

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 299/GT/2014**

**Coram:**

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

**Date of Order : 24.3.2017**

**In the matter of:**

Revision of tariff of National Capital Thermal Power Station, Dadri, Stage - I(840 MW)for the period 1.4.2009 to 31.03.2014- Truing up of tariff determined by order dated 20.5.2015 in Petition No. 260/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. Uttar Pradesh Power Corporation Limited  
Shakti Bhawan  
14, Ashok Marg  
Lucknow-226001
2. BSES-Rajdhani Power Ltd.  
BSES Bhawan, Nehru Place,  
New Delhi - 110019
3. BSES-Yamuna Power Ltd.,  
Shakti Kiran Building, Karkardooma,  
Delhi- 110072



4. Tata Power Delhi Distribution Ltd.,  
Grid Sub-station Hudson Road,  
Kingsway Camp, Delhi-110009
5. New Delhi Municipal Council,  
Palika Kendra, Sansad Marg,  
New Delhi-110001

.....**Respondents**

The following were present:-

For Petitioner:

Shri Ajay Dua, NTPC  
Shri Neeraj Kumar, NTPC  
Shri Nishant Gupta, NTPC  
Shri T. Vinod Kumar, NTPC  
Shri Bhupinder Kumar, NTPC  
Shri Rajeev Choudhary, NTPC

For Respondent:

Shri, R.B. Sharma, Advocate, BRPL  
Shri Manish Garg, UPPCL  
Shri Sameer Singh, BYPL  
Shri Shekhar Sakhani, BYPL  
Shri Kanishk, BRPL

**ORDER**

This petition has been filed by the petitioner, NTPC, for revision of tariff of National Capital Thermal Power Station stage-I (4 x 210) (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 840 MW comprises of four units of 210 MW each. The dates of commercial operation of different units of the generating station are as under:

	Capacity (MW)	Date of Commercial Operation (COD)
Unit – I	210	1.1.1993
Unit – II	210	1.2.1994



Unit – III	210	1.4.1995
Unit – IV	210	1.12.1995
<b>COD of Generating Station</b>	<b>840</b>	<b>1.12.1995</b>

3. The Commission by order dated 6.7.2012 in Petition No. 255/2009 had determined the tariff for the generating station for the period 2009-14. Aggrieved by the said order, the petitioner filed Appeal No. 167/2012 before the Appellate Tribunal for Electricity (“Tribunal”) and the Tribunal by Judgment dated 12.5.2015 upheld the order of the Commission observing as:

*“Additional capital expenditure on the above said assets as claimed by the appellant under the said situations are not covered under the definition of “Change in law” because the expenditure on the said assets can be claimed by the appellant NTPC only under Change in Law clause when the events are to be dealt with as a result of enactment, promulgation, amendment, modification or repeal of any law or change in the interpretation of any law by a competent court, Tribunal or Indian Governmental Instrumentality or Change in Law by a competent statutory authority, in any consent, approval or license available or obtained for the project. The learned counsel for the appellant has though tried to explain the said events to be covered under Change in Law but has really failed to demonstrate that such events leading to replacement of the said system or addition of the said assets have occurred.*

*The Central Commission has rightly observed, in the impugned orders, that such expenses were being claimed by the NTPC in FY 2013-14 without providing any explanation for the delayed capitalization of the expenditure and such claim was being made under the ‘change in law’ by the appellant without demonstrating the need for such expenditure under the provisions of any statute. Further, under Tariff Regulations, 2009 auxiliary power consumption is determined on the basis of normative value and any reduction in auxiliary power consumption will benefit the appellant alone. Merely because Bureau of Energy Efficiency has issued guidelines to monitor the auxiliary power consumption and the Regulations of the CEA to install meters, will not bring it under ‘Change in Law’ and thus the capitalization in respect of this asset cannot be made for the purpose of tariff.*

*22. Without repeating the submissions of the respondents/beneficiaries provided in para no. 17.01 to 17.10 of this judgment, we find that the learned Central Commission has rightly disallowed the said claim of additional capital expenses by giving sufficient and cogent reasons. We make it clear that no Regulation of the Tariff Regulations can be read in isolation but the cumulative effect of the whole Regulations, scheme and purpose of the Regulations have to be considered, hence the Central Commission has rightly disallowed the said claims of the NTPC after analyzing the cumulative effect of various Regulations of Tariff Regulations, 2009 without leaving any ambiguity. We do not find any merit in any of the contentions of the appellant-NTPC. However, we agree to the findings recorded by the Central Commission on Issue No. ‘A’. Consequently, this Issue No. ‘A’ is decided against the appellant.”*



4. Accordingly, there is no change in annual fixed charges determined by the Commission in order dated 6.7.2012, in Petition No. 255/2009. Thereafter, the petitioner had filed Petition No. 260/GT/2013 and the Commission vide order dated 20.5.2015 had revised the fixed charges for the period 2009-14, after truing up exercise in terms of Regulation 6(1) of the 2009 Tariff Regulation. The capital cost of ₹172340.35 lakh as approved in order dated 6.7.2012 in Petition No. 255/2009 was revised to ₹170127.78 lakh after removal of un-discharged liability of ₹2212.57 lakh on cash basis as on 1.4.2009.

5. Accordingly, the revised capital cost and annual fixed charges as approved in order dated 20.5.2015 is as under:-

#### Capital Cost

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital cost	170127.78	170341.37	169983.16	169737.55	169444.73
Net Additional capital expenditure	213.58	(-)358.21	(-)245.61	(-)292.83	-
Closing capital cost	170341.37	169983.16	169737.55	169444.73	169444.73
Average Capital cost	170234.57	170162.26	169860.36	169591.14	169444.73

#### Annual Fixed Charges

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	2398.97	2399.57	2387.54	2369.44	2380.09
Interest on loan	126.19	2.83	0.00	0.00	0.00
Return on Equity	19974.99	19739.42	19492.41	19473.88	19919.35
Interest on working capital	7188.55	7231.12	7294.57	7333.07	7402.04
O&M expense	15288.00	16161.60	17085.60	18068.40	19101.60
Cost of secondary fuel oil	2457.17	2457.17	2463.90	2457.17	2457.17
Compensation Allowance	210.00	252.00	294.00	294.00	357.00
<b>Total</b>	<b>47643.87</b>	<b>48243.69</b>	<b>49018.03</b>	<b>49995.97</b>	<b>51617.24</b>

6. Regulation 6 of the 2009 Tariff Regulations provides as under:

*"6. Truing up of Capital Expenditure and Tariff*



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

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

7. The petitioner presently seeks revision of the annual fixed charges based on the actual additional capital expenditure incurred for 2013-14 in accordance with Regulation 6(1) of the 2009 Tariff Regulations. The petitioner has submitted that the items disallowed by the Commission for capitalization in order dated 6.7.2012 in Petition No. 255/2009 have not been included. Accordingly, the annual fixed charges claimed by the petitioner is as under:

#### **Annual Fixed Charges**

	<i>(₹ in lakh)</i>				
	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Depreciation	2418.13	2436.06	2440.42	2441.55	2449.55
Interest on loan	126.06	2.70	0.00	0.00	0.00
Return on Equity	19983.55	19774.71	19554.95	19556.14	20020.57
Interest on working capital	7196.52	7241.49	7307.35	7346.66	7418.20
O&M expense	15288.00	16161.60	17085.60	18068.40	19101.60
Cost of secondary fuel oil	2457.17	2457.17	2463.90	2457.17	2457.17
Compensation Allowance	210.00	252.00	294.00	294.00	357.00
<b>Total</b>	<b>47679.43</b>	<b>48325.74</b>	<b>49146.22</b>	<b>50163.92</b>	<b>51804.09</b>

8. In compliance with the direction of the Commission, the petitioner has filed additional information with copy to the respondents. Reply has been filed by the Respondents UPPCL and BRPL and the petitioner has filed in rejoinder to said replies.

9. Taking into consideration the submissions of the parties and the documents available on record, we proceed to revise the tariff of the generating station, on prudence check, as stated in the subsequent paragraphs.



## Capital cost

10. 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.”*

11. The petitioner has considered the opening capital cost as ₹170127.78 lakh as on 1.4.2009 as approved in order dated 20.5.2015 in Petition No. 260/GT/2013. Based on the closing capital cost of ₹170127.78 lakh as on 31.3.2009 and ₹169444.73 lakh as on 31.3.2013, admitted by the Commission in order dated 20.5.2015 in Petition No. 260/GT/2013, the annual fixed charges of the generating station for 2013-14 have been determined by this order.

## Actual/ Projected Additional Capital Expenditure during 2009-14

12. Regulation 9 of the 2009 Tariff Regulations, as amended on 21.6.2011 and 31.12.2012, provides as under:

### **“9. Additional Capitalisation.**

....

*(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.

13. The actual additional capital expenditure for the period 2009-13 and the projected additional capital expenditure for the year 2013-14 allowed vide order dated 20.5.2015 in Petition No. 260/GT/2013 is as under:-

(₹ in lakh)					
Head of Work/Equipment	2009-10 (Actual)	2010-11 (Actual)	2011-12 (Actual)	2012-13 (Actual)	2013-14 (projected)
Construction of Transit Camp & A,B,C Type Quarters	26.96	-	-	-	-
NDCT Package	299.98	-	-	-	-
Fire Protection System for Administration Building	11.73	-	-	-	-
<b>Change in Law- Regulation 9(2)(viii)</b>	-	-	-	-	-
Ambient Air quality monitoring system	-	96.79	-	-	-
<b>Total</b>	<b>338.67</b>	<b>96.79</b>	-	-	-



Head of Work/Equipment	2009-10 (Actual)	2010-11 (Actual)	2011-12 (Actual)	2012-13 (Actual)	2013-14 (projected)
Exclusions not allowed (B)	(-)243.12	(-)457.36	(-)255.66	(-)293.41	-
Discharges of Liabilities (against allowed assets/works)	118.03	2.36	10.05	0.59	-
<b>Net Additional Capitalization Allowed</b>	<b>213.58</b>	<b>(-)358.21</b>	<b>(-)245.61</b>	<b>(-)292.83</b>	<b>-</b>

14. The actual additional capital expenditure claimed by the petitioner for the year 2013-14 is as under:

HEAD OF WORKS/EQUIPMENTS	2013-14
	Actual
<b>Capital Addition Schemes (Allowed by CERC)</b>	
Ash Storage Modification.	125.62
<b>Capital Addition Scheme</b>	
Railway Siding Civil Work	10.33
<b>Total</b>	<b>135.95</b>
<b>Discharge of Liability</b>	
Discharge of liabilities by way of payment out of liabilities on allowed items before 1.4.09	46.57
Discharge of liabilities by way of payment on claimed items after 1.4.09	3.98
Total discharge of liabilities by way of payment	50.55
<b>Total Additional Capital Expenditure</b>	<b>186.50</b>

15. The respondent BRPL vide affidavit dated 29.4.2016 has submitted that, petitioner has not furnished details of additional capital expenditure, CWIP and de-capitalization incurred in 2013-14 duly audited and certified by Auditors as per Regulation 6(3) of the 2009 Tariff Regulations. Thus the documents which are required for the purpose of truing up are not enclosed in the petition. Further, BRPL submitted that petitioner has not submitted the list of assets that form a part of the project but not put into use. The same should be removed from the capital cost.





16. Respondent BRPL also submitted that the Tribunal, vide its Judgment dated 22.3.2016 in Appeal No. 47 of 2014 has clearly distinguished between initial spares, maintenance spares and capital spares. This distinction between initial and maintenance spares show that, when initial spares are replaced by maintenance spares, the initial spares are required to be de-capitalized as the replaced initial spares are no more in use and the same have become unserviceable in accordance to proviso under Regulation 7(1)(c) of the 2009 Tariff Regulations.

17. The petitioner had filed Appeal No.47 of 2014 in the Tribunal in respect of certain items such as Energy Management system, cable drag chain, replacement of finned economizer 'J' bends etc. which were disallowed by the Commission. However, the Tribunal in its Judgment dated 22.3.2016 upheld the decision of the Commission passed in the impugned order dated 16.12.2013 in Petition No. 18/GT/2013 and dismissed the said Appeal.

18. We have considered the submissions of the petitioner and the respondent. The Commission vide order dated 20.5.2015 in Petition No. 260/GT/2013 had trued up annual fixed charges for 2009-13 on the basis of actual additional capital expenditure for 2009-13. The Commission while revising the tariff of the generating station for the period 2009-14 in order dated 20.5.2015 had directed the petitioner to submit additional information at the time of truing up of tariff as under: :

- a. List of spares which were capitalized in 2009-14 along with proper justification.
- b. In para 32, claim of petitioner for exclusion of all de-capitalization were disallowed.  
Proper/sufficient details/clarification for exclusion of all de-capitalization disallowed.



c. In para 33, exclusion of ₹117.95 lakh sought by petitioner was not allowed.

Petitioner was directed to submit the details of exclusions of ₹117.95 lakh not allowed at the time of truing up.

19. In response to RoP of the hearing dated 22.6.2016, the petitioner vide affidavit dated 12.7.2016 has furnished the details of capital spares for the period 2009-14. However, the detail, sought for in terms of (b) and (c) above has not been submitted by the petitioner. Accordingly, no revision has been considered for the period 2009-13 and the tariff as approved vide order dated 20.5.2015 in Petition No. 260/GT/2013 is considered and the actual additional capital expenditure incurred during the year 2013-14 has only been discussed in this order as under:

#### **2013-14**

##### **Ash Storage Modification**

20. The petitioner has claimed additional capital expenditure of ₹125.62 lakh towards Ash storage modification under Regulation 9(2)(iii) of the 2009 Tariff Regulations. In justification of the same, the petitioner has submitted that the additional capital expenditure for the said work/asset has been approved vide order dated 6.7.2012 in Petition No. 255/2009, wherein an amount ₹130.00 lakh projected to be incurred during 2010-11 was allowed. The petitioner has submitted that on account of the delay in the execution of the said work, the said asset was capitalized in the year 2013-14.

21. The respondent, BRPL vide affidavit dated 29.4.2016 has submitted that the petitioner has claimed projected additional capital expenditure of ₹125.62 lakh in 2013-14, which had been allowed by the Commission in order dated 6.7.2012, but the same was not considered in order dated 20.5.2015 in Petition No. 260/GT/2013. It has further submitted that the claim in respect of the said work is not justifiable, as the same is not a



deferred work related to ash pond or ash handling system covered within the original scope of works. Accordingly, the respondent has prayed that the same should be disallowed.

22. We have examined the matter. It is noted that the Commission by letter dated 22.6.2016 had directed the petitioner to submit the asset-wise, year-wise variation in the actual capital expenditure claimed as against the allowed in order dated 20.5.2015, under specific heads giving specific reasons for the increase or decrease, as the case maybe. In response, the petitioner vide affidavit dated 12.7.2016 has submitted that, Ash storage modification amounting to ₹125.62 lakh was capitalized in 2013-14 as against the projected additional capital expenditure of ₹130.00 lakh allowed in order dated 6.7.2012. Considering the fact that the actual cost of work was based on competitive bidding and was executed for a lesser amount (i.e. ₹125.62 lakh) and since the work is related to ash handling system and within the original scope of work of the project and was approved by order dated 6.7.2012, we are inclined to allow the expenditure under Regulation 9(2)(iii) of the 2009 Tariff Regulation.

### **Railway Siding Civil Work**

23. The petitioner has claimed additional capital expenditure of ₹10.33 lakh for the said work under Regulation 9(2)(i) of the 2009 Tariff Regulations. In justification of the same, the petitioner has submitted that the expenditure incurred is based on the judgment of the Delhi High Court dated 8.11.2012 in the matter of Arbitration between M/s Budhraj Mining & Construction Ltd. And IRCON.

24. The respondent BRPL has submitted that additional capital expenditure of ₹10.33 lakh claimed under Regulation 9(2)(i) of the 2009 Tariff Regulations is not justifiable, and the case is not against the petitioner.



25. The petitioner was directed to submit the asset-wise, year-wise variation in the actual capital expenditure claimed and as against those allowed in order dated 20.5.2015 under specific heads giving specific reasons for increase or decrease as the case maybe. In response, the petitioner vide affidavit dated 12.7.2016 has submitted that the railway siding and civil work was under arbitration and the decision was pending before the Hon'ble Delhi High Court. It was also submitted that the expenditure was capitalized in 2013-14. The scheme was not indicated earlier and hence no expenditure was approved.

26. We have examined the matter. It is observed that the arbitration matter referred to by the petitioner was pending before the Hon'ble Delhi High court and is related to the dispute between M/s IRCON and its subcontractor. Since there appears to be no direction on the petitioner to make payment. We find no reason to allow the capitalization of the expenditure incurred by the petitioner.

**Reconciliation of actual additional capital expenditure for the period 2013-14 vis-a-vis Books of Accounts.**

27. The additional capital expenditure as per books of accounts vis-à-vis additional capital expenditure claimed for the year 2013-14 is as under:

<i>(₹ in lakh)</i>		
Sr.No.	2013-14	
1	Closing Gross Block as per Audited Balance Sheet as on 31.3.2013	174215.16
2	Opening Gross Block as per Audited Balance Sheet as on 1.4.2013	174215.16
3	Closing Gross Block as per Audited Balance Sheet on 31.3.2014	175158.61
4	Addition During the Year (3-2)	943.45
5	Exclusion during the period 2013-14	807.50



6	Additional capital expenditure during the period 2013-14 including liabilities (4-5)	135.95
7	Less: Un-discharged Liabilities	-
8	Net Additional capital expenditure claimed during the period 2013-14 on cash basis (7-8)	135.95
9	Liabilities discharged during the year 2013-14	50.55
10	<b>Total Additional capital expenditure claimed on cash basis during the year 2013-14 (9+10)</b>	<b>186.51</b>

### Exclusions:

28. The summary of exclusions claimed as per books of accounts is as under:

Description	(₹ in lakh)		
	Additional Capital Expenditure Claimed in 2013-14	Liabilities in Additional Capital Expenditure	Net Claim on cash basis
Items disallowed by the Commission	747.23	203.78	543.45
Vapour absorption Heat Pump- Not Claimed	0.38	-	0.38
Plant & Machinery- Minor in nature	(-)0.0027		(-)0.0027
Inter unit transfer	(-)0.92	-	(-)0.92
Unserviceable assets	(-)46.09	-	(-)46.09
Capitalization of spares	649.36	72.49	576.86
De-capitalization of spares- Part of capital cost	(-)271.85	-	(-)271.85
De-cap of MBOA items part of capital cost	(-)259.28	-	(-)259.28
De-cap of MBOA items not part of capital cost	(-)11.27	-	(-)11.27
Liability Reversal	(-)0.05	-	(-)0.05
<b>Total</b>	<b>807.50</b>	<b>276.27</b>	<b>531.22</b>

We now consider the exclusions for the year 2013-14 under different heads of claims for the purpose of tariff.

### Items disallowed by Commission



29. The petitioner has excluded an amount of ₹747.23lakh, including liability of ₹203.78 lakh towards items disallowed by the Commission in order dated 6.7.2012 in Petition No. 255/2009. The items are summarized as under:-

(₹ in lakh)

	Claimed in 2013-14	Liabilities in Additional Capital Expenditure	Net Claim on cash basis
R&M of Chlorination	23.61	4.16	19.45
R& M of Gen Excitation System	68.57	33.62	34.95
Retrofitting of Generator protection panel with integrated numerical generator protection relay	94.88	66.12	28.75
Renovation of Kruggs make isolators	104.11	62.54	41.57
Lightning arrestors for 500 MVA ICTs	42.40	19.84	22.56
Renovation of ESP field and rapper control	149.59	-	149.59
Chlorine absorption system for PTP , CW	42.25	17.50	24.75
BFP Re-circulation Valves	110.83	-	110.83
CCTV System for Stage#1 Main Plant & CHP	110.99	-	110.99
<b>Total</b>	<b>747.23</b>	<b>203.78</b>	<b>543.45</b>

30. The capitalization of these works/assets had not been allowed since there was no proviso in Regulation 9(2) of the 2009 Tariff Regulations to allow such works. In order dated 6.7.2012 the Commission had disallowed the additional capital expenditure of the above assets by stating the following reasons;

*“From the justification submitted by the petitioner, it is noticed that these assets/works are essentially required for efficient operation of the generating station. However, there is no provision under Regulation 9(2) of the 2009 Tariff Regulations to consider the capitalization of these capital assets. As decided by the Commission, additional capital expenditure for successful and efficient operation of the generating stations for reasons other than those provided for under Regulation 9(2) of 2009 Tariff Regulations is not permissible. Moreover, the generating station has not completed 25 years and hence the question of considering R&M schemes for extension of useful life does not arise.”*



31. Since these items were not allowed to be capitalized, they do not form part of capital cost. Hence, the exclusions sought are in order and accordingly allowed.

**Items not claimed**

32. The petitioner has excluded amounts of ₹0.38 lakh and ₹(-)0.0027 lakh in books of accounts towards minor assets such as Vapor absorption (VAM) and Minor asset for Plant and Machinery respectively. Since capitalization of these items has not been claimed by the petitioner, being minor in nature, these items do not form part of capital cost. Hence exclusions sought on this count are in order and has been allowed.

**Un-serviceable Assets**

33. The petitioner has de-capitalized items such as vehicles, construction equipment and plant machinery amounting to (-)₹46.09 lakh in books of accounts in 2013-14. In justification of the same, the petitioner has submitted that, the items have been de-capitalized but shown as unserviceable asset as per Note-12 of the balance sheet. It is further submitted that as new purchase of these kinds of items are not being allowed for tariff, the de-capitalization should be excluded for purpose of tariff.

34. After examining the exclusions sought on de-capitalization of these items, it is noticed that depreciation of ₹41.42 lakh has already been recovered on account of these items and therefore these items form part of tariff. Hence, exclusion on account of de-capitalization of these items is not justified and has not been allowed.

**Capitalization of spares:**

35. The petitioner has excluded capital spares amounting to ₹649.36 lakh including liability of ₹72.49 lakh in the books of account in 2013-14. Since capitalization of spares over and above the initial spares procured after the cut-off date are not allowed for the purpose of tariff and they form part of the O&M expenses when consumed, the exclusion of the said amount under this head is in order and has been allowed.



### **De-capitalization of Spares**

36. The petitioner has de-capitalized in the books of accounts capital spares amounting to (-) ₹271.85 lakh in 2013-14 on the ground that these spares have become unserviceable. After examining the exclusions sought on de-capitalization of capital spares, it is noticed that these capital spares were part of the capital cost of the generating station for the purpose of tariff. Hence, exclusion sought on account of de-capitalization of these spares is not allowed.

### **De-capitalization of MBOA items**

37. The petitioner has excluded de-capitalized MBOAs of (-) ₹259.28 lakh and (-) ₹11.27 lakh in 2013-14 in the books of accounts. In justification, the petitioner has submitted that, the un-serviceable items have been de-capitalized for accounting purposes. As new purchase of these items is not being allowed for tariff purposes by the Commission hence it should be excluded from tariff.

38. On scrutiny it was observed that the amount (-) ₹259.28 lakh was allowed in tariff as a part of capital cost and the amount (-) ₹11.27 lakh was not allowed as a part of capital cost. Hence, exclusions of ₹259.28 lakh on account of de-capitalization of MBOA which were part of capital cost is not justifiable and accordingly, the exclusion of these items has not been allowed. However, exclusions amounting to ₹(-)11.27 lakh on account of de-capitalization of MBOA which were not a part of capital cost is allowed.

### **Inter-unit Transfer**

39. The petitioner has excluded amounts for (-) ₹0.92 lakh towards inter unit transfer in books of accounts in 2013-14.





40. It is observed that the Commission while dealing with applications for additional capitalization in respect of other generating station of the petitioner had decided in its various orders that both positive and negative entries arising out of inter-unit transfers of temporary nature and shall be ignored for the purpose of tariff. However, in order dated 20.5.2015 in Petition No. 260/GT/2013 the Commission had disallowed the exclusion of transfer of IT equipment to corporate center since it was of a permanent nature. In line with the decision in the order dated 20.5.2015, exclusion claimed for inter-unit transfer of IT equipment for EDP equipment of ₹(-)0.92 lakh is not allowed.

### Liability Reversal

41. The petitioner had excluded amount of (-) ₹0.05 lakh in 2013-14 on account of reversal of liability. In justification, the petitioner has submitted that since tariff is allowed on cash basis, the liability reversal has been kept under exclusion. Accordingly, the liability reversal of the said amount has been allowed.

42. As per provisions of the 2009 Tariff Regulations, the same has been excluded and as such the exclusion of reversal of liabilities is in order and is allowed.

43. The summary of exclusions allowed and disallowed is as under:

	Claimed in 2013-14	Allowed	Not Allowed
Items disallowed by CERC	747.23	747.23	-
Heat Pump vapor absorption- not claimed	0.38	0.38	-
Minor assets (Plant & Machinery)	(-)0.0027	0.00	-
Inter unit transfer- permanent	(-)0.92	-	(-)0.92
Unserviceable assets	(-)46.09	-	(-)46.09
Capitalization of spares	649.36	649.36	-
De-capitalization of spares- part of capital cost	(-)271.85	-	(-)271.85
De-cap of MBOA items part of capital cost	(-)259.28	-	(-)259.28
De-cap of MBOA items not part of CC	(-)11.27	(-)11.27	-



Liability Reversal	(-)0.05	(-)0.05	-
<b>Total</b>	<b>807.50</b>	<b>1385.64</b>	<b>(-)578.14</b>

44. Based on above discussions, the additional capital expenditure allowed for the generating station in 2013-14 is as under:

<i>(₹ in lakh)</i>	
<b>Head of Work/Equipment</b>	<b>2013-14</b>
Construction of Transit Camp & A,B,C Type Quarters	-
NDCT Package	-
Fire Protection System for Administration Building	-
Ash Storage Modification	125.62
<b>Total (A)</b>	<b>125.62</b>
<b>Change in Law 9(2)(viii)</b>	
Ambient Air quality monitoring system	-
<b>New Claims- Regulation 9(2)(i)</b>	
Railway Siding Work	-
<b>Total</b>	<b>125.62</b>
Exclusions not allowed (B)	(-)578.14
<b>Net Additional capitalization allowed (C )</b>	<b>(-)452.52</b>

### **Discharge of Liabilities**

45. The respondent, UPPCL vide affidavit dated 20.10.2014 has submitted that, the petitioner has not reconciled the liability details as per audited accounts as there is significant variation in liability for capital creditors as claimed against the Audited Financial statements. In response, the petitioner vide affidavit dated 16.5.2016 has submitted that as on 31.3.2013, the total un-discharged liability is ₹13110 lakh as submitted for Stage-I& II of this generating station as compared to that of ₹14883 lakh as per Audited Balance Sheet (BS) of the generating station and the variation is ₹1773 lakh. Similarly the petitioner has submitted that as on 31.3.2014, the un-discharged liability of ₹13182 lakh as submitted for Stage-I& II of the generating station vis-à-vis liability of amount of ₹15552 lakh as per Audited accounts of the generating station, the



variation is ₹2370 lakh. The petitioner has further submitted that the variation is due to overlapping of some amount of Operational Expenditure liability in capital expenditure and that the amount of liability for Stages I & II of the generating station is lesser than that of liability as per audited balance sheet. Accordingly, the liability discharged has been restricted to the amount claim in respect of Stages I & II i.e. CAPEX liability of ₹13182 lakh, instead of audited accounts figure of ₹15552 lakh. Since, tariff is determined on cash basis, this difference has no impact on the capital cost allowed. The reconciliation amount as on 31.3.2013 and 31.3.2014 as submitted by petitioner is as under:

	(₹ in lakh)	
	As on 31.3.2013	As on 31.3.2014
Capital liabilities in Gross Block as claimed (Stage-I)	1358.09	1583.30
Capital Liabilities in CWIP as claimed (Stage-I)	237.06	1096.73
<b>Total</b>	<b>1595.15</b>	<b>2680.04</b>
Capital liabilities in Gross Block as claimed (Stage-II)	10779.61	9973.59
Capital Liabilities in CWIP as claimed (Stage-II)	735.90	528.11
<b>Total</b>	<b>11515.51</b>	<b>10501.71</b>
Capital Liabilities as per Audited Balance Sheet	14883.49	15551.88
<b>Difference</b>	<b>1772.83</b>	<b>2370.14</b>

46. Accordingly, the additional capital expenditure allowed after adjustment of liabilities discharged is as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Net Additional capitalization allowed before discharges of liabilities	95.55	(-)360.57	(-)255.66	(-)293.41	(-)452.52
Add: Discharge of Liabilities	118.03	2.36	10.05	0.59	50.55
<b>Total Additional Capital Expenditure allowed</b>	<b>213.58</b>	<b>(-)358.21</b>	<b>(-)245.61</b>	<b>(-)292.83</b>	<b>(-)401.97</b>



47. Based on the above, the capital cost considered for the purpose of tariff for the period 2009-14 is summarized as under:-

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital cost	170127.78	170341.37	169983.16	169737.55	169444.73
Net Additional capital expenditure	213.58	(-)358.21	(-)245.61	(-)292.83	(-)401.97
Closing capital cost	170341.37	169983.16	169737.55	169444.73	169042.74
Average Capital cost	170234.57	170162.26	169860.36	169591.14	169243.73

### **Debt: Equity**

48. 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 modernization expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.*

49. The gross loan and equity amounting to ₹85091.08 lakh and ₹85036.70 lakh respectively as on 31.3.2009 has been considered as gross loan and equity as on 1.4.2009 as approved in order dated 20.5.2015 in Petition No. 260/GT/2013.



50. Accordingly, the debt equity ratio as on 31.3.2014 works out as 50.10:49.90 as shown under.

(₹ in lakh)

	As on 1.4.2009		Net Additional Capital Expenditure during 2009-14		As on 31.3.2014	
	Amount	(%)	Amount	(%)	Amount	(%)
Debt	85091.08	50.02%	(-759.53)	70.00%	84,331.54	49.89%
Equity	85036.70	49.98%	(-325.51)	30.00%	84,711.19	50.11%
<b>Total</b>	<b>170127.78</b>	<b>100.00%</b>	<b>(-1085.04)</b>	<b>100.00%</b>	169,042.73	<b>100.00%</b>

### Return on Equity

51. 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.”*

52. The respondent, BRPL has submitted that the petitioner has trued up tax rate applicable to all the generating stations as per Income Tax Act, 1961 but not with respect to the generating station for the year 2013-14. Hence, it is prayed that the petitioner should be directed to furnish the actual tax rate paid against the generating station. It has further submitted that the petitioner shall clarify, as to whether there is any receipt of benefits under Section-80 IA of the Income Tax Act, 1961, allowing the benefits of tax holiday.

53. The matter has been examined. The grossing up of the base rate has been done with respect to the actual tax rate applicable to the petitioner for the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14. Accordingly, return on equity has been worked out on the normative net equity as on 1.4.2009 after accounting for the admitted actual additional capital expenditure for the period 2009-14 as above. Return on Equity has been computed as under:-

	<i>(₹ in lakh)</i>				
	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Opening notional equity	85036.70	85100.78	84993.32	84919.63	84831.79
Addition due to Net Additional Capitalisation	64.07	(-)107.46	(-)73.68	(-)87.85	(-)120.59
Closing Equity	85100.78	84993.32	84919.63	84831.79	84711.20
Average Equity	85068.74	85047.05	84956.47	84875.71	84771.49
Return on Equity (Base 3Rate ) (%)	15.500%	15.500%	15.500%	15.500%	15.500%
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%
<b>Return on Equity (Pre Tax)</b>	<b>19974.99</b>	<b>19739.42</b>	<b>19492.41</b>	<b>19473.88</b>	<b>19905.19</b>



## **Interest on Loan**

54. 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.*



55. Interest on loan has been worked out as under:-
- a. The gross normative loan of ₹85091.08 lakh worked out on cash basis has been considered as on 1.4.2009.
  - b. Cumulative repayment of ₹83681.76 lakh as on 31.3.2009 as considered in order dated 5.9.2011 in Petition No.120/2009 has been considered as on 1.4.2009. However, after taking into account the proportionate adjustment 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 ₹82515.67 lakh.
  - 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. The weighted average rate of interest of has been considered based on actual loan portfolio for respective years. The calculations for weighted average rate of interest on loan are enclosed in **Annexure-I** of this order.
56. 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	85091.08	85240.59	84989.84	84817.92	84612.94
Cumulative repayment of loan up to previous year	82515.67	85181.61	84989.84	84817.92	84612.94
Net opening loan	2575.41	58.98	-	-	-
Addition due to Additional Capitalisation	149.51	(250.75)	(171.92)	(204.98)	(281.38)
Repayment of Loan during the period	2398.97	(63.35)	(99.92)	0.40	(708.66)
Repayment adjustment on a/c of de-capitalization	153.59	157.04	76.88	205.38	(404.70)
Add: Repayment adjustment on a/c of discharges / reversals corresponding to un-discharged liabilities deducted as on 01.04.2009	420.56	28.63	4.88	-	22.58
Net Closing Loan	58.98	-	-	-	0.00
Average Loan	1317.19	29.49	0.00	0.00	0.00
Weighted Average Rate of Interest on Loan (%)	9.5800%	9.5800%	9.5800%	9.5800%	9.5800%
<b>Interest on Loan</b>	<b>126.19</b>	<b>2.83</b>	<b>-</b>	<b>-</b>	<b>0.00</b>

### **Depreciation**

57. 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.”

58. The depreciation has been calculated based on Straight Line Method and at rates specified in Appendix to the 2009 Tariff Regulations. Further, the proportionate adjustment has been made to the cumulative depreciation corresponding to discharges of liabilities considered during the respective years on account of cumulative depreciation adjusted as on 1.4.2009. Also, the cumulative depreciation has been adjusted on account of de-capitalization considered during the period 2009-14 for the purpose of tariff. The necessary calculations in support of depreciation are as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Average capital cost	170234.57	170162.26	169860.36	169591.14	169243.74
Value of freehold land	4596.70	4604.88	4609.52	4613.25	4613.26
Depreciable value @ 90%	149074.09	149001.64	148725.75	148480.09	148167.43
Balance Useful life of the asset	12.12	11.12	10.12	9.12	8.12
Balance depreciable value	29075.55	26683.16	24161.93	21609.33	19145.40
Depreciation (annualized)	2398.97	2399.57	2387.54	2369.44	2357.81
Cumulative depreciation at the end of the period (before adjustment)	122397.51	124718.04	126951.36	129240.21	131379.84
Less: Cumulative depreciation adjustment on account of discharges out of un-discharged liabilities deducted as on 1.4.2009	75.02	41.47	1.88	0.00	33.73
Add: Cumulative depreciation adjustment on account of de-capitalization	154.05	195.69	82.48	218.18	477.55



	2009-10	2010-11	2011-12	2012-13	2013-14
Cumulative depreciation after adjustment (at the end of the period)	122318.48	124563.82	126870.76	129022.03	130936.03

### **Operation & Maintenance Expenses**

59. 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
15288.00	16161.60	17085.60	18068.40	19101.60

### **Interest on working capital**

60. 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.”*

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

62. Working capital has been calculated considering the following elements:

#### **Fuel components in working capital**

63. The petitioner has claimed the following cost of fuel component in working capital based on price and GCV of coal & secondary fuel oil procured and burnt for the preceding three months of January 2009, February 2009 and March 2009.

64. The respondent, BRPL vide affidavit dated 29.4.2016 has submitted that the petitioner has computed working capital based on price and GCV of coal & secondary fuel oil procured and burnt for the preceding three months of Jan 2009, Feb 2009 and March 2009 which is an old data. Accordingly, it is prayed that the petitioner should furnish the latest procurement price.

65. The petitioner has claimed cost of coal and cost of secondary fuel oil as under:-

	<i>(₹ in lakh)</i>				
	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Cost of coal – 2 months	23000.14	23000.14	23063.15	23000.14	23000.14
Cost of secondary fuel oil – 2 month	409.53	409.53	410.65	409.53	409.53

66. The fuel component in the working capital as considered in order dated 20.5.2015 in Petition No. 260/GT/2013 as under has been considered:



	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of coal – 2 months	23000.13	23000.13	23063.14	23000.13	23000.13
Cost of secondary fuel oil – 2 month	409.53	409.53	410.65	409.53	409.53

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

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
	1274.00	1346.80	1423.80	1505.70	1591.80

### Maintenance Spares

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

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
	3057.60	3232.32	3417.12	3613.68	3820.32

### Receivables

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

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Variable charges for two months	23,000.13	23,000.13	23,063.14	23,000.13	23,000.13
Fixed charges for two months	7940.64	8040.62	8169.67	8332.66	8596.67
<b>Total</b>	<b>30940.77</b>	<b>31040.75</b>	<b>31232.81</b>	<b>31332.79</b>	<b>31596.80</b>

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

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of coal – 2 months	23000.13	23000.13	23063.14	23000.13	23000.13
Cost of secondary fuel oil – 2 month	409.53	409.53	410.65	409.53	409.53
O&M expenses – 1 month	1274.00	1346.80	1423.80	1505.70	1591.80
Maintenance Spares	3057.60	3232.32	3417.12	3613.68	3820.32



Receivables – 2 months	30940.77	31040.74	31232.81	31332.79	31596.80
Total working capital	<b>58682.03</b>	<b>59029.52</b>	<b>59547.53</b>	<b>59861.83</b>	<b>60418.58</b>
Rate of interest (%)	12.2500	12.2500	12.2500	12.2500	12.2500
<b>Interest on working capital</b>	<b>7188.55</b>	<b>7231.12</b>	<b>7294.57</b>	<b>7333.07</b>	<b>7401.28</b>

### Secondary Fuel Oil

71. Regulation 20 of the 2009 Tariff Regulations specifies:-

**“20. Expenses on secondary fuel oil consumption for coal-based and lignite-fired generating station.**

(1) Expenses on secondary fuel oil in Rupees shall be computed corresponding to normative secondary fuel oil consumption (SFC) specified in clause (iii) of regulation 26, in accordance with the following formula:

$$SFC \times LPSFi \times NAPAF \times 24 \times NDY \times IC \times 10$$

Where,

SFC – Normative Specific Fuel Oil consumption in ml/kWh

NAPAF – Normative Annual Plant Availability Factor in percentage

NDY – Number of days in a year

IC - Installed Capacity in MW.

LPSFi – Weighted Average Landed Price of Secondary Fuel in Rs./ml considered initially”

72. The petitioner has claimed same cost of Secondary Fuel Oil as allowed vide order dated 20.5.2015 in Petition No. 260/GT/2013. We have considered the submissions of the petitioner and have accordingly allowed the cost of Secondary Fuel Oil.

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
2457.17	2457.17	2463.90	2457.17	2457.17

### Compensation Allowance

73. The petitioner has considered the same compensation allowance as approved in order dated 20.5.2015 in Petition No. 260/GT/2013 as shown under:-



(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
210.00	252.00	294.00	294.00	357.00

#### Annual Fixed charges for 2009-14

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

(₹ in lakh)					
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	2398.97	2399.57	2387.54	2369.44	2357.81
Interest on Loan	126.19	2.83	0.00	0.00	0.00
Return on Equity	19974.99	19739.42	19492.41	19473.88	19905.19
Interest on Working Capital	7188.55	7231.12	7294.57	7333.07	7401.28
O&M Expenses	15288.00	16161.60	17085.60	18068.40	19101.60
Cost of Secondary Fuel Oil	2457.17	2457.17	2463.90	2457.17	2457.17
<b>Sub-Total</b>	<b>47433.87</b>	<b>47991.69</b>	<b>48724.03</b>	<b>49701.97</b>	<b>51223.04</b>
Compensation Allowance	210.00	252.00	294.00	294.00	357.00
<b>Total</b>	<b>47643.87</b>	<b>48243.69</b>	<b>49018.03</b>	<b>49995.97</b>	<b>51580.04</b>

75. The difference in the annual fixed charges determined by order dated 20.5.2015 and those determined by this order shall be adjusted in accordance with Regulation 6(6) of the 2009 Tariff Regulations.

76. Petition No. 299/GT/2014 is disposed of in terms of the above.

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

Sd/-  
(A.S. Bakshi)  
Member

Sd/-  
(A.K. Singhal)  
Member

Sd/-  
(Gireesh B. Pradhan)  
Chairperson



**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2009-14)**

*(₹ in lakh)*

	Interest Rate (%)	Loan deployed as on 1.4.2013	Additions during the tariff period	Total
BOND XIII A series	9.58	3872.00	-	3872.00
BOND XIII B Series	9.58	21473.00	-	21473.00
<b>Total</b>		<b>25345.00</b>	<b>-</b>	<b>25345.00</b>

**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
Gross Opening Loan	25345.00	25345.00	25345.00	25345.00	25345.00
Cumulative Repayments of Loans upto Previous Year	2534.50	5069.00	7603.50	10138.00	12672.50
Net Loans Opening	22810.50	20276.00	17741.50	15207.00	12672.50
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	2534.50	2534.50	2534.50	2534.50	2534.50
Net Closing Loan	20276.00	17741.50	15207.00	12672.50	10138.00
Average Net Loan	21543.25	19008.75	16474.25	13939.75	11405.25
Rate of Interest on Loan (%)	9.5800%	9.5800%	9.5800%	9.5800%	9.5800%
Interest on Loan	2063.84	1821.04	1578.23	1335.43	1092.62