Procurement of generator were not allowed by the Commission which was upheld by the Tribunal in the said judgment. Accordingly, these assets do not form part of capital cost and hence the exclusion sought by the petitioner is in order and allowed.

FERV

46. The petitioner has excluded an amount of ₹1315.44 lakh in 2012-13 and ₹946.40 lakh in 2013-14 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 are in order and has been allowed.



Capitalization of Capital Spares

47. The petitioner has capitalized capital spares in books of accounts amounting to ₹518.87 lakh including liability of ₹8.05 lakh in 2012-13 and ₹1944.12 lakh including liability of ₹142.03 lakh in 2013-14. Since capitalization of capital spares over and above the initial spares procured after cut-off date are not allowed for the purpose of tariff, the exclusion of the said amounts are in order and is allowed.

Capitalization of Capital Spares - Adjustment

48. The petitioner has excluded an amount of ₹2.58 lakh in 2013-14 as Bill adjustment for the spares capitalized in earlier years. The exclusion sought by the petitioner is in order and is allowed.

De-capitalization of spares – part of tariff

49. The petitioner has de-capitalized in books of account capital spares amounting to (-) ₹9.00 lakh in 2013-14. Since these capital spares de-capitalized were part of tariff, the de-capitalization of spares for (-) ₹9.00 in 2013-14 is disallowed.

Capitalization of MBOA items

50. The petitioner has capitalized MBOA items in books of accounts amounting to ₹210.84 lakh including liability of ₹24.95 lakh in 2012-13 and ₹135.27 lakh including liability of ₹18.08 lakh in 2013-14. Since capitalization of MBOA items after the cut-off date are not allowed for the purpose of tariff, the exclusion of the said are in order and allowed.

Capitalization of Misc. Plant & Machinery

51. The petitioner has excluded in books of accounts an amount of ₹8.84 lakh in 2012-13. Since capitalization of minor assets are not allowed in tariff, the exclusions of the said amount are in order and allowed.



Inter-Unit Transfers

52. The petitioner has excluded amounts of (-) ₹1.11 lakh in 2012-13 on account of inter-unit transfer of EDP, WP Hospital equipment, other office equipments and SATCOM equipment's. The Commission while dealing with the application for additional capitalization in respect of other generating stations of the petitioner had decided that both positive and negative entries arising out of inter-unit transfers of temporary nature shall be ignored for the purposes of tariff. In consideration of the said decisions, the exclusion of (-) ₹1.11 lakh in 2012-13 on account of inter-unit transfer has been allowed.

De-capitalisation of MBOA items – part of tariff

53. The petitioner has de-capitalized in the books of account an amount of (-) ₹10.91 lakh in 2013-14 towards assets such as furniture & fixtures, other office equipments and EDP & SATCOM equipments etc. on these assets becoming un-serviceable. In justification of same, the petitioner has submitted that since capitalization of MBOA items is not being allowed, the corresponding de-capitalisation has been kept under exclusion. Since these MBOA items form part of tariff, the exclusion sought by the petitioner for these items has been disallowed.

De-capitalisation of MBOA items – not part of tariff

54. The petitioner has de-capitalized in the books of account an amount of (-) ₹4.20 lakh in 2013-14 towards assets such as furniture & fixtures, and EDP & SATCOM equipments etc. on becoming these assets un-serviceable. The petitioner in its justification has submitted that these items were capitalized after 2006-07 and were not allowed by the Commission. Since capitalization of MBOA items is not allowed in tariff and hence do not form part of capital cost, the exclusion sought by the petitioner for these items is in order and has been allowed.



Liability Reversal

55. The petitioner has excluded liability reversal of (-) ₹2.91 lakh for 11 kV/0.433 kV Sub-station & LT Switchgear in 2012-13 and (-) ₹2.10 lakh for adjustment of custom clearing charges in 2013-14. Since the tariff is on cash basis, liability reversal has no impact on tariff. Accordingly, the liability reversal of the said amounts has been allowed.

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

	(₹ in lakh)	
	2012-13	2013-14
Exclusions Claimed (A)	2310.61	2839.23
Exclusions Allowed (B)	2108.33	2859.14
Exclusions not Allowed (A-B)	202.28	(-) 19.92

57. Accordingly, the actual additional capital expenditure allowed for the years 2012-13 and 2013-14 are as under:

		(₹ In lakh)	
Sl. No	Head of work/ Equipment	2012-13 (Actual)	2013-14 (Actual)
A	R&M SCHEME		
1 to 40	Assets under R&M schemes (<i>list of assets enclosed at Annexure-I</i>)	5761.90	868.39
	De-capitalization (<i>as per enclosed Annexure-I of petition</i>)	682.80	100.45
	Net amount allowed - A	5079.10	767.94
53	Renovation of ESP Unit-3	1.33	0
54	Renovation of ESP Unit-4	2.41	0
55	Renovation of ESP Unit-2	511.99	3.06
	Total (52+53+54)	515.73	3.06
	Total De-capitalization of ESPs	64.44	0.37
	Net amount allowed ESPs	451.29	2.69
B	Capital Addition Schemes		
41	Procurement of 1 no. Overhead 5 Ton EOT Crane for Loco Maintenance Workshop	0	0
42	Construction of 16 nos. Residential Building type-C quarters	0	0
43	Construction of 2 nos. of Barracks, Mess, Store and approach for CISF Fire Wing	0	0
44	Air condition of Thyristor Room	39.92	3.20
45	Chlorination for T/P	0.00	0.00
	Total B (42+43+44+45)	39.92	3.20
C	Ash Handling System		
46	First Raising of Ash Dyke –A	1.18	0



47	First Raising of Ash Dyke –8	9.28	0
48	Contingency raising of Ash Dyke A	0	0
49	2 nd Raising of Ash Dyke –A	1129.14	98.69
50	2 nd Raising of Ash Dyke –8	0	0
51	Dry Ash Evacuation System	0.00	0.00
	Total (C)	1139.60	98.69
53	Implementation of scheme for supply of electricity within 5 km radius	0.00	0.00
	New Works		
55	Safety/Security related items (CCTV system)	-	-
55	Road for Township	8.40	30.73
56	Construction of ET Hostel	-	0.00
57	Design, Supply, Erection & Commission of audio, video & lifting system of auditorium, air conditioning of auditorium etc.	0	198.62
58	Stone aggregate filling & anti-weed treatment	21.35	39.64
59	Renovation of store shed in Central store	0	-
	Total F	21.35	579.73
	Total additional capital expenditure allowed (A+B+C+D+E+F) = G	6739.66	1141.51
	H: De capitalisation of Items		
60	SAP licence	(-) 2.21	-
61	Elevator for ADM	-	(-) 0.12
I	Total De-capitalisation	(-) 2.21	0.12
J	Additional capital expenditure allowed	6737.45	1141.39
K	Exclusion not allowed = k	202.28	(-) 19.92
	Net Additional Capitalization allowed (j+k)	6939.73	1121.48

58. The Commission vide order dated 11.12.2015 had revised the additional capitalization incurred for the years 2009-10 to 2011-12 based on truing-up exercise duly reconciled with the books of accounts. However, it is observed that an inadvertent error has occurred in the said order as regards the de-capitalization of old asset in the year 2010-11 viz, R&M of SG-4, R&M of SG-1, DDCIMS-4 and R&M of ESP-4 since the gross block of (i) the old assets were deducted twice and (ii) the de-capitalization of assets condemned amounting to (-) ₹11.46 lakh under the head 'Exclusions' in 2010-11 was allowed, but in the table under para 76 of the said order, the same was inadvertently not considered. Accordingly, these inadvertent errors are rectified in this order. Accordingly, the de-capitalization of ₹14.78 lakh on account of double deduction and the amount of (-) ₹11.46 lakh not considered is allowed under the head exclusion. Accordingly, the net actual additional capital expenditure for the



year 2010-11 would stand revised to ₹7508.44 lakh (from ₹7482.20 lakh). After considering the liabilities discharged for ₹82.97 lakh in 2010-11, the actual additional capital expenditure for the year 2010-11 is worked out and considered as ₹7591.41 lakh.

Capital cost for 2009-14

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

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital cost	94506.05	97885.96	105477.34	106998.88	114299.57
Add: Additional capital expenditure	3379.91	7591.37	1521.54	7300.69	1381.32
Closing capital cost	97885.96	105477.34	106998.88	114299.57	115680.89
Average Capital Cost	96196.00	101681.65	106238.11	110649.22	114990.23

Debt–Equity Ratio

60. The gross loan and equity amounting to ₹66697.78 lakh and ₹28584.76 lakh respectively as on 31.3.2009 considered in order dated 29.4.2011 in Petition No. 186/2009 has been considered as the gross loan and equity as on 1.4.2009. However, un-discharged liabilities of ₹776.50 lakh deducted from the capital cost as on 1.4.2009 has been adjusted in the debt-equity ratio of 50:50 for assets/works capitalized 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

61. 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	31643.20	32099.66	34289.87
Addition of equity due to additional capital expenditure	1013.97	2277.41	456.46	2190.21	414.40



Normative Equity - Closing	29365.79	31643.20	32099.66	34289.87	34704.27
Average Normative Equity	28858.80	30504.49	31871.43	33194.77	34497.07
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
Tax Rate for respective years	33.990%	33.218%	32.445%	32.445%	33.990%
Rate of Return on Equity (Pre Tax)	23.481%	23.210%	22.944%	22.944%	*23.481%
Return on Equity (Pre Tax)- (annualized)	6776.34	7080.09	7312.58	7616.21	8100.26

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

Interest on loan

62. 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, 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.

63. 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	73834.14	74899.22	80003.70



Cumulative repayment of loan upto previous year / period	49041.09	53834.33	58665.51	64188.10	66382.11
Net Loan Opening	17113.14	14685.84	15168.62	10711.11	13627.59
Addition due to Additional capitalization	2365.94	5313.96	1065.08	5110.48	966.92
Repayment of loan during the year	4950.41	5241.04	5482.86	2594.39	2947.14
Less: Repayment adjustment on account of de-capitalization	157.38	419.41	78.07	524.62	84.60
Add: Repayment adjustment on discharges corresponding to un-discharged liabilities deducted as on 1.4.2009	0.20	9.56	117.80	124.23	0.20
Net Repayment	4793.24	4831.18	5522.59	2194.01	2862.74
Net Loan Closing	14685.84	15168.62	10711.11	13627.59	11731.77
Average Loan	15899.49	14927.23	12939.87	12169.35	12679.68
Weighted Average Rate of Interest on Loan	3.2191%	0.4535%	3.8712%	0.2772%	5.1525%
Interest on Loan	511.82	67.69	500.92	33.73	653.33

Depreciation

64. 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
Average Capital Cost	96196.00	101681.65	106238.11	110649.22	114990.23
Depreciable value (ex-land) @ 90%	85069.17	90006.25	94107.06	98077.06	101983.97
Remaining useful life at beginning of year	5.1462%	5.1544%	5.1609%	N.A.	N.A.
Balance depreciable value	15.79	14.79	13.79	12.79	11.79
Depreciation (annualized)	4950.41	5241.04	5482.86	2594.39	2947.14



Cumulative depreciation at the end	54439.39	59588.65	64813.35	67499.29	70195.81
Less: Cumulative depreciation adjustment on account of un-discharged liabilities as on 1.4.2009	(-) 0.26	(-) 11.97	(-) 147.59	(-) 155.65	(-) 0.25
Less: Cumulative Depreciation reduction due to de-capitalization	92.03	270.13	56.03	406.27	64.44
Cumulative depreciation (at the end of the period)	54347.62	59330.49	64904.90	67248.67	70131.62

Normative Annual Plant Availability Factor

65. The Normative Annual Plant Availability Factor of 85% as considered in order dated 11.12.2015 in Petition No.235/GT/2013 has been considered.

O&M Expenses

66. O&M expenses as considered in order dated 11.12.2015 in Petition No.235/GT/2013 as stated below has been considered.

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

Interest on Working Capital

67. 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.



68. 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 1st 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.

69. 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

69. 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

70. 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	4951.91	5093.66	5373.53	4892.09	5366.99
Total	17955.20	18096.95	18412.44	17985.38	18370.28

O & M Expenses (1 month)

71. O & M expenses for 1 month as considered in order dated 11.12.205 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

72. 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 month	962.50	1017.50	1075.80	1137.40	1202.30
Maintenance Spares	2310.00	2442.00	2581.92	2729.76	2885.52
Receivables- 2 Months	17955.20	18096.95	18412.44	17985.38	18370.28
Total Working Capital	34513.48	34842.24	35392.34	35138.33	35743.88
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Total Interest on Working capital	4227.90	4286.17	4335.56	4304.45	4378.63

Annual Fixed Charges for 2009-14

73. 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	5241.04	5482.86	2594.39	2947.14
Interest on Loan	511.82	67.69	500.92	33.73	653.33
Return on Equity	6776.34	7080.09	7312.58	7616.21	8100.26
Interest on Working Capital	4227.90	4286.17	4335.56	4304.45	4378.63
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
Total	29711.46	30561.98	32241.17	29892.57	32201.94

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.

74. The Energy Charge Rate of 270.611 paise/kWh as determined by order dated 17.10.2012/11.12.2015 shall remain unchanged.

75. The difference between the annual fixed charges determined by order dated 11.12.2015 and those determined by this order shall be adjusted in accordance with Regulation 6 (6) of the 2009 Tariff Regulations.

76. Petition Nos. 329/GT/2014 is disposed of in terms of the above.

sd/-
(Dr.M.K.Iyer)
Member

sd/-
(A.K.Singhal)
Member

sd/-
(Gireesh B. Pradhan)
Chairperson

