

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 273/GT/2014

Coram:

Shri A.S. Bakshi, Member

Dr. M. K. Iyer, Member

Date of Hearing: 20.5.2016

Date of Order : 31.8.2016

In the matter of

Revision of tariff of Talcher Thermal Power Station (460 MW) for the period 2009-14 truing up of tariff determined in order dated 15.5.2014 in Petition No. 304/2009.

And in the matter of

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

.....Petitioner

Vs

GRIDCO Limited
24, Janpath,
Bhubaneswar – 751007

...Respondents

Parties present:

For Petitioner: Shri Bhupinder Kumar, NTPC
Shri Rajeev Chaudhary, NTPC
Shri T. Vinodh Kumar, NTPC
Shri Shailendra Singh, NTPC

For Respondents: Shri Raj Kumar Mehta, Advocate, GRIDCO
Shri Himanshi Andley, Advocate, GRIDCO
Shri Madhusudan Sahoo, GRIDCO

ORDER

This petition has been filed by the petitioner, NTPC for revision of the annual fixed charges in respect of Talcher Thermal Power Station (460 MW) (hereinafter referred to as 'the generating



station') for the period from 2009-14 in terms of 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 460 MW comprises of four units of 60 MW each and two units of 110 MW each. The dates of commercial operation (COD) of the units of the generating station are as under:

Unit	COD
Unit-I	17.12.1967
Unit-II	28.3.1968
Unit-III	11.7.1968
Unit-IV	11.4.1969
Unit-V	24.3.1982
Unit-VI / Station	24.3.1983

3. The Commission vide order dated 15.5.2014 in Petition No. 304/TT/2009 had approved the tariff of the generating station for the period 2009-14, taking in consideration the actual expenditure for the period 2009-13 and projected capital expenditure for 2013-14 period. The Commission in the said order had considered the opening capital cost of ₹85477.03 lakh as on 1.4.2009 (after removal of un-discharged liabilities of ₹1844.64 lakh as on 1.4.2009). Aggrieved by the said order dated 15.5.2014, the petitioner filed Review Petition (RP. No. 17/2014) on the ground of (i) Rate of depreciation as per Tariff Regulations 2009; (ii) Adjustment of depreciation recovered at 90% of estimated de-capitalised value for assets de-capitalised under R&M; (iii) Allowance of disallowed Stage-I items of R&M Phase-IV; (iv) Correction of error in double deduction of CW pump de-capitalisation value in tariff; (v) Consideration of de-capitalisation on actual basis at the time of true-up instead of estimated basis @13% of allowed additional capitalisation; and (vi) Consideration of upfront fees paid for loans in interest rate for PNB, LIC-III D4 & LIC-III D1 loans and the same was disposed vide order dated 24.9.2014 admitting with liberty to the petitioner on the issue of consideration of de-capitalisation on actual basis, to consider the same will be considered in the final true up order.

4. The annual fixed charges allowed in order dated 15.5.2014 is as under:



	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	3956.43	4127.66	4292.05	4420.56	4476.56
Interest on Loan	1048.97	893.09	822.51	688.28	437.52
Return on Equity	9457.90	9613.69	9754.96	9951.54	10037.19
Interest on Working Capital	2361.24	2413.22	2472.69	2527.71	2582.64
O&M Expenses	15065.00	15925.20	16836.00	17802.00	18818.60
Cost of Secondary fuel oil	1006.79	1006.79	1009.55	1006.79	1006.79
Total	32896.33	33979.64	35187.76	36396.88	37359.29

5. 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."

6. The petitioner has sought the revision of the annual fixed charges based on the actual additional capital expenditure incurred for the year 2013-14 and actual de-capitalization during the period 2009-14 in accordance with clause (1) of Regulation 6 of the 2009 Tariff Regulations. Accordingly, the capital cost and the annual fixed charges claimed by the petitioner for the said years are as under:

Capital Cost

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	85477.03	90910.29	93798.41	99101.83	100229.85
Add: Additional capital expenditure	5433.27	2888.11	5303.42	1128.02	2403.33
Closing Capital Cost	90910.29	93798.41	99101.83	100229.85	102633.18
Average Capital Cost	88193.66	92354.35	96450.12	99665.84	101431.52

Annual Fixed Charges

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	3968.71	4155.95	4340.26	4484.96	4564.42
Interest on Loan	1049.51	891.89	819.07	721.32	543.14
Return on Equity	9477.13	9657.46	9828.70	10050.05	10409.64
Interest on Working Capital	2361.91	2414.69	2475.16	2531.79	2594.44



O&M Expenses	15065.00	15925.20	16836.00	17802.00	18818.60
Cost of Secondary fuel oil	1006.79	1006.79	1009.55	1006.79	1006.79
Total	32929.05	34051.98	35308.73	36596.91	37937.03

7. In compliance with the directions of the Commission, the petitioner has filed additional information and has served copies on the respondents. The respondents, GRIDCO, have filed their replies and the petitioner has filed its rejoinder to the new replies. We now proceed to examine the claim of the petitioner based on the submissions of the parties and the documents available on record, as discussed in the subsequent paragraphs.

Capital Cost

8. The last proviso to Regulation 7 of the 2009 Tariff Regulations, as amended on 21.6.2011, provides as under:

“Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2009 duly trued up by excluding un-discharged liability, if any, as on 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14, as may be admitted by the Commission, shall form the basis for determination of tariff.”

9. The petitioner has claimed annual fixed charges for the period 2009-14 based on the admitted opening capital cost of ₹87321.67 lakh (as on 1.4.2009) inclusive of un-discharged liabilities of ₹1844.64 lakh in Commission’s order dated 15.5.2014 in Petition No.304/2009. Out of the un-discharged liabilities of ₹1844.64 lakh, an amount of ₹87.26 lakh pertaining to the period prior to 1.4.2004 and ₹1757.38 lakh pertaining to period 2004-09.

10. In terms of the last proviso to Regulation 7 of the 2009 Tariff Regulations, the capital cost as on 1.4.2009, after removal of un-discharged liabilities of ₹1844.64 lakh, works out to ₹85477.03 lakh, on cash basis. Further, discharges of liabilities (during the period 1.4.2009 to 31.3.2014) out of un-discharged liabilities amounting to ₹1844.64 lakh deducted from capital cost as on 1.4.2009 adjust the capital cost on cash basis. The un-discharged liabilities corresponding to additional capital expenditure approved, have been discharged in the period 1.4.2009 to 31.3.2014 and has been



considered as additional capital expenditure during the respective year of discharge for the purpose of tariff in accordance with the 2009 Tariff Regulations.

Actual Additional Capital Expenditure

11. Clause (2) of Regulation 9 of the 2009 Tariff Regulations 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 kilometers of the power station if, the generating company does not intend to meet such expenditure as part of its Corporate Social Responsibility.”

12. The actual additional capital expenditure had been allowed in the order dated 15.5.2014 in Petition No. 304/2009 for the period 2009-13 and projected additional capital expenditure for the period 2013-14. The break-up details of the actual/ projected additional capital expenditure allowed in order dated 15.5.2014 for the period 2009-14 are as under:

Head of Work/ Equipment	Actual additional expenditure				Projected additional expenditure
	2009-10	2010-11	2011-12	2012-13	2013-14
Ash handling /Ash Dyke Works	84.28	8.96	0.00	265.28	0.00
Environment System and change of law	95.49	1.03	0.00	0.00	516.54
R&M PHASE-II WORKS					
SG and Auxiliaries	80.61	59.05	46.88	74.40	0.00
TG and Auxiliaries	0.00	0.00	192.10	445.86	0.86
Electrical and Auxiliaries	35.32	48.20	0.00	0.00	0.00
R&M of Cooling tower ST-I	5.44	0.00	0.00	0.00	0.00
Ladies club and Bal Bhavan building construction and electrification.	0.00	0.00	0.00	0.00	0.00
Control and instrumentation (Adjustment amount against bank guarantee)	0.00	0.00	0.00	(-) 45.78	0.00
Total R&M Works Phase-II	121.37	107.25	238.98	474.48	0.86
Corresponding de-capitalization	(-)15.78	(-)13.94	(-)31.07	(-)61.68	(-)0.11
Net Additional Capitalization allowed (R&M —II)	105.59	93.31	207.91	412.80	0.75
R&M Works Phase-III					
SG and Auxiliaries	103.66	23.49	1993.27	12.19	0.00
TG and Auxiliaries	639.24	572.20	2291.96	273.28	448.62
Water System	0.00	158.70	214.20	286.10	0.00
Electrical and Auxiliaries(₹3.98 lakh Adjustment amount towardxs Stator rewinding Stage-I)	951.10	197.21	90.65	(-)3.98	0.00
Control and Instrumentation	1555.07	55.27	27.03	141.00	0.00
Fire Fighting & Air system	444.39	104.30	0.79	0.00	0.00
Total R&M Phase-III Works	3693.46	1111.17	4617.90	708.59	448.62
Corresponding de-capitalization	(-)480.15	(-)144.45	(-)600.33	(-)92.12	(-)58.32
Net Additional Capitalization allowed (R&M —III)	3213.31	966.72	4017.57	616.51	390.30
R&M of Switchyard	0.00	2888.82	18.99	9.92	0.00
R&M phase IV expenditure					
Additional Capital Expenditure	236.60	71.03	639.13	34.76	319.01
De-capitalization	(-)30.76	(-)2.30	(-)82.99	(-)2.14	(-)36.91
Net expenditure R&M Phase-IV (after de- capitalization)	205.84	68.73	556.14	32.62	282.10
Other capital works	0.00	0.00	0.00	0.00	0.00



Head of Work/ Equipment	Actual additional expenditure				Projected additional expenditure
	2009-10	2010-11	2011-12	2012-13	2013-14
Capital spares	0.00	0.00	0.00	0.00	0.00
MBOA items & other minor works	0.00	0.00	0.00	0.00	0.00
De-capitalization of Capital spares, Switchyard (replacement against R&M), MBOA and other assets	(-) 35.30	(-) 1410.90	(-) 374.64	(-) 446.14	0.00
Scheme for supply of electricity within 5 km radius	0.00	0.00	0.00	0.00	0.00
Exclusions not allowed	0.00	0.00	0.00	0.00	0.00
Total (excluding discharged of liability)	3669.21	2616.67	4425.96	891.00	1189.68
Additional de-capitalisation corresponding to un-discharged liabilities in respect of assets claimed and allowed under R&M schemes	(-) 19.25	(-) 4.80	(-) 5.29	(-) 4.40	0.00
Less: Differential gap of unserviceable asset in the books	0.00	0.00	6.08	0.00	0.00
Add: Discharges of un-discharged liabilities	1237.37	110.75	169.16	241.42	170.91
Net Additional Capital Expenditure considered for the purpose of tariff	4887.33	2722.62	4583.75	1128.03	1360.59

13. The petitioner has not revised the additional capital expenditure for the period 2009-12 allowed in order dated 15.5.2014 in Petition No. 304/2009. However, in terms of the observation of the Commission in order dated 24.9.2014 in Petition No. 17/RP/2014, the petitioner, vide affidavit dated 11.3.2016 has furnished the actual de-capitalization of ₹237.96 lakh in 2009-10, ₹39.96 lakh in 2010-11 and ₹285.27 lakh in 2011-12 respectively in R&M Phase II,III & IV schemes, and estimated de-capitalization of ₹160.35 lakh in 2012-13 and an estimated de-capitalization of ₹61.63 lakh in 2013-14, It has further stated that de-capitalization for 2012-13 and 2013-14 has been considered based on the methodology considered by Commission in the order dated 15.5.2014 i.e (13% of gross value of assets allowed in R&M Ph-II,III,IV). Hence, the actual additional capital expenditure incurred in the year 2013-14 has only been considered in this order along with the actual de-capitalization for the period 2009-14. The break-up details of the actual additional capital expenditure claimed for the years 2009-14 are as under:



S. No.	Head of Work/ Equipment	Regulations under which claimed	Actual additional expenditure claimed					Total
			2009-10	2010-11	2011-12	2012-13	2013-14	
A1	ASH HANDLING SYSTEM							
1	Construction of Ash Pond I / Check dam for ash disposal		0.00	0.00	0.00	265.28	50.80	316.08
2	Electric resistance welding (ERW) pipe for Ash dyke		84.28	8.96	0.00	0.00	0.00	93.25
3	Adjustment against final bill settlement E&C of ash disposal line to mine.	9(2)(iii)	0.00	0.00	0.00	0.00	0.14	0.14
A1	TOTAL ASH HANDLING		84.28	8.96	0.00	265.28	50.94	409.46
A2	ENVIRONMENT SYSTEM AND CHANGE OF LAW							
1	AAQMS	9(2)(ii)	95.49	1.03	0.00	0.00	0.00	96.51
2	Ash Water Recirculation System (pumps, pedestals, routing survey, pipes, pipe laying etc)	9(2)(ii)	0.00	0.00	0.00	0.00	501.79	501.79
3	Retrofitting work of ESP stage-II and Ammonia dozing in ESP Stage-I	9(2)(ii)	0.00	0.00	0.00	0.00	0.00	0.00
4	Execution of conveyance deed for taken over freehold land acquired at the time of takeover.	9(2)(ii)	0.00	0.00	0.00	0.00	7.29	7.29
A2	TOTAL ENVIRONMENT SYSTEM AND CHANGE OF LAW		95.49	1.03	0.00	0.00	509.08	605.59
A3	R&M PHASE-II WORKS							
1	SG and Auxiliaries		80.61	59.05	46.88	74.40	0.00	260.94
2	TG and Auxiliaries		0.00	0.00	192.10	445.86	0.86	638.81
3	Electrical and Auxiliaries		35.32	48.20	0.00	0.00	0.00	83.52
4	R&M of Cooling tower ST-I		5.44	0.00	0.00	0.00	0.00	5.44
5	Control and instrumentation (Adj amount against bank guarantee)		0.00	0.00	0.00	(-)45.78	0.00	-45.78
A3	TOTAL R&M PHASE-II WORKS	Reg 10	121.37	107.25	238.98	474.49	0.86	942.94
A4	R&M PHASE-III WORKS & Switchyard.							
1	SG and Auxiliaries		103.66	23.49	1993.27	12.19	0.00	2132.62
2	TG and Auxiliaries		639.24	572.20	2291.96	273.28	111.76	3888.44
3	Water System		0.00	158.70	214.20	286.10	0.00	659.06
4	Electrical and Auxiliaries (Rs 3.98 lakh Adj amount towards stator rewinding Stage-I)		951.10	197.21	90.65	(-)3.98	0.00	1234.97
5	Control and Instrumentation		1555.07	55.27	27.03	141.00	0.53	1778.89
6	Fire Fighting & Air system		444.39	104.30	0.79	0.00	0.00	549.48
7	R&M of Switchyard		0.00	2888.82	18.99	9.92	0.00	2917.73
A4	TOTAL R&M PHASE-III & Switchyard	Reg 10	3693.47	4000.00	4636.88	718.55	112.29	13161.19
A5	R&M phase IV items	Reg 9(2) with Reg 44 (Power to relax)						
1	Annexure I items (17 No of schemes claimed in R&M Ph-IV in Pet No 212/2010)		87.39	0.00	631.80	0.00	0.00	719.18



2	Annexure II items (other Tools and tackles in Pet No 212/2010)		149.21	71.03	7.33	34.77	350.92	613.25
A5	TOTAL R&M PHASE-IV		236.59	71.03	639.13	34.77	350.92	1332.43
A6	CAPITAL SPARES							
1	SG and Auxiliaries (Mill gear box, discharge valve, Boiler tube, ID fan rotor assembly, Finned Eco coil etc.)		0.00	0.00	0.00	0.00	260.74	260.74
2	TG and Auxiliaries (Scoop tube BFP, CEP impellar, cartridge assembly, fluid coupling, AOP etc)		0.00	0.00	0.00	0.00	231.89	231.89
3	Capital Spares for Ash Handling System & other offsite equipment. (Knife gate valve, Ash slurry pump, Gear reducer assembly etc)		0.00	0.00	0.00	0.00	73.13	73.13
4	C&I Equipment (Battery charger for controller, CPU module, Power supply module, Analog output controller card, Numerical relay. etc)	9(2) with Reg 44 (power to relax)	0.00	0.00	0.00	0.00	154.04	154.04
5	Electrical & aux eqpts (CW motor, KWH meter, Excitation accessories etc)		0.00	0.00	0.00	0.00	91.03	91.03
6	De-capitalisation of capital spares		(-)6.78	(-)214.26	(-)303.94	(-)280.10	(-)330.11	(-)1135.19
A6	TOTAL CAPITAL SPARES		(-)6.78	(-)214.26	(-)303.94	(-)280.10	480.73	(-)324.34
A7	MBOA ITEMS							
	Plant & Machinery		0.00	0.00	0.00	0.00	13.22	13.22
	FURNITURE & FIXTURES		0.00	0.00	0.00	0.00	22.26	22.26
	OTHER OFFICE EQUIPMENTS	9(2) with Reg 44 (power to relax)	0.00	0.00	0.00	0.00	39.99	39.99
	EDP, WP Machines & Satcom Eqpts		0.00	0.00	0.00	0.00	12.88	12.88
	Communication Equipments		0.00	0.00	0.00	0.00	1.29	1.29
	Hospital Equipment		0.00	0.00	0.00	0.00	12.33	12.33
	Laboratory and workshop equip		0.00	0.00	0.00	0.00	6.14	6.14
1	Software		0.00	0.00	0.00	0.00	3.07	3.07
2	De-capitalisation of MBOA items		-4.14	-2.06	-48.91	-14.75	-30.93	-100.79
A6	TOTAL MBOA		-4.14	-2.06	-48.91	-14.75	80.25	10.40
A8	5 km scheme	9(2)(ix)	0.00	0.00	0.00	0.00	1321.26	1321.26
	TOTAL CAPITALISATION		4220.28	3971.95	5162.13	1198.24	2906.32	17458.92
A9	DECAPITALISATION							
A9(i)	De-capitalisation against R&M							
1	Actual De-capitalisation		0.00	0.00	0.00	0.00	(-)563.19	(-)563.19



	against R&M assets allowed in 2009-12 period							
2	Estimated de-capitalisation for R&M Ph-II,III & IV works for 2012-13 & 2013-14 on accrual basis.		0.00	0.00	0.00	(-)160.35	(-)61.63	(-)221.98
	SUB Total		0.00	0.00	0.00	(-)160.35	(-)624.82	(-)785.17
A 9(ii)	Other De-cap in books							
1	De-capitalisation of CW pump		0.00	(-)39.18	0.00	0.00	0.00	(-)39.18
2	De-capitalisation of switchyard		0.00	(-)1155.41	0.00	0.00	0.00	(-)1155.41
3	De-capitalisation of demolished old quarters		(-)24.38	0.00	(-)21.79	0.00	0.00	(-)46.17
4	De-cap of vehicles and construction equipment		0.00	0.00	0.00	(-)151.28	0.00	(-)151.28
5	Unserviceable assets .		0.00	0.00	(-)6.08	0.00	0.00	(-)6.08
	Sub Total		(-)24.38	(-)1194.59	(-)27.87	(-)151.28	0.00	(-)1398.13
A9	Total de-capitalization against R&M and other de-capitalization.		(-)24.38	(-)1194.59	(-)27.87	(-)311.63	(-)624.82	(-)2183.30
A10	Discharge of liability	9(2)(viii)	1237.37	110.75	169.16	241.42	121.83	1880.53
	TOTAL additional capital expenditure claimed		5433.27	2888.11	5303.42	1128.02	2403.33	17156.16

14. It is observed that the total additional capital expenditure of ₹17156.16 lakh has been claimed as actual additional capital expenditure in the period 2009-14 under Phase-II, Phase-III and Phase-IV R&M schemes. This also includes expenditure of ₹ 2917.73 lakh for R&M of Switchyard. The petitioner has claimed total additional capital expenditure Regulation 9 (2) read with Regulation 44 of the 2009 Tariff Regulations (Power to Relax).

15. From the submission of the petitioner it is evident that the claims for additional capital expenditure can be broadly categorized as under:-

- (i) Ash Handling System
- (ii) Environment System under change of law
- (iii) R&M works under Phase-II, Phase-III, R&M of Switchyard and R&M Phase- IV scheme

16. In addition to the above, the petitioner has claimed additional capital expenditure for other capital additions, capital spares and MBOA and minor assets and for expenditure incurred on implementation of the scheme for supplying power to villages within 5 km. radius of the generating



station as per guidelines of Ministry of Power, Government of India. We now examine the claims of the petitioner for additional capital expenditure as under.

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

17. The petitioner has claimed actual additional capital expenditure of ₹50.94 lakh (₹50.80 lakh towards construction of Ash Pond and ₹0.14 lakh towards adjustment against final bill settlement of E&C of ash disposal line to mine) in 2013-14 in respect of works originally approved under R&M Phase III in order dated 15.5.2014 in Petition No. 304/2009. Since the expenditure incurred by the petitioner form part of the approved scheme under R&M Phase-III and as the said work is necessary for the normal operation during the extended life of the of the generating station, we allow the capitalization of the said expenditure under Regulation 9(2)(iii) of the 2009 Tariff Regulations.

Environment System Regulation 9(2) (ii)

18. The petitioner has claimed actual additional capital expenditure of ₹501.79 lakh in 2013-14 towards Ash Water Recirculation System (pumps, pedestals, routing survey, pipes, pipe laying etc) as against the projected capital expenditure of ₹516.54 lakh in 2013-14 allowed in order dated 15.5.2014 in Petition No. 304/2009, on the ground that the same is in compliance with the directions of the Orissa State Pollution Control Board and ₹7.29 lakh towards execution of conveyance deed towards freehold land acquired at the time of takeover of the generating station by the petitioner. The petitioner while pointing out that the scheme was admitted by the Commission vide order dated 15.5.2014 in Petition No. 304/2009 for ₹516.54 lakh in 2013-14 has submitted that the actual capitalisation is ₹501.79 lakh in 2013-14 based on actual consumption of material. The petitioner has further submitted that an amount of ₹180 lakh for reservoir for storage of re-circulated water in Ash Water Recirculation System (AWRS) system has been planned for the period 2014-19 and has accordingly prayed that the same be allowed based on actual capital expenditure incurred. As regards the expenditure of ₹7.29 lakh for execution of conveyance deed towards taken over freehold land acquired at the time of takeover, the petitioner has submitted that the District Sub-



Registrar, Angul had directed the petitioner vide letter No. 157 dated 12.3.2013 for depositing Stamp duty and Registration charges for 164.47 acres of private land acquired by the petitioner from OSEB at the time of takeover of station. An amount of ₹7.29 lakh has been paid for 109.18 acres of land in 2013-14 and balance 54.97 acres was already mutated in favour of the petitioner. The petitioner has therefore prayed that the expenditure under Regulation 9(2)(ii) of 2009 Tariff Regulations may be allowed.

19. As regards to `Retrofitting work of ESP stage-II and Ammonia dozing in ESP Stage-I`, the petitioner has submitted that the works have started for meeting prescribed emission standard to meet the environment norms as per SPCB action plan for abatement of pollution in critically polluted industrial cluster Angul and CPCB directives dated 3.12.2012. Retrofitting of ESP stage-II is being carried out and work has been awarded at an approx amount of ₹36 Cr. The work is in progress and an expenditure of ₹15.22 Cr incurred as on 31.3.2014 is in CWIP against the retrofitting of ESP stage-II and shall be capitalised in 2014-16. The Centralised Ammonia Flue Gas Conditioning System (CAFGC) is planned for ESP stage-I units at an approx amount of ₹4 Cr and the work for the same was awarded on 09.05.2014. The same is expected to be capitalised in 2014-16. The petitioner has prayed to allow the same upon its capitalisation.

20. We have considered the submissions of the petitioner. As stated, the actual capital expenditure of ₹501.79 lakh towards Ash Water Recirculation System in 2013-14 is allowed in view of the compliance with the directions of the Orissa State Pollution Control Board. The expenditure of ₹7.29 lakh in 2013-14 towards execution of conveyance deed is allowed in view of the direction of the District sub-registrar Angul for Paying Stamp duty and registration charges for 164.47 acres of private land acquired by the petitioner from OSEB.

21. As regards the additional capital expenditure of ₹180 lakh on account of Reservoir for storage of re-circulated water in AWRS system planned for the period 2014-19 and the expenditure towards



`Retrofitting work of ESP stage-II and Ammonia dozing in ESP Stage-I` to be capitalized during the period 2014-19 period, the same will be considered on merit at the time of determination of tariff of the generating station for 2014-19 in accordance with the law.

R&M works under Phase-II, Phase-III, Switchyard R&M and Phase-IV- Power to relax

22. The petitioner has claimed additional capital expenditure of ₹0.86 lakh in 2013-14 for works under R&M Phase-II, ₹112.29 lakh in 2013-14 for works under R&M Phase-III, ₹0.00 lakh for Switchyard R&M and ₹350.92 lakh in 2013-14 for works under R&M Phase-IV under Regulation 9(2) read with Regulation 44 of the 2009 Tariff Regulations against the additional capital expenditure cost of ₹0.86 lakh during 2013-14 for works under R&M Phase-II, ₹448.62 lakh for works under R&M Phase-III in 2013-14, ₹0.00 lakh for Switchyard R&M and ₹319.01 lakh for works under R&M Phase-IV in 2013-14 approved vide order dated 15.5.2014 in Petition No. 304/2009.

23. As regards R&M Phase-II expenditure, the petitioner has submitted that the same was already approved vide order dated 15.5.2014 in petition no. 304/2009. In regards of expenditure of ₹112.29 lakh for works under R&M Phase-III in 2013-14, the petitioner has submitted that the projected capital expenditure of ₹448.62 lakh in TG & Auxiliaries in R&M Ph-III in 2013-14 was approved vide order dated 15.5.2014 in Petition No. 304/2009. The petitioner stated that the actual capital expenditure for TG & Auxiliaries in 2013-14 is ₹111.76 lakh and the balance amount is towards replacement of extraction and CRH NRV. It has also submitted that the material is received at site and shall be capitalised in 2014-15 at the time of overhaul. Accordingly, the petitioner has prayed to allow the same upon capitalisation.

24. The petitioner has further submitted that the works of Refurbishment of MP & LP rotor blades of stage-II work part of TG & Auxiliaries work of R&M Ph-III is planned during 2014-19 to be taken at the time of capital overhauling done once in 4 years. The petitioner has further submitted that an expenditure of ₹0.53 lakh in 2013-14 is towards balance payment of the approved DDCMIS



package of Stage-II units under R&M Phase-III for Control and instrumentation in 2009-10 vide order dated 15.5.2014 in Petition No. 304/2009. It has submitted that the amount was not paid to party due to some technical non compliance in erection of AC package, which is part of DDCMIS package and now after compliance of same the amount has been released. Accordingly, the petitioner has prayed to allow the same. As regards, expenditure of ₹350.92 lakh towards works under R&M Phase-IV in 2013-14, the petitioner has submitted that the works were approved for ₹319 lakh vide order dated 15.5.2014 in Petition No. 304/2009 and the variation is due to difference in estimated and actual cost.

25. The respondent GRIDCO has submitted that in regards to the R&M works of the generating station, the petitioner is trying to mislead by submitting extraneous interpretations of the respondents stand on R&M works and the petitioner is silent on the observations of the Commission vide order dated 7.6.2013 as regards the extension of life of Stage-II units by 15 years. The respondent has further submitted that the petitioner has not filed any review petition challenging the said order. The respondent has submitted that Phase-IV R&M works are essential and inevitable for sustainable performance of Stage-II Units, however the petitioner has disclosed the phases of R&M works in the generating station continuously, and there appears to be no end to it. The respondent has submitted that in order dated 7.6.2013 in Petition No. 212/2010, the life extension of stage-II units was considered only after considering all the information, supporting documents & analysis submitted by the petitioner. The respondent submitted that the useful life of Stage-II units of the petitioner may be extended by another 15 years as per order dated 7.6.2013. In response, the petitioner has clarified that it has been billing the respondent as per tariff order issued by the Commission in respect of this generating station. The petitioner has stated that the respondent has reaped the full benefits of R&M by way of higher generation and operating norms specified by the Commission from time to time as compared to the performance at the time of takeover from OSEB. The petitioner has further submitted that the order for in-principle approval of R&M activities beyond 2014 was issued by Commission on 7.6.2013. After the issuance of the order, the petitioner took a comprehensive view



on carrying out the R&M Phase-IV further. Based on the above, the petitioner has decided not to carry out left over R&M schemes (R&M Phase-IV) beyond 2014. Accordingly, the petitioner has submitted that the contentions of the respondent are devoid of merit and may be rejected.

26. We have examined the submissions of the parties. The Commission vide its order dated 19.6.2002 in Petition No. 62/2000 had extended the life of the generating station up to the year 2021, taking into consideration the R&M works under Phase-I, Phase-II & Phase-III schemes and the benefits of operational performance and efficiency through improvement in operational norms have been passed on to the respondent. As regards the admissibility of capital expenditure under R&M Phase-II, Phase-III, Switchyard and Phase-IV schemes for the period 2009-14, the same have been considered in order dated 15.5.2014 in Petition No. 304/2009. It is observed that the actual capital expenditure under R&M Phase-II, Phase-III, Switchyard and Phase-IV for the period 2009-13 and project expenditure for 2013-14 was approved vide order dated 15.5.2014 in petition no. 304/2009. As regards the actual expenditure during 2013-14, for works under R&M phase-II, there is minor variation with the approved cost in order dated 15.5.2014 in petition no. 304/2009, based on the actual and same is allowed. As regards of expenditure for works under R&M Phase-III, the the actual capital expenditure for TG & Auxiliaries in 2013-14 is ₹111.76 lakh and the balance amount is towards replacement of extraction and CRH NRV and shall be capitalised in 2014-15 at the time of overhaul. As regards, the works of Refurbishment of MP & LP rotor blades of stage-II work part of TG & Auxiliaries work of R&M Ph-III, the same is planned in 2014-19 period. We are of the considered view that the capitalization of the expenditure for the period 2014-19 shall be considered on merit, based on the submissions of the petitioner at the time of determination of tariff of the period 2014-19 in terms of 2014 Tariff regulations and as per law.

27. Based on the above discussion, the actual capital expenditure for ₹0.86 lakh towards works under R&M Phase-II, ₹112.29 lakh towards works under R&M Phase-III, ₹0.00 lakh for Switchyard



R&M and ₹350.92 lakh towards for works under R&M Phase-IV in the year 2013-14 are allowed under Regulation 9(2) with Regulation 44 of the 2009 Tariff Regulations.

Capital Spares

28. The petitioner has claimed actual expenditure of ₹810.84 lakh towards capitalization of capital spares in 2013-14 and has submitted that the generation station being old is operating under relaxed norms and extended life and no Compensation Allowance and Special Allowance has been provided. It has also submitted that the Commission vide its order dated 3.2.2009 in Petition No. 31/2008 (tariff charges for the period 2004-07) had allowed the capitalization of spares for ₹6.80 crores against the de-capitalization of ₹12.97 crores. The petitioner has further submitted that the balance value of spares worth of ₹ 6.16 crores shall be purchased and capitalised in subsequent years. It has stated that the Commission had further considered the capitalisation of capital spares in 2007-09. The petitioner has accordingly prayed to consider the capitalisation of capital spares in 2013-14 under Regulation 44, as the total de-capitalization of ₹1135.19 lakh during the period 2009-14 is also claimed.

29. It is observed that the amount of ₹2795.64 lakh towards capitalization of capital spares during the period from 2009-10 to 2012-13 was not allowed in order dated 15.5.2014 in petition no. 304/2009 with remarks as under:

“It is observed Commission by its orders had allowed expenditure of ₹1100 lakh during 1995-2000 and ₹1919 lakh during 2002-04 on this count. Thus, the total initial spares capitalized after takeover of the generating station is ₹3019 lakh. The total capitalization of expenditure for R&M including R&M during 2009-14 works out to around ₹70000 lakh. Therefore, the initial spares capitalized in respect of the generating station works out to more than 2.5% of total R&M expenses. In view of this, the claim for capitalization of capital spares has not been allowed.”

30. In terms of the above discussions, Since the spares capitalized is more that 2.5% of the total R&M expenditure, the capitalization of spares in 2013-14 is not allowed.



MBOA Items

31. The petitioner has claimed actual capital expenditure of ₹111.19 lakh in 2013-14 under Regulation 9(2) read with Regulation 44 of the 2009 Tariff Regulations. Since the provision of Regulation 9(2) do not permit the expenditure of MBOA assets and we find no justification to relax the provisions of Regulation 9(2) of the 2009 Tariff Regulations. Accordingly, the prayer of the petitioner is rejected.

Expenditure for creating infrastructure for supply of electricity with in 5 km radius

32. The petitioner has claimed a projected additional capital expenditure of ₹1321.26 lakh in 2013-14 for creation of infrastructure for supply of electricity within 5 km radius. The scheme had been withdrawn vide Ministry of Power, GOI notification dated 25.3.2013, the expenditure was not allowed in some of the generating stations of the petitioner by the Commission in its orders determining tariff. The petitioner has submitted that the Ministry of Power, GOI by letter dated 8.3.2014 had granted exemption in respect of 8 ongoing projects around the generating stations of the petitioner, including this generating station, under the erstwhile scheme and has accordingly conveyed its approval for capitalization of such expenditure as per provisions of the said scheme, subject to orders of this Commission. In terms of this, the petitioner vide affidavit dated 28.3.2016 has submitted the handing over/taking over certificate by CESU and has claimed the capitalization of expenditure of ₹1321.26 lakh during 2013-14 for the works completed for 52 villages under the said scheme. The petitioner has claimed additional capital expenditure of ₹1321.26 lakh in 2013-14 and has submitted that further there is a un-discharged liability of ₹153.94 lakh as on 31.3.2014 corresponding to final payment of 5 km scheme, out of which ₹149 lakh have been discharged through payment in 2014-15 and the balance amount of ₹4.94 lakh is pending. The petitioner has also submitted that as per order of the Commission dated 15.5.2014, the actual capitalisation is to be considered at the time of truing-up. Accordingly, it has submitted that after completion of 5 km infrastructure work for the generating station, the same has been considered for capitalisation. The



petitioner has also submitted that all the 52 villages infrastructure is completed and handed over to the State discoms. The petitioner has accordingly submitted that the expenditure may be allowed.

33. The respondent, GRIDCO has submitted that the scheme has been withdrawn and that the claim of the said expenditure under Regulation 9(2) is within the discretionary powers of the Commission. It has also submitted that the funds may be met by the petitioner under CSR and accordingly the claim of the petitioner may be rejected. In response, the petitioner in its rejoinder has reiterated that the infrastructure work of the scheme has been completed for all the 52 villages and handed over to the State Discom and certificate regarding the same has been enclosed. The petitioner has also stated that the scheme has been carried out in terms of the directions of the MOP, GOI and is in line with the provision of Regulation 9(2)(ix) of the 2009 tariff Regulations. Accordingly, the respondent has prayed that the said expenditure may be allowed after prudence check.

34. The matter has been examined. The scheme for supply of electricity within 5 KM radius around Central Power Plants was withdrawn vide MoP, GoI notification dated 25.3.2013. However, it is noticed that the Ministry of Power, GOI by letter dated 8.3.2014 has granted exemption in respect of 8 ongoing projects around the generating stations of the petitioner, including this generating station, under the erstwhile scheme and has conveyed the approval for capitalization of expenditure for this generating station also as per provisions of the said scheme, subject to orders of this Commission. It is noticed that the petitioner had claimed projected expenditure of ₹1166 lakh in 2013-14 in Petition No. 304/2009 and the Commission in its order dated 15.5.2014 had observed as under:

“31.... In view of this, the expenditure claimed under this head has not been considered in this order. In terms of this, the petitioner vide its affidavit dated 12.3.2014 has filed the documents and has prayed for capitalization of expenditure of `1166 lakh during 2013-14 as majority of the works under the said scheme is likely to be completed during the year 2013-14. The submissions have been taken on record. However, the claim for capitalization of the said expenditure will be considered at the time of truing up of tariff of the generating station for 2009-14 in terms of Regulation 6 of the 2009 Tariff Regulations.”



35. In terms of the liberty granted, the petitioner has claimed the actual additional capital expenditure of ₹1321.26 lakh in 2013-14 and has prayed that the same may be allowed. The petitioner has submitted that all the 52 villages infrastructure has been completed and handed over to the Central Electricity Supply Utility of Odisha (CESU), Talcher Electrical Division and the certificate evidencing the handing over of the assets have been furnished. 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 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”

36. In line with the above decision of the Commission 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 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 July, 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 56 of this order, till the date of capitalization of asset. 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.

De-capitalization of R&M works

37. In response to the direction of the Commission in order dated 24.9.2015 in Petition No. 17/RP/2014, the petitioner, vide affidavit dated 11.3.2016 has submitted that the actual de-



capitalization of ₹237.97 lakh in 2009-10 , ₹39.96 lakh in 2010-11 and ₹285.27 lakh in 2011-12 respectively against R&M Phase II,III &IV schemes, and estimated de-capitalization of ₹160.35 lakh for 2012-13 (as considered by the Commission) and estimated de-capitalization of ₹61.63 lakh in 2013-14, and has submitted that de-capitalization in the years 2012-13 and 2013-14 has been estimated based on methodology considered by Commission in order dated 15.5.2014 i.e @13% if gross value of assets allowed in R&M Ph-II,III,IV.

38. In response to the direction of the Commission vide ROP of the hearing dated 11.7.2016, the petitioner has further submitted that the generating station being old taken over by the petitioner, the capitalization value of most of the old assets is not available, and hence the assessment of de-capitalization of such assets difficult. It has stated that the de-capitalization value is finalized based on multi-department technical committee re-commendation, which takes time. The petitioner has stated that the actual de-capitalization for assets allowed in R&M for 2012-13 and 2013-14 is in process of finalization and will be carried out in books of accounts during 2014-19 based on re-commendation of technical committee. Thus the petitioner has submitted that in absence of actual de-capitalization for 2012-13 and 2013-14, the estimated de-capitalization for those replacement works only may be considered where actual de-capitalization will be carried out, as other works in the years 2012-13 and 2013-14 involve new facilities/procurement where no de-capitalization is envisaged. Accordingly, the de-capitalization of ₹36.68 lakh and ₹51.77 lakh for 2012-13 has been claimed considering the flat @13% for all the items.

39. It is observed that the petitioner has claimed the actual de-capitalization for the period 2009-12 in the year 2013-14. The petitioner has also not provided the actual de-capitalization amount for the years 2012-13 and 2013-14 in respect of the R&M activities, considering the fact that the audit should have been completed in 2015-16. The actual de-capitalization for the period 2009-12 is capitalized and adjusted in the respective years i.e ₹237.97 lakh in 2009-10, ₹39.96 lakh in 2010-11, ₹285.27 lakh in 2011-12 and hence the net additional capitalization for the period 2009-12 changes



-with respect to the changes in the actual de-capitalization. Further, in absence of the actual figures of de-capitalization, and in absence of any justification/details furnished by the petitioner, the de-capitalization for R&M activities for 2012-13 has been considered as for the methodology approved in order dated 15.5.2014 in Petition No. 304/2009 and the de-capitalization for 2013-14 has been considered @ 13% of the actual additional capitalization allowed for the period. According, the de-capitalization amount of ₹160.35 lakh and ₹61.63 lakh for the year 2012-13 and 2013-14 respectively are allowed.

De-capitalization of Assets

40. The petitioner has claimed de-capitalization of ₹35.30 lakh, ₹1410.90 lakh, ₹380.72 lakh, ₹446.14 lakh and ₹361.05 lakh for the year 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively towards de-capitalization of Capital spares, MBOA items, CW pumps, Switchyard, demolished old quarters, vehicles, construction equipments along with additional expenditure. It is observed that the de-capitalization of ₹35.30 lakh, ₹1410.90 lakh, ₹374.64 lakh, ₹446.14 lakh for 2009-10, 2010-11, 2011-12, 2012-13 respectively were approved vide order dated 15.5.2014. The petitioner has submitted the unserviceable assets of amount ₹6.08 lakh removed from the tariff vide order dated 15.05.2014 has been added to the de-capitalization amount during 2011-12. Accordingly, the de-capitalization of assets, as claimed, have been allowed.

41. Based on the above discussions, the additional capital expenditure allowed including expenditure on R&M works, are summarized as under:

Sl. No.	Head of Work/ Equipment	Actual additional capital expenditure					Total
		2009-10	2010-11	2011-12	2012-13	2013-14	
1	Ash handling /Ash Dyke Works	84.28	8.96	0.00	265.28	50.94	409.46
2	Environment System and change of law	95.49	1.03	0.00	0.00	509.08	605.60
3	R&M PHASE-II WORKS						
(i)	SG and Auxiliaries	80.61	59.05	46.88	74.40	0.00	260.94
(ii)	TG and Auxiliaries	0.00	0.00	192.10	445.86	0.86	638.81
(iii)	Electrical and Auxiliaries	35.32	48.20	0.00	0.00	0.00	83.52
(iv)	R&M of Cooling tower ST-I	5.44	0.00	0.00	0.00	0.00	5.44



(v)	Ladies club and Bal Bhavan building construction and electrification.	0.00	0.00	0.00	0.00	0.00	0.00
(vi)	Control and instrumentation (Adjustment amount against bank guarantee)	0.00	0.00	0.00	(-)45.78	0.00	(-)45.78
	Total R&M Works Phase-II	121.37	107.25	238.98	474.48	0.86	942.93
4	R&M Works Phase-III						
(i)	SG and Auxiliaries	103.66	23.49	1993.27	12.19	0.00	2132.61
(ii)	TG and Auxiliaries	639.24	572.20	2291.96	273.28	111.76	3888.44
(iii)	Water System	0.00	158.70	214.20	286.10	0.00	659.00
(iv)	Electrical and Auxiliaries(₹3.98 lakh adjustment amount towards Stator rewinding Stage-I)	951.10	197.21	90.65	(-)3.98	0.00	1234.98
(v)	Control and Instrumentation	1555.07	55.27	27.03	141.00	0.53	1778.90
(vi)	Fire Fighting & Air system	444.39	104.30	0.79	0.00	0.00	549.48
	Total R&M Phase-III Works	3693.46	1111.17	4617.90	708.59	112.29	10243.41
5	R&M of Switchyard	0.00	2888.82	18.99	9.92	0.00	2917.73
6	R&M phase IV expenditure	236.60	71.03	639.13	34.77	350.92	1332.45
7	Total R&M Phase-II,III, switchyard and IV)	4231.20	4188.26	5515.00	1493.04	1024.09	16451.58
8	Total of de-capitalization (R&M Ph-II, III, IV)	(-)237.97	(-)39.96	(-)285.27	(-)160.35	(-)61.63	(-)785.17
9	Total R&M Phase II,III & Switchyard & IV (Net Additional Capitalization)	3993.24	4148.30	5229.72	1332.69	962.46	15666.41
10	Other capital works	0.00	0.00	0.00	0.00	0.00	0.00
11	Capital spares	0.00	0.00	0.00	0.00	0.00	0.00
12	MBOA items & other minor works	0.00	0.00	0.00	0.00	0.00	0.00
13	De-capitalization of Capital spares, Switchyard, MBOA and other assets	(-)35.30	(-)1410.90	(-)380.72	(-)446.14	(-)361.05	(-)2634.10
14	Scheme for supply of electricity within 5 km radius	0.00	0.00	0.00	0.00	0.00	0.00
17	Total Additional Expenditure (excluding discharged of liability)	3957.94	2737.40	4849.01	886.55	601.41	13032.31

42. The reconciliation of the actual additional capital expenditure for the period 2013-14 with books of accounts as submitted by the petitioner is as under:

		(₹ in lakh)
		2013-14
a	Opening balance of the period	105028.52
b	Closing balance of the period	107838.05
c	Additional capitalisation as per audited account (b -a)	2809.53
i	Additional capitalisation/de-capitalization claimed as per Form-9	2403.33
li	Less: discharge of past liability claimed	121.83
lii	Less: Adjustment of estimated de-capitalization against R&M schemes claimed in 2013014	(-)61.63
iv	Additional capitalisation / De-capitalisation claimed cash basis (i-ii)	2343.13
v	Add: Un-discharged liabilities in Additional capitalisation	210.24
A	Total Additional capitalisation in 2013-14 claimed on gross basis (accrual) (iii+iv)	2553.33



		2013-14
	Exclusion items	
	De-capitalisation of MBOA items & Capital Spared not part of capital cost	(-) 78.85
	R&M Phase-IV disallowed works	38.10
	Inter-unit transfer	0.74
	ERV Loan	297.83
	Liability reversal	(-) 1.62
B	Total exclusions	256.20
C	Additional Capital Expenditure (A+B)	2809.53

Exclusions

43. It is noticed 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 on account of exclusion of certain expenditure and un-discharged liabilities for the purpose of tariff. The summary of exclusions claimed as per books of accounts is examined as under:

	<i>(₹ in lakh)</i>
	2013-14
De-capitalisation of spares	(-) 69.73
De-capitalisation of MBOA items	(-) 9.12
R&M Phase-IV disallowed works	38.10
Inter-unit transfer	0.74
ERV Loan	297.83
Liability reversal	(-) 1.62
Total exclusions	256.20

De- capitalization of Capital Spares

44. The petitioner has de-capitalized in books of accounts capital spares amounting to (-) ₹9.95 lakh in 2009-10, (-) ₹46.59 lakh in 2010-11, (-) ₹12.22 lakh in 2011-12-10 and (-) ₹0.97 lakh in 2012-13 on account of consumption of these spares. The exclusion sought on de-capitalization of spares has been examined and it is noticed that these spares form part of the capital cost of the generating station and these were disallowed by vide order dated 15.5.2014 in 304/2009. Hence, exclusion of de-capitalization of these spares is in order and is accordingly allowed.



De-capitalization of MBOA items

45. The petitioner has de-capitalized MBOA items such as furniture & fixtures, office equipments, EDP & other equipments, hospital equipments in books of accounts amounting to (-) ₹9.12 lakh for the period 2009-13 on account of these items becoming unserviceable. The exclusions sought on de-capitalization of MBOA has been examined and it is noticed that the amount indicated by the petitioner are for de-capitalization of the MBOA assets disallowed vide order dated 3.2.2009 in Petition No. 31/2008 for the period 2004-07, vide order dated 3.9.2012 in Petition No. 184/2009 and vide order dated 15.5.2014 in Petition No. 304/2009. Hence, the exclusion of MBOA items amounting to (-) ₹9.12 lakh is allowed.

Loan ERV

46. The petitioner has claimed the exclusion amount of ₹297.83 lakh on account of Loan ERV. The petitioner has claimed an amount of ₹296.36 lakh on account of Loan ERV for Plant & Machinery and ₹1.47 lakh on account of Loan ERV for Main Plant Building. As per 2009 Tariff Regulations ERV on Loan repayment & interest payment is being directly billed to beneficiary on year to year basis. Hence, the same is excluded from the capital cost and allowed under exclusions.

R&M Phase-IV disallowed works

47. The petitioner has sought the exclusion of ₹38.10 lakh in 2013-14 against the disallowed works of R&M phase-IV. It is observed that these works were disallowed vide order dated 15.5.2014 in Petition No. 304/2009. Hence, the same is allowed under exclusions.

Reversal of liability

48. The petitioner has sought the exclusion of (-) ₹1.62 lakh in 2013-14 against the reversal of liability. In view of the submission of the petitioner that tariff is on cash basis, the reversal of liability is allowed.



49. Based on the above, the exclusion of ₹256.20 lakh as claimed by the petitioner is allowed.

50. Accordingly, the actual additional capital expenditure allowed for the period 2012-14 is summarised as under:

(₹ in lakh)							
S.No	Head of Work/ Equipment	Actual additional expenditure					Total
		2009-10	2010-11	2011-12	2012-13	2013-14	
1	Ash handling /Ash Dyke Works	84.28	8.96	0.00	265.28	50.94	409.46
2	Environment System and Change in law	95.49	1.03	0.00	0.00	509.08	605.60
3	R&M Phase-II	121.37	107.25	238.98	474.48	0.86	942.93
4	R&M-Phase-III	3693.46	1111.17	4617.90	708.59	112.29	10243.41
5	R&M (Switchyard)	0.00	2888.82	18.99	9.92	0.00	2917.73
6	R&M Phase-IV	236.60	71.03	639.13	34.77	350.92	1332.45
7	Other capital works	0.00	0.00	0.00	0.00	0.00	0.00
8	Capital spares	0.00	0.00	0.00	0.00	0.00	0.00
9	MBOA items & Other minor works	0.00	0.00	0.00	0.00	0.00	0.00
	De-capitalization of Capital spares, Switchyard (replacement against R&M), MBOA and other assets	(-)273.26	(-)1450.86	(-)665.99	(-)606.49	(-)422.68	(-)3419.27
10	Scheme for supply of electricity within 5 km radius	0.00	0.00	0.00	0.00	0.00	0.00
11	Exclusions not allowed	0.00	0.00	0.00	0.00	0.00	0.00
11	Total	3957.94	2737.40	4849.01	886.55	601.41	13032.31

51. Considering the discharges of liabilities during the period 2009-14, the net additional capital expenditure allowed is as under:

(₹ in lakh)					
	2009-10	2010-11	2011-12	2012-13	2013-14
Admitted additional capital expenditure allowed	3957.94	2737.40	4849.01	886.55	601.41
Add: Discharges of liabilities	1237.37	110.75	169.16	241.42	121.83
Total additional capital expenditure allowed	5195.31	2848.15	5018.17	1127.97	723.24

52. 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	85477.03	90672.34	93520.48	98538.64	99666.67
Add: Additional capital expenditure	5195.31	2848.15	5018.16	1128.03	1645.26
Closing Capital Cost	90672.34	93520.48	98538.64	99666.67	101311.93
Average Capital Cost	88074.68	92096.41	96029.56	99102.66	100489.30

Debt-Equity Ratio

53. The gross loan and equity of ₹47204.97 lakh and ₹40116.70 lakh respectively as allowed in order dated 23.10.2013 and order dated 15.5.2014 in Petition No. 304/2009 has been considered as gross loan and equity as on 1.4.2009. However, un-discharged liabilities amounting to ₹1844.64 lakh included in the capital cost as on 1.4.2009 has been adjusted to debt and equity in the ratio of 50:50 for liabilities pertaining to period prior to 1.4.2004 and 70:30 for liabilities added thereafter. As such, the gross normative loan and equity as on 1.4.2009 is revised to ₹45931.17 lakh and ₹39545.86 lakh respectively. Further, the admitted additional expenditure has been allocated in the debt and equity ratio of 70:30.

Return on Equity

54. The return on equity has been worked out after grossing up of the base rate (of RoE) with the actual tax rate applicable to the petitioner for the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14, respectively as considered in order dated 15.5.2014 in Petition No. 304/2009, on the normative equity after accounting for actual additional capital expenditure. Accordingly, return on equity is worked out as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Notional Equity- Opening	39545.86	41104.45	41958.89	43464.34	43802.75
Addition of Equity due to additional capital expenditure	1558.59	854.44	1505.45	338.41	216.97
Normative Equity-Closing	41104.45	41958.89	43464.34	43802.75	44019.71
Average Normative Equity	40325.15	41531.67	42711.62	43633.54	43911.22
Return on Equity (Base	15.500	15.500	15.500	15.500	15.500



Rate)					
Tax Rate for the year	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) annualised	9468.75	9639.50	9799.75	10011.28	10310.79

Interest on loan

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

(a) Gross normative loan amounting to ₹45931.17 lakh has been considered as on 1.4.2009.

(b) Cumulative repayment as on 31.3.2009 works out to ₹31863.85 lakh as per order dated 23.10.2013 and as per order dated 15.5.2014 in Petition No. 304/2009, the same 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 tariff 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 ₹31309.15 lakh. Accordingly the net normative loan as on 1.4.2009 works out to ₹14622.02 lakh.

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

(d) The weighted average rate of interest as considered in order dated 15.5.2014 in Petition No. 304/2009, has been considered.

56. The necessary calculations for interest on loan are given as under:



(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Gross opening loan	43744.09	45931.17	49567.89	51561.59	55074.31
Cumulative repayment of loan upto previous year	29362.62	31309.16	35568.09	38718.04	42576.38
Net Loan Opening	14381.47	14622.02	13999.79	12843.56	12497.93
Addition due to additional capital expenditure	3636.71	1993.71	3512.72	789.58	506.27
Repayment of loan during the year	3963.36	4144.34	4321.33	4459.62	4501.27
Less: Repayment adjustment on account of de-capitalization	191.28	1015.60	466.19	424.54	295.87
Add: Repayment adjustment on account of discharges corresponding to un-discharged liabilities deducted as on 1.4.2009	486.86	21.21	3.21	37.15	3.82
Net Repayment	4258.94	3149.94	3858.34	4072.22	4209.22
Net Loan Closing	13999.79	12843.56	12497.93	9215.29	5512.33
Average Loan	14310.91	13421.68	12670.74	10856.61	7363.81
Weighted Average Rate of Interest of loan	7.3350%	6.6507%	6.4778%	6.6739%	6.7419%
Interest on Loan	1049.70	892.64	820.79	724.56	496.46

Depreciation

57. The cumulative depreciation as on 31.3.2009 as per order dated 15.5.2014 in Petition No. 304/2009 works out to ₹38907.10 lakh. Proportionate adjustment has been made to this cumulative depreciation on account of the un-discharged liabilities deducted as on 1.4.2009. Accordingly, the revised cumulative depreciation as on 1.4.2009 works out to ₹38756.07 lakh. The value of freehold land considered in order dated 15.5.2014 in Petition No. 304/2009 is ₹2597.63 lakh and subsequent discharges/reversal and the same has been considered for the purpose of calculating the depreciable value. The cumulative depreciation has been adjusted for actual de-capitalization considered during the period 2009-14. The depreciation rate of 4.5%, as per order dated 15.5.2014 in Petition No. 304/2009, has been considered for the remaining useful life. Necessary calculations in support of depreciation are as under:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	85477.03	90672.33	93520.48	98538.65	99666.62
Add: Additional Capital Expenditure	5195.31	2848.15	5018.17	1127.97	723.24



Closing Capital Cost	90672.33	93520.48	98538.65	99666.62	100389.87
Average Capital Cost	88074.68	92096.41	96029.57	99102.64	100028.24
Rate of Depreciation	4.5000%	4.5000%	4.5000%	4.5000%	4.5000%
Depreciable value (excluding land) @ 90%	77778.39	80877.17	84387.31	87113.25	87930.52
Remaining useful life at the beginning of the year	12.00	11.00	10.00	9.00	8.00
Balance depreciable Value	39022.32	38318.67	38826.48	37680.95	34357.56
Depreciation (annualized)	3963.36	4144.34	4321.33	4459.62	4501.27
Cumulative depreciation at the end	42719.44	46702.83	49882.16	53891.91	58074.23
Less: Cumulative Depreciation adjustment due to de-capitalization of assets considered for the purpose of tariff	224.33	1169.08	454.84	365.64	352.34
Add: Cumulative Depreciation adjustment on account of discharges out of un-discharged liabilities deducted as on 1.4.2009	63.40	27.07	4.96	46.69	5.26
Cumulative depreciation (at the end of the period)	42558.50	45560.83	49432.29	53572.96	57727.16

O&M Expenses

58. O&M expenses as considered in order dated 15.5.2014 in Petition No. 304/2009 has been considered as under:

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
15065.00	15925.20	16836.00	17802.00	18818.60

Normative Annual Plant Availability Factor (NAPAF)

59. The NAPAF of 82% as considered in order dated 15.5.2014 in Petition No. 304/2009 has been considered for the purpose of tariff.

Interest on Working Capital

60. Regulation 18(1)(a) of the 2009 Tariff Regulations provides that the working capital for coal based generating stations shall cover:



- (i) Cost of coal for 1.5 months for pit-head generating stations and two months for non-pithead 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 liquid 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 charge and energy charge for sale of electricity calculated on normative plant availability factor; and
- (v) O&M expenses for one month.

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

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

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

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

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

Fuel Component in working capital

62. Fuel component in the working capital as considered in order dated 15.5.2014 in Petition No. 304/2009 has been considered as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of Coal – 1.5 months	4009.93	4009.93	4020.92	4009.93	4009.93
Cost of secondary fuel oil – two months	167.80	167.80	168.26	167.80	167.80

Maintenance spares

63. Maintenance spares as allowed in order dated 15.5.2014 in Petition No. 304/2009 as stated below, has been considered as under:



(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
3013.00	3185.04	3367.20	3560.40	3763.72

Receivables

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

(₹ in lakh)					
	2009-10	2010-11	2011-12	2012-13	2013-14
Fixed Charges (two months)	5485.87	5670.43	5876.94	6089.13	6287.33
Variable Charges (two months)	5346.575	5346.575	5361.224	5346.575	5346.575
Total	10832.45	11017.00	11238.16	11435.70	11633.91

O&M Expenses

65. O&M expenses for 1 month as allowed in order dated 15.5.2014 in Petition No. 304/2009 has been considered as under:

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
1255.42	1327.10	1403.00	1483.50	1568.22

66. 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 as under:

(₹ in lakh)					
	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of coal – 1.5 months	4009.93	4009.93	4020.92	4009.93	4009.93
Cost of secondary fuel oil- 2 months	167.80	167.80	168.26	167.80	167.80
O&M expenses - 1 month	1255.42	1327.10	1403.00	1483.50	1568.22
Maintenance Spares	3013.00	3185.04	3367.20	3560.40	3763.72
Receivables- 2 months	10832.45	11017.00	11238.16	11435.70	11633.91
Total Working Capital	19278.59	19706.87	20197.53	20657.33	21143.58
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Total Interest on working capital	2361.63	2414.09	2474.20	2530.52	2590.09



Annual Fixed Charges

67. Accordingly, the annual fixed charges allowed for the period 2009-14 are summarized as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	3963.36	4144.34	4321.33	4459.62	4501.27
Interest on Loan	1049.70	892.64	820.79	724.56	496.46
Return on Equity	9468.75	9639.50	9799.75	10011.28	10310.79
Interest on Working Capital	2361.63	2414.09	2474.20	2530.52	2590.09
O&M Expenses	15065.00	15925.20	16836.00	17802.00	18818.60
Cost of Secondary fuel oil	1006.79	1006.79	1009.55	1006.79	1006.79
Total	32915.23	34022.55	35261.61	36534.77	37724.00

68. The difference in the annual fixed charges determined by order dated 15.5.2014 and those determined by this order shall be adjusted in accordance with Regulation 6 (6) of the 2009 Tariff Regulations.

Energy Charge Rate (ECR)

69. The Energy Charge Rate (ECR) of 108.475 paisa/kWh, for 2009-14 period as considered in order dated 15.5.2014 in Petition No. 304/2009 has been considered.

70. The respondent, GRIDCO has submitted that the petitioner should calculate ECR up to three decimal points as per Regulation 21 (6) of 2009 Tariff Regulations. In response, the petitioner has submitted that it used 3 decimal places rounding off figures and ensures that the values both on the upside and downside are captured without any deviation on either side and the methodology is in line with Indian Standards (IS). The petitioner has further submitted that the respondent is trying to provide a wrong interpretation of Tariff Regulation for its own benefit and the contentions raised by the respondent may be rejected.



71. ECR has been calculated upto the third decimal place after rounding off the figures. The petitioner shall be entitled to compute and recover the capacity charges and energy charges in accordance with Regulation 21(2) and Regulation 21(6)(a) respectively of the 2009 Tariff Regulations.

72. Petition No. 273/GT/2014 is disposed of in terms of the above.

Sd/-

(Dr. M.K.Iyer)
Member

Sd/-

(A. S. Bakshi)
Member

