

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 344/GT/2014

Coram:

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

Date of Order : 15.3.2017

In the matter of:

Revision of tariff of Sipat Super Thermal Power Station, Stage-II (1000 MW) for the period from 1.4.2009 to 31.3.2014- Truing up of tariff determined by order dated 17.9.2014 in Petition No. 132/GT/2013.

And in the matter of:

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

.....**Petitioner**

Versus

1. Madhya Pradesh Power Management Company Ltd.,
Shakti Bhawan, Vidyut Nagar,
Jabalpur-482008
2. Maharashtra State Electricity Distribution Company Ltd.,
Prakashgad, Bandra (East),
Mumbai-400051
3. Gujarat Urja Vikas Nigam Limited,
Vidyut Bhawan, Race Course
Vadodora-390007
4. Chhattisgarh State Power Distribution Company Ltd,
Sundar Nagar,
Danganiya, Raipur-492013



5. Electricity Department, Govt. of Goa,
Vidyut Bhawan, Panjim
Goa
6. Electricity Department,
Administration of Daman & Diu,
Daman-396210
7. Electricity Department,
Administration of Dadra and Nagar Haveli,
Silvassa

.....Respondents

Parties present:-

For Petitioner: Shri Bhupinder Kumar, NTPC
Shri Rajeev Chaudhary, NTPC
Shri Ajay Dua, NTPC
Shri Nishant Gupta, NTPC

For Respondents: None

ORDER

This petition has been filed by the petitioner, NTPC, for revision of tariff of Sipat Super Thermal Power Station, Stage-II (1000 MW) (hereinafter referred to as “the generating station”) for the period from 1.4.2009 to 31.3.2014, in terms of the proviso to Regulation 6 (1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 Tariff Regulations”).

2. The generating station with a capacity of 1000 MW comprises of two units of 500 MW each. The dates of commercial operation of different units of the generating station are as under:

	Date of commercial operation (COD)
Unit-I	20.6.2008
Unit-II / Generating station	1.1.2009

3. The Commission vide order dated 20.1.2012 in Petition No. 316/2009 had approved the annual fixed charges for this generating station for the period from



1.4.2009 to 31.3.2014. The Commission vide order dated 17.9.2014 in Petition No. 132/GT/2013 revised the annual fixed charges for the generating station for the period 2009-14 considering the actual additional capital expenditure for the years 2009-10, 2010-11 and 2011-12 and projected additional capitalization for 2012-13 and 2013-14.

4. The capital cost and the annual fixed charges approved by order dated 17.9.2014 is as under:-

Capital Cost

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital cost	384409.56	407581.48	415224.00	425430.29	430053.21
Additional capital expenditure	23171.92	7642.52	10206.29	4622.92	4601.00
Closing capital cost	407581.48	415224.00	425430.29	430053.21	434654.21
Average Capital cost	395995.52	411402.74	420327.14	427741.75	432353.71

Annual fixed charges

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	20264.50	20961.59	21403.83	21856.86	22092.52
Interest on loan	16959.89	16773.29	17648.66	17443.86	16647.70
Return on Equity	27895.11	28645.97	28931.96	29442.32	29759.77
Interest on working capital	3805.79	3873.72	3956.30	4014.12	4058.57
O&M expenses	13000.00	13740.00	14530.00	15360.00	16240.00
Cost of secondary fuel oil	1414.92	1414.92	1418.80	1414.92	1414.92
Total	83340.22	85409.49	87889.55	89532.08	90213.49

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. Accordingly, the petitioner has filed this petition for revision of annual fixed charges considering the opening capital cost as ₹384409.56 lakh as on 1.4.2009 and the actual additional capital expenditure incurred for the period 2009-14 vide affidavit dated 14.8.2014. The revised annual fixed charges claimed by the petitioner are as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	20265.34	20968.45	21647.15	22333.06	22516.04
Interest on loan	16953.25	16981.03	18809.39	18223.81	16850.10
Return on Equity	27896.96	28654.87	29260.31	30082.76	31039.09
Interest on working capital	3805.71	3878.38	3992.42	4053.65	4098.29
O&M expenses	13000.00	13740.00	14530.00	15360.00	16240.00
Cost of secondary fuel oil	1414.92	1414.92	1418.80	1414.92	1414.92
Total	83336.19	85637.66	89658.07	91468.20	92158.43

7. In compliance with the directions of the Commission, the petitioner has filed additional information with copy to the respondents. The respondents, Madhya Pradesh Power Management Company Ltd (MPPMCL) and Chhattisgarh State Power Distribution Company Ltd. (CSPDCL) have filed reply in the matter and the petitioner has filed its rejoinder to the same. Accordingly, based on the submission of the parties and the documents available on record, we proceed to consider the revision of tariff of the generating station for 2009-14 after truing up, 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 opening capital cost as ₹384409.56 lakh as on 1.4.2009. The Commission vide order dated 17.9.2014 had approved the capital cost of ₹384409.56 lakh as on 1.4.2009 after deduction of un-discharged liabilities of ₹18022.68 lakh as on 1.4.2009 from the gross capital cost of ₹402432.24 lakh on cash basis for the purpose of tariff. Accordingly, we have considered the capital cost of ₹384409.56 lakh as on 1.4.2009.

Actual Additional Capital Expenditure

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

11. The cut-off date of the generating station as per Regulation 3(11) of the 2009 Tariff Regulation is 31.3.2012. The Commission in order dated 17.9.2014 in Petition No. 132/GT/2013 had approved 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. It is observed that the cut-off date for this generating station was further extended by one more year i.e. upto 31.3.2013 from the extended cut-off date of 31.3.2012 vide order dated 17.9.2014 in Petition No. 132/GT/2013 as a special case considering that expenditure has already been incurred by the petitioner for major portion of the works and disallowance of capitalization of the balance works would not be prudent. The Commission had further decided that the IDC included in the expenditure incurred on works / balance works as on cut-off date after 31.3.2013 shall not be made admissible to the petitioner. It is also observed that there is difference in the additional capital expenditure approved by the Commission vide order dated 17.9.2014 in Petition



No. 132/GT/2013 and the petitioners claim for the years 2009-10, 2010-11 & 2011-12. This is on account of the fact that the order in Petition No. 132/GT/2013 was issued later on 17.9.2014 during the pendency of this petition, the petitioner had filed the instant petition vide affidavit dated 14.8.2014, however. the petitioner vide affidavit dated 29.9.2014 has submitted the net additional capital expenditure, excluding IDC duly certified by Auditors and un-discharged liabilities for the years 2012-13 and 2013-14.

12. The additional capital expenditure approved by order dated 17.9.2014 in Petition No. 132/GT/2013 is as under:-

(₹ in lakh)							
Sl. No.	Head of work/Equipment	2009-10 (Actual)	2010-11 (Actual)	2011-12 (Actual)	2012-13 (Proj)	2013-14 (Proj)	Total
A	Capital Works						
1	Merry Go Round (Incl. rolling stock)	244.00	905.60	188.00	0.00	0.00	1337.60
2	Steam Generator –Civil works	474.40	239.70	125.30	0.00	0.00	839.34
3	Turbine Generator – Civil works	252.00	106.80	0.00	0.00	0.00	358.84
4	Off-site Civil & Mechanical	284.30	307.90	452.40	21.90	0.00	1066.60
5	Chimney	22.15	49.32	0.00	0.00	0.00	71.47
6	Steam Generator	1310.10	141.80	23.41	0.00	0.00	1475.30
7	Turbine Generator	462.70	87.93	2.42	0.00	0.00	553.01
8	Station C & I	101.20	33.74	0.00	0.00	0.00	134.90
9	Coal Handling Plant	69.30	0.00	0.00	0.00	0.00	69.30
10	Fuel Oil Handling Plant	46.63	0.00	0.00	0.00	0.00	46.63
11	Cooling water –Civil works	48.90	8.98	0.00	0.00	0.00	57.88
12	Cooling water –Mechanical works	37.62	0.00	2.39	0.00	0.00	40.01
13	Raw Water Reservoir	0.00	0.00	0.00	0.00	0.00	0.00
14	Water Treatment Plant	10.12	2.11	2.16	0.00	0.00	14.39
15	De-Mineralization Plant	2.05	0.00	0.00	0.00	0.00	2.05
16	Cooling Tower –Civil works	9.10	5.11	15.79	0.00	0.00	30.00
17	Cooling Tower – Mechanical works	0.00	0.00	0.00	0.00	0.00	0.00
18	Condensate Polishing Unit	24.62	6.80	0.98	0.00	0.00	32.40
19	Fire Detection Protection System	130.68	11.08	78.63	26.81	0.00	247.20
20	Air Conditioning	0.00	9.29	4.85	0.00	0.00	14.14



Sl. No.	Head of work/Equipment	2009-10 (Actual)	2010-11 (Actual)	2011-12 (Actual)	2012-13 (Proj)	2013-14 (Proj)	Total
21	Ventilation	9.06	6.20	0.48	0.00	0.00	15.74
22	Generator Bus duct	8.18	0.00	2.51	0.00	0.00	10.69
23	LT Control cables	28.40	0.00	0.00	0.00	0.00	28.40
24	Cabling	165.21	4.09	31.51	0.00	0.00	200.81
25	Power Transformer	49.01	99.74	0.00	0.00	0.00	148.75
26	Construction of maintenance/ storage facilities in Stage-II	116.56	475.47	45.62	0.00	0.00	637.65
27	Other deposit works	3728.93	490.90	426.59	0.00	0.00	4646.40
28	Tools & Plant	724.68	882.29	321.33	0.00	0.00	1928.30
29	Township Construction	4747.35	655.16	1674.32	0.00	0.00	7076.83
	Total	13107.10	4530.00	3398.70	48.71	0.00	21084.56
B Works Relating to Ash Dyke and Ash Handling Plant							
30	Ash Handling Plant	638.29	96.28	123.13	167.00	0.00	1024.70
31	Ash Dyke	98.36	71.16	32.13	490.00	500.00	1191.65
32	Ash Water Recirculation System	235.12	27.49	0.00	0.00	0.00	262.61
	Ash Total	971.77	194.93	155.26	657.00	500.00	2478.96
33	Capital Spares	721.05	1312.40	6365.80	2130.00	0.00	10529.22
	Total Additional Capital Expenditure	14799.90	6037.40	9919.70	2835.70	500.00	34092.75
C New Claim							
34	Land Compensation	97.19	124.40	149.60	0.00	0.00	371.25
35	11 kV/33 kV Switch Gear/Switch Yard	5.01	0.64	7.55	0.00	0.00	13.20
36	Make-Up Water Pump House	0.00	0.00	0.00	0.00	0.00	0.00
37	Expenditure on 5 KM scheme	0.00	0.00	0.00	0.00	0.00	0.00
	Sub-Total	102.20	125.20	9022.30	0.00	0.00	9249.55
	Grand Total	14902.20	6162.40	10076.90	2835.70	500.00	34477.14
	Add : Exclusions not allowed	(-)52.52	(-)150.49	(-)269.60	-	-	(-)472.61
	Total Additional Capital Expenditure allowed after adjustment of de-capitalization	14849.68	6011.91	9807.29	2835.70	500.00	34004.53
	Discharges of liabilities	8322.24	1630.60	398.99	1787.21	4101.00	
	Total Additional Capital Expenditure allowed for tariff	23171.92	7642.52	10206.29	4622.92	4601.00	



13. The actual additional capital expenditure allowed by the Commission vide order dated 17.9.2014 in Petition No. 132/GT/2013 for the period 2009-12 has not been revised by the petitioner. Hence, the actual additional capital expenditure incurred during the years 2012-13 and 2013-14 has only been considered in this order. The break-up of the actual additional capital expenditure claimed for the years 2012-13 and 2013-14 are as under:

(₹ in lakh)

SI No	Head of work/Equipment	Regulations under which claimed	Actual additional capital expenditure claimed	
			2012-13	2013-14
1	Land Compensation	9(2)(viii)	0.00	1.35
2	MGR (Including Rolling Stock i.e. Wagons)	9(2)(viii)	0.67	0.00
3	Steam Generator- Civil	9(2)(viii)	12.23	6.55
4	Turbine Generator- CIVIL	9(2)(viii)	53.26	14.03
5	Off-Site Civil & Mech.	9(1)(ii) with Regulation 44	192.54	124.07
7	Steam Generator	9(2)(viii)	11.05	124.35
8	Turbine Generator	9(2)(viii)	0.00	1.69
9	Station Control & Instrumentation	9(2)(viii)	7.73	0.00
10	Coal Handling plant	9(2)(viii)	1.05	1.33
11	Cooling Water-Civil	9(2)(viii)	38.84	5.49
12	Cooling Tower –Civil	9(2)(viii)	0.00	0.37
13	Fire Detection & Protection system	9(2)(viii)	11.91	0.00
14	Ventilation	9(2)(viii)	0.18	0.00
15	Cabling	9(1)(ii) with Regulation 44	43.02	7.40
16	Storage facilities in stage-II	9(2)(viii)	0.00	6.33
17	Other Deposit Works including IT infrastructure/MBOAs	9(2)(viii)	5.36	0.00
18	Township Construction	9(2)(viii)	65.72	45.01
19	11 KV/33 KV Switch Gear /Switch Yard	9(2)(viii)	0.52	0.40
20	Make up water Pump House	9(2)(viii)	42.18	



21	400 KV S- Yard	9(2)(viii)	30.22	
22	Raw Water Reservoir	9(2)(viii)	5.84	
23	Simulator	9(2)(viii)	1.69	
24	Acoustic leak detection system	9(2)(ii)	42.88	20.79
Sub Total Capitalisation				359.16
Works relating to Ash Dyke and Ash Handling system:				
25	Ash Handling plant	9(2)(viii)	14.63	47.00
26	Ash Dyke	9(2)(iii)	0.00	62.69
27	Ash Water Recirculation system	9(2)(iii)	5.02	0.00
Total capitalisation Ash related works				109.69
28	Capital Spares:	9(1)(iii)	2703.38	0.00
Sub Total Of Additional capitalisation				468.86
Works Adjustment				
29	CHP(Works Adjustments)		(-) 18.87	
30	Works adjustment-Township		(-) 1.04	
31	Capital Spare adjustment		(-) 2.61	(-) 0.42
Sub Total Of Works Adjustment				(-) 0.42
32	Discharge of un-discharge liabilities out of the liabilities as on 1.4.2009		1243.20	2102.19
33	Discharge of un-discharge liabilities of additional capitalization during 2009-14		45.79	34.64
Sub Total Of discharge of un-discharge liabilities			1288.98	2136.83
Total Additional capital expenditure			4556.38	2605.26

14. We now examine the claim of the petitioner for additional capital expenditure for 2012-14 as stated in the subsequent paragraphs.



Additional expenditure claimed under Regulation 9(2)(ii)

15. The petitioner has claimed actual additional capital expenditure of ₹42.88 lakh and ₹20.79 lakh during the years 2012-13 and 2013-14 respectively towards Acoustic leak detection system under Regulation 9(2)(ii) of the 2009 Tariff Regulations. In justification of the same, the petitioner has submitted that with the advancement of technology and technical innovation M/s BHEL has developed the technology for online boiler tube leak detection system based on sound sensing probes at initial stage so that unit can be taken under shut down for maintenance and secondary damage can be avoided. The petitioner has submitted that this asset was not part of original package, but due to increase in availability norms as per the 2009 Tariff Regulations for the period 2009-14, this expenditure was necessary for achieving the higher normative availability norms.

16. We have examined the matter. The Commission vide order dated 15.5.2014 in Petition No. 148/GT/2013 had disposed off the claim of the petitioner for this asset and observed as under:

“23.We appreciate the submission of petitioner that this system helps in the early detection of boiler tube leakage. However, we are of the view that if the boiler and water system of the generating station is properly maintained there would be no reason for tube leakages and consequent unavailability of the generating station. We notice that the generating station has been provided with reasonable O& M expenses for effective and efficiently maintenance of different systems/ components of the units/ generating station. We also hold that the requirement to meet higher availability of norms specified by the Commission in the 2009 Tariff Regulations cannot fall under 'Change in Law' as per definition provided under the 2009 Tariff Regulations. In view of the above, the claim has not been allowed.”

17. In line with the above decision, we do not allow the claim of the petitioner towards Acoustic leak detection system for the period 2012-14.



Works deferred for execution under Regulation 9(2)(iii)

18. The actual additional capital expenditure claimed by the petitioner under the Regulation 9(1)(ii) read with Regulation 44 of the 2009 Tariff Regulations are as under:

(₹ in lakh)

SI No	Head of work/Equipment			Total
		2012-13	2013-14	
1	Off-Site Civil & Mechanical	192.54	124.07	316.61
2	Cabling	43.02	7.40	50.42
Total		235.56	131.47	367.03

Offsite Civil and Mechanical

19. The petitioner has claimed total actual additional capital expenditure of ₹316.61 lakh during the period 2012-14 towards off-site Civil and Mechanical works. In justification of the same, the petitioner has submitted that this work has been allowed by the Commission vide order dated 20.1.2012 in Petition No. 316/2009. It has also submitted that M/s HSCL had abandoned the work mid way and accordingly, the work was offloaded to other agencies. The petitioner has further submitted that most of the works were completed up to cut-off date of the generating station and the balance work was off loaded to other agencies and the same was completed during the years 2012-13 and 2013-14. Accordingly, the petitioner has submitted that Commission may allow the capitalization of this expenditure for the balance works after the cut-off date (2013-14) of the generating station in exercise of Power to Relax under Regulation 44 of the 2009 Tariff Regulations as the reason for delay was beyond the control of the petitioner.

Cabling

20. The petitioner has claimed total actual additional capital expenditure of ₹50.42 lakh towards Cabling during 2012-14 under this head. In justification of the same, the petitioner has submitted that all the major works were completed before 31.3.2012



except for the balance work of Cabling of Coal Handling Plant and the same has completed after 31.3.2012. The petitioner has further submitted that the work was part of the originally awarded package to M/s L&T who abandoned the work and subsequently the work was offloaded to M/s Dinesh Kumar Bheghel at the risk and cost of M/s L&T and accordingly the balance work of Cabling at Coal Handling plant was completed. The petitioner has further submitted that in terms of the above submission, the Commission may allow the capitalization of the amount after the cut-off date of the generating station (2013-14) in exercise of the Power to Relax under Regulation 44 of the 2009 Tariff Regulations as delay is on account for reasons beyond the control of the petitioner.

21. We have examined the matter. It is noticed that the additional capital expenditure claimed in respect of balance works completion within the cut-off date of the generating station (31.3.2013) and is within original scope of work of the project. Accordingly, the said works deferred amounts to ₹192.54 towards Off-site civil and mechanical works and ₹43.02 lakh for Cabling is allowed under Regulation 9(1)(ii) of the 2009 tariff Regulations. However, in respect of actual additional capital expenditure of ₹124.07 lakh for Off-site civil and mechanical works and ₹7.40 lakh for Cabling in 2013-14. We are not inclined to allow the capitalization of these deferred works on the ground that the Commission in its order dated 17.9.2014 in Petition no. 132/GT/2014 had extended the cut-off date from 31.3.2012 to 31.3.2013 considering the difficulties faced by the petitioner in the execution of the work..

22. Having not undertaken the said work within the extended cut-off date (31.3.2013), in our view, the petitioner cannot absolve itself of the responsibility for the delay in the execution of the balance/ deferred works and the respondents cannot be suffered on this count. Moreover, the provisions of Regulation 9(1)(ii) of the 2009 Tariff



Regulations only permit the capitalization of the expenditure within the cut-off date of the generating station. It is further noticed that, the petitioner has not submitted proper details / justification as regards to the steps taken by it to mitigate the delay and execution of works within the extended cut-off date of the generating station. In the absence of the above, no case has been made out by the petitioner to allow the capitalization of these works in exercise of the Power to relax the provision of Regulation 9(2) of the 2009, Tariff regulations Accordingly, the prayer of the petitioner to allow the capitalization of these works in 2013-14 is rejected.

23. The petitioner has claimed total additional capital expenditure of ₹62.69 lakhs in 2013-14 towards Ash Dyke and ₹5.02 lakh towards Ash Water Recirculation system in 2012-13. In justification of the same, the petitioner has submitted that this work has already been approved by the Commission in order dated 20.1.2012 in Petition no. 316/2009 on the ground that these works are in nature of balance works and are within the original scope. The respondent, MPPMCL has submitted that against the approved expenditure the petitioner has claimed higher expenditure and therefore the Commission to disallow the excess amount claimed by the petitioner.

24. We have examined the matter. Considering the fact that these works are related to Ash handling system and is within the original scope of work, the claim for actual additional capital expenditure towards Ash water recirculation system and Ash Dyke for the period 2012-13 and 2013-14 respectively is allowed under Regulation 9(2)(ii) of the 2014, Tariff regulations.



Additional capital expenditure claimed under Regulation 9(2)(vii)

25. The actual additional capital expenditure claimed under Regulation 9(2)(viii) of the 2009 Tariff Regulations is as under:

(₹ in lakh)

SI No	Head of work/Equipment			Total
		2012-13	2013-14	
1	Land Compensation	0.00	1.35	1.35
2	MGR (Including Rolling Stock i.e. Wagons)	0.67	0.00	0.67
3	Steam Generator- Civil	12.23	6.55	18.78
4	Turbine Generator- Civil	53.26	14.03	67.29
5	Steam Generator	11.05	124.35	135.4
6	Turbine Generator	0.00	1.69	1.69
7	Station Control & Instrumentation	7.73	0.00	7.73
8	Coal Handling plant	1.05	1.33	2.38
9	Cooling Water-Civil	38.84	5.49	44.33
10	Cooling Tower –Civil	0.00	0.37	0.37
11	Fire Detection & Protection system	11.91	0.00	11.91
12	Ventilation	0.18	0.00	0.18
13	Storage facilities in stage-II	0.00	6.33	6.33
14	Other Deposit Works including IT infrastructure/MBOAs	5.36	0.00	5.36
15	Township Construction	65.72	45.01	110.73
16	11 KV/33 KV Switch Gear /Switch Yard	0.52	0.40	0.92
17	Make up water Pump House	42.18		42.18
18	400 KV S- Yard	30.22		30.22
19	Raw Water Reservoir	5.84		5.84
20	Simulator	1.69		1.69
21	Ash Handling plant	14.63	47.00	61.63
Total		303.08	253.90	556.98

Land Compensation:

26. The petitioner has claimed actual additional capital expenditure of ₹1.35 lakh towards Land compensation in 2013-14 and has submitted that in the additional amount incurred is on account of payment made in accordance with the rehabilitation action plan to the Project affected people against the land acquisition undertaken for MGR.



MGR

27. The petitioner has claimed actual additional capital expenditure of ₹0.67 lakh towards MGR including rolling stock i.e. wagons, works pertaining to Steam Generator and Turbine Generator, Station Control & Instrumentation, Coal handling plant, civil works related to Cooling water and Cooling tower, storage facilities, other deposit works including IT infrastructure/MBOAs, 400 kV Switch yard, Raw Water Reservoir during the period 2012-14. In justification of the same, the petitioner has submitted that all the works were completed before 31.3.2012 and the capitalization claimed for the above said works during the period 2012-14 pertains to the balance payments made to the contracting agency after the final reconciliation of works and material.

Steam and Turbine Generators

28. The petitioner has claimed total actual additional capital expenditure of ₹223.16 lakh towards civil works for Steam generator and Turbine Generator works for the period 2012-14. In justification of the same, the petitioner has submitted that the same amount incurred pertains to the payment made on account of Price variation, as claimed by M/s BHEL for the materials supplied earlier. It has also submitted that the payment was made after the submission of documents by the agencies.

Other Civil works

29. The petitioner has claimed total actual additional capital expenditure of ₹54.81 lakh towards other civil works for station Control and Instrumentation, Coal handling plant, cooling tower and water works for the period 2012-14. In justification of the same petitioner has submitted that these works was already allowed by the Commission vide order dated 20.1.2012 in Petition No. 316/2009. It has also submitted that these works



were completed before the cut-off date (2012-13) of the generating station. The additional capital expenditure towards claimed pertains to the payments made to the contracting agency after final reconciliation of works and materials.

Fire detection and Protection System

30. The petitioner has further claimed actual additional capital expenditure of ₹11.91 lakh towards Fire detection and Protection System in the year 2012-13. In justification of the same, the petitioner has submitted that the expenditure incurred is related to the payment made for completion of the facility by the agency. The petitioner has further submitted that recovery of ₹11.91 lakh in 2013-14 has been made towards adjustment made after final reconciliation with the contracting agency.

Ventilation

31. The petitioner has claimed actual additional capital expenditure of ₹0.18 lakh for Ventilation in 2012-13. In justification of the same, the petitioner has submitted that all the works were completed before 31.3.2012 and the expenditure claimed pertains to the payment made on account of Price variation in accordance with the contract at the time of contract closing.

Township Construction

32. The petitioner has claimed actual additional capital expenditure of ₹110.73 lakh towards Township Construction for the period 2012-14. In justification of the same, the petitioner has submitted that all the works were completed before 31.3.2012 and the capitalization claimed in 2012-13 pertains to the payment made to the contractor after reconciliation of material i.e. cement and steel. The petitioner further submitted that the



expenditure claimed in 2013-14 pertains to balance payments after final finishing work and rectification work by the agency.

Switchgear

33. The petitioner has claimed actual additional capital expenditure of ₹0.92 lakh towards 11 kV/33 kV Switch Gear for the period 2012-14. In justification of the same, the petitioner has submitted that the work was completed before 31.3.2012 and the capitalization of expenditure in 2012-13 pertains to the final payment made earlier in the Switch Gear package, therefore, amount was not transferred at the time of migration of data from manual system to SAP system. Accordingly, it has submitted that the said amount has been, the same has been accounted in 2012-13. The petitioner has further submitted that the capitalization made in 2013-14 is mainly on account of works adjustment made in books of account as a part of material reconciliation with the contracting agencies.

Make-up Water

34. The petitioner has claimed actual additional capital expenditure of ₹42.18 lakh towards Make-up water Pump house in 2012-13. In justification of the same, the petitioner has submitted that the said work form part of the original scope of work and major works pertaining to this generating station were completed and capitalized along with COD of the generating station. The petitioner has further submitted that the payment made in 2012-13 pertains to final payment made as a part of contract closing.

Simulator

35. The petitioner has claimed actual additional capital expenditure of ₹1.69 lakh towards Simulator for the period 2012-13 which is within the cut-off date (2012-13) of the



generating station. In justification of the same, the petitioner has submitted that the capitalization pertains to the payment made after completion of acceptance test.

Ash Handling Plant

36. The petitioner has claimed actual additional capital expenditure of ₹61.63 lakh towards Ash Handling Plant for the period 2012-14. In justification of the same, the petitioner has submitted that this work has already been approved by the Commission vide order dated 20.1.2012 in Petition No. 316/2009. It has also submitted that the payments made in 2012-13 and 2013-14 mainly relates to the erection/ commissioning of Dry Ash extraction system and PG test/trial operation of the same and the balance painting/miscellaneous works including erection and commissioning of EOT cranes.

Submission of the Respondent

37. The respondent, MPPMCL has submitted that the additional capital expenditure claimed by the petitioner for Land compensation has not been approved by the Commission and has therefore prayed that the same may be disallowed. In response, the petitioner has submitted that payment made under Land compensation forms the part of original scope of work and the same is allowable in accordance with the provisions of the 2009 Tariff Regulations.

38. The respondent, MPPMCL has submitted that as against the approved amount the petitioner has claimed higher amount for MGR, Steam Generator, Turbine Generator, Chimney, Cooling water-civil, Cooling tower-civil, Power Transformer, other deposit works, T&P and Township construction and has therefore prayed that the Commission may disallow the expenditure over and above the approved expenditure. The respondent, MPPMCL has prayed that the Commission may direct the petitioner to furnish documentary evidence with respect to its claim under Regulation 9(2)(viii) of the



2009 Tariff Regulations as these liabilities belongs to period prior to 31.3.2012. In response, the petitioner has submitted that it has furnished the reasons for variance in actual additional capital expenditure as against the projected additional capital expenditure in Petition no 316/2009. The petitioner has further submitted that the issue of cut-off date has already been decided by the Commission after hearing all the parties and after prudence check. As regards to Ash dyke raising works the petitioner has submitted that these are continuous activities under the original scope of work of the project and the same is carried out throughout the life of the plant, as and when required and accordingly me be allowed under Regulation 9(1)(ii) and 9(2)(iii) of the 2009, Tariff Regulations. As regards liabilities, the petitioner has submitted that as per accrual principle of accounting, the total value of the work gets capitalized in the gross block as soon as the asset is put to use notwithstanding the fact that part of the payment of capital asset has been retained as commitment or liabilities. Accordingly, the petitioner has prayed that the liability is identified at the time when the asset is put to use has been claimed as additional capital expenditure under the head discharge of un-discharged liability for the works.

39. We have examined the matter. As stated the cut-off date of the generating station as per Regulation 3(11) of the 2009, Tariff Regulations is 31.3.2012. Hence, the Commission in order dated 20.1.2012 in Petition No.316/2009 extended the said cut-off date to a further period of one year till 2012-13. It is noticed that the expenditure incurred in 2012-13 is in respect of works deferred for execution is within the said cut-off date 2012-13. Accordingly, the claim of the petitioner for actual capital expenditure of ₹2801.21 lakh in 2012-13 is allowed under Regulation 9(1)(ii) of the 2009 Tariff Regulations.



40. As regards the additional capital expenditure claimed towards Ash dyke, Land compensation, Steam and Turbine Generators, Coal handling plant, cooling tower, cooling water storage facility, Township construction and switchgear/switch yard during 2013-14, it is noticed that these are balance final payments made after reconciliation of the works which have completed within the cut-off date (2012-13) of the generating station and original scope of work. Hence, the additional capital expenditure claimed in respect of deferred liabilities are allowed under Regulation 9(2)(viii) of the 2009 Tariff Regulations.

41. In respect of the the capitalization towards Make-up water Pump house, the Commission vide order dated 17.9.2014 had observed as under:

“35..... For the purpose of tariff, the cost of any common facility between the two stages of the project should have been apportioned in order to maintain equilibrium in the tariff of both the stages. Since the petitioner was allowed to capitalize an expenditure of `8665.00 lakh towards MUW system in the capital cost of this generating station by order dated 10.12.2009 and the tariff was approved accordingly, we do not intend to carry out any pro rata adjustment of the expenditure of `8665.00 lakh for the two stages of this generating station specially considering the fact that the same would involve retrospective adjustment of the approved tariff. In this background, there is no justification to allow the balance amount of `8865.10 lakh pertaining to balance work of MUW system to this generating station. However, the same would be considered in the capital cost of Stage-I units. Accordingly, expenditure of `8865.10 lakh has not been allowed to be capitalized for this generating station.”

42. In view of the above, the balance payments claimed by the petitioner for this generating station in 2011-12 has been considered and capitalized in respect of Sipat STPS-I of the petitioner in order dated 6.12.2016 in Petition No. 295/GT/2014. Hence, the capitalization of ₹42.18 lakh for the year 2012-13 in respect of this generating station has not been considered in the order.



Capital Spares

43. The Commission in order dated 17.9.2014 in Petition No. 132/GT/2013 had allowed the actual capital spares of ₹8399.25 lakh during the years 2009-10, 2010-11, 2011-12 and projected capital spares of ₹2130.00 lakh in 2012-13. However, the petitioner, in this petition has claimed capital spares of ₹2703.38 lakh in 2012-13. The respondent, MPPMCL has submitted that for the purpose of calculation of allowable initial spares, the original project cost as on original cut-off date of 31.3.2010 may be considered.

44. The petitioner was directed to submit the details of capital spares along with details of consumption of capital spares for the period 2009-14 and list of spares consumed as per Form-17 and in response, the petitioner has submitted the details of consumption of capital spares for the period 2010-14.

45. We have examined the matter. It is noticed that the petitioner has claimed capital spares of ₹11102.63 lakh which works out to 2.53% of the completion cost i.e. ₹439324.35 lakh as on 31.3.2014. It is observed that petitioners claim for capital spares is in excess of ceiling limit of 2.50% as specified under the 2004 Tariff Regulations. Considering the approved capital cost of ₹428102.15 lakh as on 31.3.2013 the amount of capital spares works out to ₹10702.55 lakh as on 31.3.2013. Hence, the capital spares allowed for the year is ₹1184.56 lakh in terms of Regulation 17 of the 2004, Tariff Regulations.

Works adjustment

46. The petitioner has claimed the following assets towards Works adjustment:

	2012-13	2013-14
Works Adjustment-CHP	(-) 18.87	0.00
Works adjustment-Township	(-) 1.04	0.00
Capital Spare adjustment	(-) 2.61	(-) 0.42
Total	(-) 22.53	(-) 0.42



47. The petitioner has submitted that CHP-works adjustment pertains to recovery of amount due to reduction in scope of work at the time of contract closing by the contractor/sub-contractor. The petitioner has also submitted that Township-works adjustment pertains to the adjustment made on account of reconciliation of scrap material with the contractor/sub-contractor. As regards capital spares adjustment, the petitioner has submitted that it pertains to the adjustment made in the capital spares capitalized during 2011-12 on account of price and freight adjustment. On prudence check, it is observed that the said asset forms part of capital cost and is within the original scope of work of the project. Accordingly, works adjustment claimed by the petitioner has been considered as the additional capital expenditure.

48. Based on the above discussions, the actual additional capital expenditure allowed for the period 2012-14 is as under:

(₹ in lakh)

SI No	Head of work/Equipment			Total
		2012-13	2013-14	
1	Off-Site Civil & Mechanical	192.54	0.00	192.54
2	Cabling	43.02	0.00	43.02
3	Ash Dyke	0.00	62.69	62.69
4	Ash Water Recirculation system	5.02	0.00	5.02
5	Land Compensation	0.00	1.35	1.35
6	MGR (Including Rolling Stock i.e. Wagons)	0.67	0.00	0.67
7	Steam Generator- Civil	12.23	6.55	18.78
8	Turbine Generator- Civil	53.26	14.03	67.29
9	Steam Generator	11.05	124.35	135.4
10	Turbine Generator	0.00	1.69	1.69
11	Station Control & Instrumentation	7.73	0.00	7.73
12	Coal Handling plant	1.05	1.33	2.38
13	Cooling Water-Civil	38.84	5.49	44.33
14	Cooling Tower –Civil	0.00	0.37	0.37
15	Fire Detection & Protection system	11.91	0.00	11.91
16	Ventilation	0.18	0.00	0.18
17	Storage facilities in stage-II	0.00	6.33	6.33
18	Other Deposit Works including IT infrastructure/MBOAs	5.36	0.00	5.36
19	Township Construction	65.72	45.01	110.73



SI No	Head of work/Equipment			Total
		2012-13	2013-14	
20	11 KV/33 KV Switch Gear /Switch Yard	0.52	0.40	0.92
21	400 KV S- Yard	30.22	0.00	30.22
22	Raw Water Reservoir	5.84	0.00	5.84
23	Simulator	1.69	0.00	1.69
24	Ash Handling plant	14.63	47.00	61.63
25	Capital Spares	1184.56	0.00	1184.56
26	Works adjustment	(-) 22.53	(-) 0.42	(-) 22.95
27	Total additional capital expenditure	1663.52	316.18	1979.70

49. The reconciliation of the actual capital expenditure with the books of accounts for the years 2012-13 and 2013-14 as submitted by the petitioner is as under:

(₹ in lakh)

S. No.	2012-13	
1	Closing Gross Block as per Audited Balance Sheet 31.3.2012 (A)	445008.93
2	Less: Unserviceable assets regrouped from Fixed Assets to Current Assets (B)*	0.37
3	Opening Gross Block as on 1.4.2012 (C)	445008.56
4	Closing Gross Block as on 31.3.2013 (D)	453395.35
5	Addition during the year 2012-13 (as per books) E=D-C	8386.79
6	Exclusions (F)	4858.22
7	Additional capital expenditure claimed (for tariff purpose) (G=E-F)	3528.56
8	Liabilities included (H)	261.16
9	Net additional capitalization excluding liabilities (I=G-H)	3267.40
10	Discharge of liabilities (J)	1288.98
11	Net additional capitalization claimed on cash basis (K=I+J)	4556.38
	2013-14	
1	Opening Gross Block as on 1.4.2013 (A)	453395.35
2	Closing Gross Block as on 31.3.2014 (B)	460548.58
3	Addition during the year 2013-14 (as per books) (C=B-A)	7153.22
4	Exclusions (D)	6497.67
5	Additional capital expenditure claimed (for tariff purpose) (E=C-D)	655.55
6	Liabilities included (F)	187.12
7	Net additional capitalization excluding liabilities (G=E-F)	468.43
8	Discharge of liabilities (H)	2136.83
9	Net additional capitalization claimed on cash basis (I=G+H)	2605.26

*Since asset has become unserviceable and was part of capital cost as on COD of the generating station therefore the same has been treated as de-capitalization.



Exclusions

50. The summary of exclusions claimed by the petitioner from the books of accounts is as under:-

Sr. No.	Name of work	Capitalization/ De-capitalization	
		2012-13	2013-14
(₹ in lakh)			
A	Capitalization of MBOA		
1	Tools & plants	2.31	3.49
2	Furnitures & Fixtures	26.87	0.00
3	Laboratory & workshop equipment	233.43	0.00
4	Vehicles	0.18	0.00
5	Other Office Equipments	4.93	0.00
6	Sub-Total	267.72	3.49
B	Inter Unit Transfer		
7	Other Office Equipment	0.00	(-)1.50
8	EDP, WP machines & SATCOM equipment	(-) 0.59	0.00
9	Furniture & fixtures	(-) 0.70	(-) 0.50
10	Sub-Total	(-) 1.29	(-) 2.00
C	De-capitalization of MBOA: Part of Capital cost		
11	EDP, WP machines & SATCOM equipment	(-) 35.85	(-) 5.85
12	Communication equipments	0.00	(-) 0.13
13	Furnitures & Fixtures	(-) 4.12	(-) 0.22
14	Other office Equipments	(-) 0.54	(-) 0.25
15	laboratory equipments	(-) 0.50	0.00
16	Plant & Machinery	(-) 0.41	0.00
17	Electrical Equipments	0.00	(-) 0.93
18	Sub-Total	(-) 41.42	(-) 7.38
D	De-capitalization of Spares: Part of Capital cost	(-)143.63	(-)19.74
E	De-capitalization of wagons: Part of Capital cost	0.00	(-) 24.72
F	Works adjustment: Tools & plant adjustment	0.00	(-) 0.06
G	De-capitalization of Spares: Not part of capital cost	0.00	(-) 33.59
H	Capital Spares: Not part of capital cost	0.00	1181.90
I	Loan ERV	5007.63	5897.96
J	Reversal of liability	(-) 230.79	(-) 511.03
	Total (A to J)	4858.22	6484.83
K	Un-discharged Liability	0.00	12.84
	Total (A to K)	4858.22	6497.67

Capitalization of Miscellaneous Bought Out Assets (MBOA)

51. The petitioner has capitalized expenditure towards MBOA items in books of accounts during 2012-13 and 2013-14. The exclusion of ₹267.72 lakh and ₹3.49 lakh



claimed towards MBOA items during the years 2012-13 and 2013-14 respectively has been considered.

Inter unit Transfer

52. The petitioner has capitalized expenditure towards inter unit transfer in books of accounts during the years 2012-13 and 2013-14. The petitioner has submitted that the capitalization towards inter unit transfer were not allowed in tariff as part of the capital cost and hence, these inter unit transfers amounting to (-) ₹1.29 lakh and (-) ₹2.00 lakh claimed by the petitioner as exclusions during the years 2012-13 and 2013-14 respectively has been considered.

53. In addition to above, the petitioner has submitted that there have been Inter unit transfer of wagons from this generating station to Talcher STPS Stage-II during the year 2009-10 which got de-capitalized in Talcher STPS Stage-II (another generating station of the petitioner). The petition vide affidavit dated 4.7.2014 in Petition No. 320/GT/2013 (Revision of tariff of Talcher STPS, Stage-II for 2009-14) has prayed that the de-capitalization of these inter unit transferred wagons are to be considered in tariff of the originating/transferring station and not at the transferred station, as the cost of these assets is being serviced through tariff for this generating station. In view of the above, the petitioner has prayed for consideration of the de-capitalized wagons amounting to ₹24.72 lakh each for the year 2011-12 and 2012-13 for this generating station. Considering the fact that the asset was being serviced through tariff for this generating station and had been de-capitalized i.e. unserviceable, We are of the view that the same should be deducted from the capital cost of this generating station. We direct accordingly.



De-capitalization of Miscellaneous Bought out Assets (MBOA)

54. The petitioner has excluded the de-capitalized MBOA in books of accounts during the years 2012-13 and 2013-14. It is observed that MBOA amounting to ₹41.42 lakh and ₹7.38 lakh were allowed in tariff as part of the capital cost and hence it would not be prudent to consider the exclusion. Therefore, de-capitalization of MBOA for (-) ₹41.42 lakh and (-) ₹7.38 lakh which form part of the capital cost for the purpose of tariff has been considered for reduction from capital cost.

De-capitalization of spares

55. The petitioner has de-capitalized capital spares amount of (-) ₹143.63 lakh and (-) ₹19.74 lakh during the years 2012-13 and 2013-14 respectively. It is observed that these spares were allowed in tariff and form part of the capital cost of the generating station. Accordingly, the de-capitalization of spares for (-) ₹143.63 lakh and (-) ₹19.74 lakh which form part of capital cost for the purpose of tariff has been considered for reduction from the capital cost.

De-capitalization of wagons

56. The petitioner has de-capitalized an amount of ₹24.72 lakh towards Wagons in 2013-14. It is observed that these wagons were allowed in tariff and form part of the capital cost as per the generating station. Therefore, de-capitalization of wagons for (-) ₹24.72 lakh which were allowed and form part of capital cost for the purpose of tariff has been considered as reduction from capital cost.

Tools & Plant Adjustment

57. The petitioner has submitted Works adjustment of (-) ₹0.06 lakh towards Tools and Plant in 2013-14 and has submitted that the same pertains to the adjustment made on account of price and freight in the procurement of tools and plants capitalized during



the year 2012-13. Since the capitalization towards tools and plants was not allowed by the Commission in order dated 17.9.2014 in Petition No. 132/GT/2013, the exclusion of (-) ₹0.06 lakh towards adjustment of tools and plants has been considered.

De-capitalization of spares: Not part of capital cost

58. The petitioner has de-capitalized capital spares in 2013-14 and has submitted that these spares do not form part of the admitted capital cost. The petitioner was directed to submit the reasons for procuring the spares amounting to ₹33.59 lakh and de-capitalizing the same during the year 2013-14. In response, the petitioner has submitted the accounting guidelines of the Petitioner's Company for the capital spares which states as under:

"In case, originally fitted parts are replaced with the new capital spares and the taken out parts are irreparable, then the gross block and accumulated depreciation / cost of spares (in case of purchase during the year) of the replaced spare(s) shall be removed from the books."

59. Accordingly, the petitioner based on the above methodology has effected the de-capitalisation of spares amounting to ₹33.59 lakh in 2013-14 out of total de-capitalisation of ₹53.52 lakh in the year of its capitalization. We have examined the matter. There is difference in the amount of total de-capitalization of spares of ₹53.52 lakh submitted by the petitioner and the amount of ₹53.33 lakh (₹19.74 lakh + ₹33.59 lakh) claimed earlier and shown in table of exclusions above. It is further observed that the spares after the cut-off date i.e. (in 2013-14) has not been allowed. Accordingly, the de-capitalization of spares for (-) ₹33.59 lakh corresponding to spares for 2013-14 has been considered as exclusions.

Capitalization of Spares not forming part of the capital cost

60. The petitioner has capitalized capital spares for ₹1181.90 lakh in 2013-14. It is observed that these spares claimed are beyond the cut-off date of the generating station



(31.3.2013) and hence not allowed in tariff in order dated 17.9.2014 in Petition No. 132/GT/2013. Accordingly, the capitalization of spares for ₹1181.90 lakh has been considered as exclusions.

Loan ERV

61. The petitioner has claimed amounts of ₹5007.63 lakh and ₹5897.96 lakh towards Loan ERV under exclusions during the years 2012-13 and 2013-14 respectively. Since FERV is directly billed to beneficiaries as per the 2009 Tariff Regulations the same is considered under exclusions.

Un-discharged Liability

62. The petitioner has claimed an amount of ₹12.84 lakh towards un-discharged liabilities in 2013-14 which forms part of exclusion and hence the Un-discharge liabilities have been considered as a part of exclusion.

Reversal of Liability

63. The petitioner has claimed amount of (-)₹230.79 lakh and (-) ₹511.03 lakh towards reversal of liability under exclusions during the year 2012-13 and 2013-14 respectively. The petitioner has submitted that the negative capitalization pertains to the reversal of liability from the un-discharged liability as on 1.4.2009. The petitioner has also submitted that the admitted capital base as on 31.3.2009 has already been reduced by excluding the un-discharged liability as on 1.4.2009. In terms of the provisions of the 2009 Tariff regulations, liabilities has been excluded / deducted from the capital cost as on 1.4.2009 and as such the exclusion of reversal of liabilities is in order and is allowed.

64. Based on the above, the details of exclusions claimed and allowed for the years 2012-13 and 2013-14 is summarized as under:-



	(₹ in lakh)	
	2012-13	2013-14
Exclusions claimed	4858.22	6497.67
Exclusions allowed	5043.28	6549.51
Exclusion considered as de-capitalization and reduced from capital cost	(-) 185.05	(-) 51.84
Assets transferred to other generating station and considered as de-capitalization in this generating station	(-) 24.72	0.00
Total	(-) 209.77	(-) 51.84

Discharge of liabilities

65. The petitioner has claimed amounts of ₹1288.98 lakh and ₹2136.83 lakh towards discharge of un-discharged liabilities during the year 2012-13 and 2013-14 respectively. It is noticed from the submissions of the petitioner that the said amount of ₹1288.98 lakh in 2012-13 is inclusive of an amount of ₹45.79 lakh for Make-up water system. In view of the observations in para 37 of this order, the amount of ₹45.79 lakh towards discharge of un-discharge liabilities for this generating station has not been considered in this order as the same has been considered in order dated 6.12.2016 in Petition No. 295/GT/2014. Out of the total un-discharged liabilities, the discharge of liabilities of ₹1243.20 lakh and ₹2136.83 lakh during the years 2012-13 and 2013-14 respectively, pertains to capital cost of the allowed capital assets/items and has therefore been considered as additional capital expenditure during the respective years of discharge.

66. The revised additional capital expenditure of ₹10181.57 lakh in 2011-12 on account of adjustment towards de-capitalization of wagons (inter unit transfer) as discussed above has been considered. Accordingly, the actual additional capital expenditure incurred for the years 2012-13 and 2013-14 is allowed as under:-

	(₹ in lakh)	
	2012-13	2013-14
Additional capital expenditure allowed	1663.52	316.18
Exclusions not allowed	(-) 185.05	(-) 51.84
Net additional capital expenditure allowed	1478.47	264.34
Inter unit transfer: De-capitalization of wagons	(-) 24.72	0.00



	2012-13	2013-14
Less: Unserviceable assets	(-)0.37	0.00
Liabilities discharged	1243.20	2136.83
Total additional capitalization allowed including liabilities	2696.57	2401.17

67. 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	384409.56	407581.48	415224.00	425405.57	428102.15
Additional capital expenditure	23171.92	7642.52	10181.57	2696.57	2401.17
Closing capital cost	407581.48	415224.00	425405.57	428102.15	430503.32
Average Capital cost	395995.52	411402.74	420314.79	426753.86	429302.74

Debt: Equity

68. Regulation 12 of the 2009 Tariff Regulations provides that:-

(a) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff.

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

Explanation.- The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

(2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.

(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.



69. The gross loan and net equity amounting to ₹281702.57 lakh and ₹120729.67 lakh respectively as on 31.3.2009 has been considered as gross loan and net equity as on 1.4.2009. The un-discharged liabilities amounting to ₹18022.68 lakh till 31.3.2009 is included in the above debt and equity. The un-discharged liabilities have been adjusted in the debt-equity ratio of 70:30 for liabilities pertaining to the period prior to 1.4.2009. As such, the gross normative loan and net equity, on cash basis, considered for tariff as on 1.4.2009 is revised to ₹269086.69 lakh and ₹115322.87 lakh respectively. The admitted actual additional expenditure has been allocated in debt-equity ratio of 70:30.

(₹ in lakh)

Asset	As on 1.4.2009		Net Additional capitalization during 2009-14		As on 31.3.2014	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	269086.69	70.00%	32265.63	70.00%	301352.32	70.00%
Equity	115322.87	30.00%	13828.13	30.00%	129151.00	30.00%
Total	384409.56	100.00%	46093.76	100.00%	430503.32	100.00%

Return on Equity

70. Regulation 15 of the 2009 Tariff Regulations, as amended on 21.6.2011, provides that:

“(1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.

(2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per clause (3) of this regulation.

Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in Appendix-II.

Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.

(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income



Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.

(4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

Where t is the applicable tax rate in accordance with clause (3) of this regulation.

(5) The generating company or the transmission licensee, as the case may be, shall recover the shortfall or refund the excess Annual Fixed charges on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission:

Provided further that Annual Fixed Charge with respect to tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations.”

71. The respondent, MPPMCL has requested the Commission to direct the petitioner to furnish the information regarding applicable income tax as per Income Tax Act 1961 of the respective financial year and refund of excess AFC recovered from the beneficiaries. In response the petitioner has submitted that as per the 2009 Tariff Regulations it has grossed up with actual tax rate applicable to the petitioner for the tariff period 2009-14 and has also submitted that it has already furnished income tax rate details in Form-3 of the instant petition. The rate for computation of Return on Equity has been computed as per the tax rate applicable to the petitioner generating company in line with the provisions of the relevant Finance Acts of the respective year during the tariff period 2009-14. Accordingly the Return on Equity has been computed as under:

	<i>(₹ in lakh)</i>				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening notional equity	115322.87	122274.44	124567.20	127621.67	128430.64
Addition due to Additional Capitalisation	6951.58	2292.75	3054.47	808.97	720.35
Closing Equity	122274.44	124567.20	127621.67	128430.64	129151.00
Average Equity	118798.66	123420.82	126094.44	128026.16	128790.82
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50



	2009-10	2010-11	2011-12	2012-13	2013-14
Tax rate (%)	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)	27895.11	28645.97	28931.11	29374.32	30241.37

Interest on Loan

72. Regulation 16 of the 2009 Tariff Regulations provides that:-

“(1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.

(3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project.

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered.

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute.



Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan.

73. The respondent, MPPMCL has submitted that rate of interest claimed by the petitioner is increasing by about 1% as compared to the allowed rate of interest and therefore has requested the Commission to check the petitioners claim. In response the petitioner has submitted that it has computed Interest on loan as per the provisions of the 2009 Tariff Regulations. Interest on loan has been worked out as under:-

- a. The gross normative loan of ₹269086.69 lakh (₹281702.56 lakh - ₹12615.87 lakh towards un-discharged liabilities) worked out on cash basis has been considered as on 1.4.2009.
- b. The Cumulative repayment of loan as on 31.3.2009 as determined in order dated 30.9.2011 in Petition No. 63/2009 and 140/2009 amounting ₹11687.38 lakh has been considered as balance as on 1.4.2009. This balance has been further reduced to ₹11163.96 lakh after an adjustment towards the un-discharged liabilities as on 1.4.2009.
- c. Addition to normative loan on account of additional capital expenditure approved above has been considered on year to year basis.
- d. Depreciation allowed has been considered as repayment of normative loan during the respective year of the tariff period 2009-14. Further proportionate adjustment has been made to the repayments corresponding to discharges of liabilities considered during the respective years on account of cumulative repayment adjusted as on 1.4.2009. Also, proportionate adjustment has been made to the repayments on account of de-capitalizations considered in the additional capital expenditure approved above.



- e. Actual rate of interest corresponding to each loan as furnished by the petitioner has been considered as actual rate of interest. The details of weighted average rate of interest are placed at Annexure-I.

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

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross opening loan	269086.69	285307.04	290656.80	297783.90	299671.50
Cumulative repayment of loan up to previous year	11163.96	31639.03	52542.90	73758.39	95438.41
Net opening loan	257922.73	253668.01	238113.90	224025.51	204233.09
Addition due to Additional Capitalisation	16220.35	5349.76	7127.10	1887.60	1680.82
Repayment of Loan during the period	20264.50	20961.59	21403.27	21806.79	21940.72
Less: Repayment adjustment on a/c of de-capitalisation	36.76	105.34	206.03	162.87	36.58
Add: Repayment adjustment on a/c of discharges / reversals corresponding to un-discharged liabilities deducted as on 01.4.2009	247.32	47.63	18.25	36.10	61.05
Repayment of Loan during the period (Net)	20475.06	20903.87	21215.49	21680.03	21965.19
Net Closing Loan	253668.01	238113.90	224025.51	204233.09	183948.72
Average Loan	255795.37	245890.96	231069.71	214129.30	194090.90
Weighted Average Rate of Interest on Loan (%)	6.6303%	6.8214%	7.6378%	8.2684%	8.4068%
Interest on Loan	16959.89	16773.29	17648.66	17705.07	16316.80

Depreciation

75. Regulation 17 of the 2009 Tariff Regulations provides that:

“(1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.



(2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site.

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.

(3) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the assets of the generating station and transmission system. Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.

(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting 3[the cumulative depreciation including Advance against Depreciation] as admitted by the Commission upto 31.3.2009 from the gross depreciable value of the assets.

(6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.”

76. The respondent, MPPMCL has submitted that the petitioner has claimed depreciation towards land right of use at a depreciation rate of 3.34% which is against the provisions of the Regulation and requested the Commission to disallow the same. In response the petitioner has submitted that as per Appendix-II of the 2009 Tariff Regulations, a depreciation rate of 3.34% is applicable for the leased land and accordingly it has considered the same. The petitioner was directed to submit the details of depreciation un-recovered, if any, till 31.3.2014 on account of availability lower than NAPF. In response the petitioner has submitted that from the COD of the station till 31.3.2014, the station has been achieving the normative plant availability factor as set out in the 2009 Tariff Regulations from time to time and therefore, for the instant station there is no under recovery of depreciation till 31.3.2014. The cumulative depreciation on



31.3.2009 of ₹12110.84 lakh has been proportionately adjusted by an amount of ₹542.38 lakh on account of un-discharged liabilities deducted as on 1.4.2009 and the balance considered for the purpose of tariff as on 1.4.2009 is ₹11568.46 lakh. The depreciation has been calculated based on Straight Line Method and at rates specified in Appendix to the 2009 Tariff Regulations. Further, the proportionate adjustment has been made to the cumulative depreciation corresponding to discharges of liabilities considered during the respective years on account of cumulative depreciation adjusted as on 1.4.2009. Also, the cumulative depreciation has been adjusted on account of de-capitalization considered during the period 2009-14 for the purpose of tariff. The necessary calculations in support of depreciation are as under:

	<i>(₹ in lakh)</i>				
	2009-10	2010-11	2011-12	2012-13	2013-14
Average capital cost	395995.52	411402.74	420314.79	426753.86	429302.73
Depreciable value @ 90%	351989.37	365743.88	373630.06	379425.22	384045.84
Balance depreciable value	340420.91	333661.84	320556.41	304982.98	287798.77
Rate of depreciation (%)	5.1174%	5.0952%	5.0922%	5.1099%	5.1108%
Depreciation	20264.50	20961.59	21403.27	21806.79	21940.72
Cumulative depreciation at the end of the period (before adjustment)	31832.97	53043.63	74476.92	96249.04	118187.78
Add: Cumulative depreciation adjustment on account of discharges out of un-discharged liabilities deducted as on 1.4.2009	256.28	49.35	18.91	37.41	63.26
Less: Cumulative depreciation adjustment on account of de-capitalization	7.20	19.34	53.58	39.39	7.66
Cumulative depreciation after adjustment (at the end of the period)	32082.04	53073.64	74442.25	96247.06	118243.39



Operation & Maintenance Expenses

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

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
13000.00	13740.00	14530.00	15360.00	16240.00

Interest on working capital

78. Regulation 18 (1) (a) of the 2009 Tariff Regulations provides that the working capital for Coal-based/lignite-fired thermal generating stations shall cover:

“(i) Cost of coal or lignite and limestone, if applicable, for 1½ months for pithead 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.”

79. 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”

80. The cost of coal for 1.5 months as shown below has been considered as under:

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
5682.21	5682.21	5697.77	5682.21	5682.21

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

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
235.82	235.82	236.47	235.82	235.82

82. O&M expenses for 1 month as allowed in order dated 17.9.2014 is considered as under:

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
1083.33	1145.00	1210.83	1280.00	1353.33

83. Maintenance spares as allowed in order dated 17.9.2014 has been considered as under.

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
2600.00	2748.00	2906.00	3072.00	3248.00

84. 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
Variable charges for two months	7576.27	7576.27	7597.03	7576.27	7576.27
Fixed charges for two months	13890.04	14234.92	14648.02	14946.37	15035.39
Total	21466.31	21811.18	22245.05	22522.64	22611.66



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

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of coal – 1.1/2 months	5682.21	5682.21	5697.77	5682.21	5682.21
Cost of secondary fuel oil – 2 month	235.82	235.82	236.47	235.82	235.82
O&M expenses – 1 month	1083.33	1145.00	1210.83	1280.00	1353.33
Maintenance Spares	2600.00	2748.00	2906.00	3072.00	3248.00
Receivables – 2 months	21466.31	21811.19	22245.29	22522.64	22611.66
Total working capital	31067.67	31622.22	32296.36	32792.67	33131.02
Rate of interest (%)	12.25%	12.25%	12.25%	12.25%	12.25%
Interest on working capital	3805.79	3873.72	3956.30	4017.10	4058.55

Secondary Fuel Oil

86. The petitioner has claimed Secondary Fuel Oil same as allowed in order dated 17.9.2014 in Petition No. 132/GT/2013. The respondent, MPPMCL has submitted that as per Regulation 25 (3) of the 2009 Tariff Regulations the saving on account of secondary fuel oil consumption in relation to norms shall be shared with beneficiaries in the ratio of 50:50, in accordance with the formula given therein at the end of the year. The respondent, MPPMCL has accordingly, prayed that the petitioner may be directed to file on affidavit the details regarding sharing of saving in secondary fuel oil consumption and fuel price adjustment in respect of cost of secondary fuel oil with a copy to respondent. In response, the petitioner has submitted that it has already passed on the benefit of both saving in consumption of secondary fuel oil and in the price adjustment to the beneficiaries and has also submitted the required details in the monthly bills raised to the respondent. The Secondary Fuel Oil has been considered same as allowed in order dated 17.9.2014 in Petition No. 132/GT/2013 as under:-



(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
1414.92	1414.92	1418.80	1414.92	1414.92

Annual Fixed Charges

87. The annual fixed charges allowed for the period 2009-14 in respect of the generating station is summarized as under:-

(₹ in lakh)					
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	20264.50	20961.59	21403.27	21806.79	21940.72
Interest on Loan	16959.89	16773.29	17648.66	17705.07	16316.80
Return on Equity	27895.11	28645.97	28931.11	29374.32	30241.37
Interest on Working Capital	3805.79	3873.72	3956.30	4017.10	4058.55
O&M Expenses	13000.00	13740.00	14530.00	15360.00	16240.00
Cost of secondary fuel oil	1414.92	1414.92	1418.80	1414.92	1414.92
Total	83340.22	85409.49	87888.14	89678.20	90212.37

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

89. Petition No. 344/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



Annexure-I

**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN
FOR TARIFF PERIOD 2009-14**

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Net opening loan	237871.63	231237.08	229346.83	201972.18	170182.00
Add: Addition during the period	12500.00	34500.00	4400.00	0.00	0.00
Less: Repayment during the period	19134.56	36390.25	31774.65	31793.00	30323.00
Net Closing Loan	231237.08	229346.83	201972.18	170179.18	139859.00
Average Loan	234554.36	230291.96	215659.51	186075.68	155020.50
Rate of Interest (%)	6.6303%	6.8214%	7.6378%	8.2684%	8.4066%
Interest	15551.56	15709.21	16471.67	15385.48	13032.00

