

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 315/GT/2014**

**Coram:**

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

**Date of Hearing: 27.02.2015**

**Date of Order: 21.12.2015**

**In the matter of**

Revision of tariff of Singrauli Super Thermal Power Station (2000 MW) for the period from 1.4.2009 to 31.3.2014-Truing up of tariff determined by order dated 15.5.2014 in Petition No. 188/GT/2013.

**And**

**In the matter of**

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

...**Petitioner**

Vs

1. Uttar Pradesh Power Corporation Ltd  
Shakti Bhawan, 14, Ashok Road,  
Lucknow – 226001
2. Jaipur Vidyut Vitran Nigam Ltd  
Vidyut Bhawan, Janpath,  
Jaipur – 302 205
3. Ajmer Vidyut Vitran Nigam Ltd Old Power House,  
Hatthi Bhatta, Jaipur Road, Ajmer – 305001
4. Jodhpur Vidyut Vitran Nigam Ltd  
New Power House, Industrial Area,  
Jodhpur – 342003
5. Tata Power Delhi Distribution Ltd  
33 kV Sub-station, Kingsway Camp,  
Delhi – 110 009
6. BSES Rajdhani Power Ltd  
BSES Bhawan, Nehru Place,  
New Delhi – 110 019



7. BSES Yamuna Power Ltd  
Shakti Kiran Building, Karkardooma  
New Delhi – 110092
8. Haryana Power Purchase Centre,  
Shakti Bhawan, Sector, 6  
Panchkula – 134109
9. Punjab State Power Corporation Ltd  
The Mall, Secretariat Complex,  
Patiala – 147 001
10. Himachal Pradesh State Electricity Board,  
Kumar Housing Complex Building – II,  
Vidyut Bhawan, Shimla-171004
11. Power Development Department,  
Government of J&K,  
New Secretariat, Srinagar
12. Power Department,  
Union Territory of Chandigarh,  
Addl. Office Building, Sector 9D, Chandigarh
13. Uttarakhand Power Corporation Ltd Urja Bhawan,  
Kanwali Road, Dehradun – 248 001

....Respondents

**Parties present:**

Shri M.G.Ramachandran, Advocate, NTPC  
Ms. Ranjitha Ramachandran, Advocate, NTPC  
Shri Ajay Dua, NTPC  
Shri Bhupinder Kumar, NTPC  
Shri Neeraj Kumar, NTPC  
Shri Vivek Kumar, NTPC  
Shri Nishant Gupta, NTPC  
Shri Manish Garg, UPPCL  
Shri R. B. Sharma, Advocate, BRPL

**ORDER**

This petition has been filed by the petitioner, NTPC, for revision of tariff of Singrauli Super Thermal Power Station (2000 MW) (hereinafter referred to as “the generating station”) for the period from 1.4.2009 to 31.3.2014 in terms of 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 total capacity of 2000 MW comprises of five units of 200 MW and two Units of 500 MW each. The dates of commissioning of various units of the generating station are as under:



Unit-I	1.6.1982
Unit-II	1.2.1983
Unit-III	1.7.1983
Unit-IV	1.1.1984
Unit-V	1.6.1984
Unit-VI	1.7.1987
Unit-VII/Generating station	<b>1.5.1988</b>

3. The Commission vide order dated 7.8.2012 in Petition No. 225/2009 had determined the tariff of the generating station for the period from 1.4.2009 to 31.3.2014 considering the capital cost of ₹127479.47 lakh (after removing un-discharged liabilities amounting to ₹382.35 lakh as on 1.4.2009). Thereafter, Petition No.188/GT/2013 was filed by the petitioner for revision of the annual fixed charges based on the actual additional capital expenditure incurred for the years 2009-10, 2010-11 and 2011-12 and the projected additional capital expenditure for the years 2012-13 and 2013-14 and the Commission vide order dated 15.5.2014 revised the tariff of the generating station. Aggrieved by the said order, the petitioner filed Review Petition No. 16/RP/2014 and the Commission by order dated 1.10.2014 allowed the prayer for “Computation of de-capitalized value of spares as part of capital cost for 2011-12 as ₹464.75 lakh instead of ₹384.29 lakh as claimed in tariff petition” and directed rectification of the said error while revising the tariff of the generating station based on truing-up exercise for 2012-14.

4. The annual fixed charges and the capital cost of the generating station allowed by Commission’s order dated 15.5.2014 in Petition No.188/GT/2013 is as under:

#### Capital Cost

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital cost	127479.47	127303.07	127150.73	126635.09	126635.09
Additional Capital Expenditure	(-) 176.40	(-) 152.34	(-) 515.63	0.00	7867.62
<b>Closing Capital cost</b>	<b>127303.07</b>	<b>127150.73</b>	<b>126635.09</b>	<b>126635.09</b>	<b>135347.09</b>
<b>Average Capital cost</b>	<b>127391.27</b>	<b>127226.90</b>	<b>126892.91</b>	<b>126635.09</b>	<b>130991.09</b>

#### Annual Fixed Charges

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	210.42	215.52	1.29	2.16	232.16
Interest on Loan	482.76	365.66	343.16	333.10	407.56
Return on Equity	14325.06	14148.29	13963.15	13945.40	14245.24



Interest on Working Capital	7051.98	7170.22	7287.47	7392.74	7589.43
O&M Expenses	31200.00	32980.00	34870.00	36870.00	38980.00
Cost of Secondary Fuel Oil	3175.77	3175.77	3184.47	3175.77	3175.77
Compensation Allowance	780.00	650.00	650.00	650.00	325.00
Special Allowance	4000.00	5286.00	5588.36	5908.01	9368.93
<b>Total</b>	<b>61225.99</b>	<b>63991.47</b>	<b>65887.91</b>	<b>68277.19</b>	<b>74324.09</b>

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

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

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

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

6. In accordance with the above, the petitioner has filed this petition for revision of tariff of the generating station for the period 2009-14 based on the admitted capital cost as on 31.3.2009 and the actual capital expenditure incurred (on cash basis) during the period 2009-14. Accordingly, the capital cost and the annual fixed charges claimed by the petitioner are as under:

#### Capital Cost

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	127479.47	127303.07	127150.73	126715.55	126925.61
Additional capital expenditure	(-)176.40	(-)152.34	(-)435.18	210.06	212.80
<b>Closing Capital Cost</b>	<b>127303.07</b>	<b>127150.73</b>	<b>126715.55</b>	<b>126925.61</b>	<b>127138.41</b>
<b>Average Capital Cost</b>	<b>127391.27</b>	<b>127226.90</b>	<b>126933.14</b>	<b>126820.58</b>	<b>127032.01</b>

#### Annual Fixed Charges

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	210.43	215.52	1.29	7.19	17.80
Interest on Loan	483.12	365.99	343.52	509.77	746.64
Return on Equity	14325.06	14148.29	13965.92	13958.17	14299.75
Interest on Working Capital	7051.99	7170.23	7287.53	7396.79	7593.16
O&M Expenses	31200.00	32980.00	34870.00	36870.00	38980.00
Cost of Secondary Fuel Oil	3175.77	3175.77	3184.47	3175.77	3175.77
Compensation Allowance	780.00	650.00	650.00	650.00	325.00
Special Allowance	4000.00	5286.00	5588.36	5908.01	9368.93
<b>Total</b>	<b>61226.37</b>	<b>63991.79</b>	<b>65891.10</b>	<b>68475.71</b>	<b>74507.06</b>

7. In compliance with the directions of the Commission, the petitioner has filed additional information and has served copies to the respondents. The respondents, UPPCL and BRPL have filed replies in the matter and the petitioner has filed its rejoinder to the said replies. We now



proceed to revise the tariff of the generating station, based, on prudence check, considering the submissions of the parties and the documents available on record as stated in the subsequent paragraphs.

### Capital Cost as on 1.4.2009

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 annual fixed charges claimed by the petitioner is based on the opening capital cost of ₹127479.47 lakh as on 1.4.2009 as approved by order dated 15.5.2014. The petitioner vide its affidavit dated 8.2.2013 has furnished the value of capital cost and liabilities as on 1.4.2009 as per books of accounts in Form-9A. The details of liabilities and capital cost have been reconciled with the information available with the records of the Commission as under:

	<i>(₹ in lakh)</i>	
	<b>As per Form-9A</b>	<b>As per records of Commission</b>
Capital cost as on 1.4.2009 as per books	139952.94	139952.94
Liabilities included above	416.72	416.72

10. It is evident from the above that there is no variation in the capital cost and liabilities position as on 1.4.2009. Further, out of the total liabilities of ₹416.72 lakh included in the gross block, the approved capital cost of ₹127479.47 lakh, is inclusive of un-discharged liabilities of ₹382.35 lakh (all pertaining to period 2004-09) and the balance liabilities of ₹34.37 lakh corresponds to disallowed assets/works.

11. Accordingly, the capital cost as on 1.4.2009, after removal of un-discharged liabilities of ₹382.35 lakh, works out to ₹127479.47 lakh, on cash basis. Further, out of the un-discharged liabilities of ₹382.35 lakh deducted as on 1.4.2009, the petitioner has discharged liabilities of ₹1.96 lakh, ₹53.14 lakh, ₹48.21 lakh, ₹25.53 lakh and ₹1.03 lakh during the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively and has also reversed amounts of ₹1.33 lakh and



₹44.23 lakh during the years 2009-10 and 2011-12. These discharges along with the discharges corresponding to assets admitted on cash basis during the tariff period 2009-14 has been allowed as additional capital expenditure during the respective years.

### **Actual Additional Capital Expenditure**

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

*“9.(2) The capital expenditure incurred or projected to be incurred on the following counts after the cut-off date may, in its discretion, be admitted by the Commission, subject to prudence check:*

*(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;*

*(ii) Change in law;*

*(iii) Deferred works relating to ash pond or ash handling system in the original scope of work;*

*(iv) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) including due to geological reasons after adjusting for proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation; and*

*(v) In case of transmission system any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement of switchyard equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system:*

*Provided that in respect sub-clauses (iv) and (v) above, any expenditure on acquiring the minor items or the assets like tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2009.*

*(vi) In case of gas/liquid fuel based open/ combined cycle thermal generating stations, any expenditure which has become necessary on renovation of gas turbines after 15 year of operation from its COD and the expenditure necessary due to obsolescence or non-availability of spares for successful and efficient operation of the stations.*

*Provided that any expenditure included in the R&M on consumables and cost of components and spares which is generally covered in the O&M expenses during the major overhaul of gas turbine shall be suitably deducted after due prudence from the R&M expenditure to be allowed.*

*(vii) Any capital expenditure found justified after prudence check necessitated on account of modifications required or done in fuel receipt system arising due to non-materialisation of full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station.*

*(viii) Any un-discharged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date, after prudence check of the details of such deferred liability, total estimated cost of package, reason for such withholding of payment and release of such payments etc.*

*(ix) Expenditure on account of creation of infrastructure for supply of reliable power to rural households within a radius of five kilometres of the power station if, the generating company does not intend to meet*



such expenditure as part of its Corporate Social Responsibility.”

13. The details of the actual additional capital expenditure claimed by the petitioner for the period 2009-14 are as under:

(₹ in lakh)						
Sl. No.		2009-10	2010-11	2011-12	2012-13	2013-14
1	New Assets	0.22	7.79	32.94	190.34	206.61
2	De-capitalization	0.00	0.00	0.00	5.82	0.00
3	<b>Net additional capital expenditure claimed (1-2)</b>	<b>0.22</b>	<b>7.79</b>	<b>32.94</b>	<b>184.52</b>	<b>206.61</b>
4	Exclusions not allowed in order dated 15.5.2014 in Petition No. 188/GT/2013	(-) 178.58	(-) 213.27	(-) 516.32	0.00	0.00
5	Total additional capital expenditure allowed (3 +4)	(-) 178.36	(-) 205.48	(-) 483.38	184.52	206.61
6	Additional liabilities discharged	1.96	53.14	48.21	25.53	6.19
7	<b>Total additional capital expenditure claimed (5+6)</b>	<b>(-)176.40</b>	<b>(-)152.34</b>	<b>(-) 435.17</b>	<b>210.05</b>	<b>212.80</b>

14. The break-up details of the actual additional capital expenditure allowed in order dated 15.5.2014 Petition No. 188/GT/2013 for 2009-14 are as under:

(₹ in lakh)					
	2009-10 (Actual)	2010-11 (Actual)	2011-12 (Actual)	2012-13 (Projected)	2013- 14 (Projected)
Dry Ash Extraction and Transportation for Stage-II (DAETP)	0.00	0.00	0.00	0.00	4572.00
Ash Water Recirculation System	0.00	0.00	0.00	0.00	4140.00
<b>Sub Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>8712.00</b>
<b>New Items /claims</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Dyke sub laggoning civil work	0.00	0.00	0.00	0.00	0.00
Ash Dyke Package lagoon Stage-I	0.00	0.00	32.94	0.00	0.00
Implementation of scheme for supply of power within 5 KM radius	0.00	0.00	0.00	0.00	0.00
Leasehold land-Plant	0.00	0.00	0.00	0.00	0.00
Replacement of ASEA and Jyoti Make 6.6 kV MOCBs with SF6 Vacuum Breaker for CHP	0.22	0.00	0.00	0.00	0.00
Liquid Waste Treatment Plant	0.00	7.79	0.00	0.00	0.00
<b>Total additional capital expenditure allowed</b>	<b>0.22</b>	<b>7.79</b>	<b>32.94</b>	<b>0.00</b>	<b>8712.00</b>

15. The break-up details of the actual additional capital expenditure claimed in this petition for the period 2009-14 are as under:



(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
<b>New Items/Claims</b>					
Dyke Sub laggoning civil work	0.00	0.00	0.00	190.34	0.00
Ash Dyke Package lagoon	0.00	0.00	32.94	0.00	0.00
Implementation of scheme for supply of power within 5 KM radius	0.00	0.00	0.00	0.00	206.61
Replacement of ASEA and Jyoti Make 6.6 KV MOCBs with SF6 Vaccum Breaker for CHP Stage -II	0.22	0.00	0.00	0.00	0.00
Liquid Waste Treatment Plant	0.00	7.79	0.00	0.00	0.00
<b>Total additional capital expenditure claimed</b>	<b>0.22</b>	<b>7.79</b>	<b>32.94</b>	<b>190.34</b>	<b>206.61</b>
De-capitalisation – implementation of SAP	0.00	0.00	0.00	(-) 5.82	0.00

16. As against the additional capital expenditure of ₹8752.95 lakh allowed vide order dated 15.5.2014 in Petition No. 188/GT/2013, it is observed that the petitioner has claimed the actual additional capital expenditure of ₹437.90 lakh for 2009-14. The decrease in the total claim for additional capital expenditure is mainly on account of the fact that as against the projected additional capital expenditure of ₹8712.00 lakh (₹4572.00 lakh for Dry Ash Extraction and transportation system and ₹4140.00 lakh for Ash Water Re-circulation System) allowed in 2013-14, only an expenditure of ₹206.61 lakh has been claimed as actual additional capital expenditure in 2013-14 towards implementation of the GOI scheme for supply of power within 5 km radius of the power plant. Also, actual additional capital expenditure of ₹190.34 lakh for Dyke sub-lagooning civil work has been claimed in 2012-13 even though no projected additional capital expenditure was allowed in the year 2012-13. It is noticed that the actual additional capital expenditure allowed by order dated 15.5.2014 remains unchanged for the years 2009-10, 2010-11 and 2011-12. We now examine the claim of the petitioner for additional capital expenditure for 2012-14 as under:

#### **Dyke Sub lagooning civil work**

17. The petitioner has claimed actual additional capital expenditure of ₹190.34 lakh in 2012-13 towards Dyke sub-lagooning civil work under Regulation 9(2)(iii) of the 2009 Tariff Regulations. In justification of the same the petitioner has submitted that the generating station was conceived in early 1980's considering lower generation level and that the ash generation and ash dyke capacity was planned accordingly. It has also submitted that being a low cost generating station, the





generation level have consistently been in the range of 90% PLF leading to higher ash generation than planned and this has led to space constraints in Khadia ash dyke for discharging of ash. Accordingly, it has submitted that in order to cater the disposal of ash, a scheme for enhancement of sub-lagooning of Khadia ash dyke was recommended by NIT Rourkela in its study and the scheme was taken for implementation.

18. The respondent, UPPCL vide its reply dated 13.10.2014 has submitted that the expenditure is not in the nature of 'deferred works' within the original scope of work as the need was felt for this work because of higher generation than originally envisaged. It has also submitted that the claim does not satisfy the requirement and is not admissible. The respondent has stated that the petitioner has claimed 'Special Allowance' for 2012-13 and hence the expenditure incurred may be met from the same. The respondent, BRPL in its reply has pointed out that the petitioner has opted for 'Special Allowance' under the provisions of 10(4) of 2009 Tariff Regulations for Renovation & Modernization & Life extension of the units (except for Unit-VII) and shall become eligible during 2014-15. It has also submitted that since the generating station would complete the useful life of 25 years, there would be no remaining deferred work for 'Dyke Sub-lagooning civil work' within the original scope of works. Accordingly, it has prayed that the claim may not be allowed. The petitioner in its rejoinder dated 20.3.2015 while reiterating its submissions has clarified that due to deferment of works related to ash dyke for stage-II units attributable to late clearances given by statutory authorities, sub-lagooning works of Khadia ash dyke is being carried out for enhancement of dyke capacity.

19. We have considered the submission of the parties and documents available on record. It is observed from the submission of the petitioner that the scheme of Dyke enhancement was envisaged later on and thus it cannot be considered to be within the original scope of work. The Commission in its tariff order dated 7.8.2012 in Petition No.225/2009 had allowed total amount of ₹30151.30 lakh in 2009-14 as Special Allowance under Regulation 10(4) of the 2009 Tariff Regulations to meet expenses to meet the expenses including R & M beyond the useful life of generating station or unit thereof as the units would be completing 25 years of useful life from their



respective CODs. In addition to this, the generating station has been allowed an amount of ₹3055.00 lakh as Compensation Allowance under Regulation 19(e) of the 2009 Tariff Regulations to meet expenses on new assets of capital nature including minor nature of assets. Accordingly, we are of the considered view that the expenditure of ₹190.34 lakh shall be met from the Compensation Allowance already allowed to the generating station in order dated 7.8.2012. Accordingly, the claim for additional capital expenditure towards Dyke sub-lagooning civil work in 2012-13 has not been allowed.

### **Expenditure on 5 km electricity supply scheme-Regulation 9(2)(ix)**

20. The petitioner has claimed ₹206.61 lakh in 2013-14 towards implementation of the scheme for electrification for villages in 5 km radius around Central Power Plants under this head. The scheme for supply of electricity within 5 km radius around Central Power Plants was withdrawn vide Ministry of Power, Government of India notification dated 25.3.2013. It is noticed that the Ministry of Power, GOI by letter dated 8.3.2014 had granted exemption in respect of 8 ongoing projects around the generating stations of the petitioner, including this generating station, under the erstwhile scheme and has conveyed the approval for capitalization of expenditure for this generating station also as per provisions of the said scheme, subject to orders of this Commission. In terms of this, the petitioner vide its affidavit dated 11.3.2014 in Petition No.188/GT/2013 had filed the documents in support of capitalization of the expenditure of ₹409.95 lakh in 2012-13 and ₹80.00 lakh in 2013-14. The Commissions accepted the submissions of the petitioner and by order dated 15.5.2014 directed that the said claim shall be considered at the time of truing up of tariff of the generating station for 2009-14 in terms of Regulation 6 of the 2009 Tariff Regulations. Based on this, the petitioner in this petition has claimed the actual additional capital expenditure of ₹206.61 lakh in 2013-14 and has prayed that the same may be allowed.

21. The respondent, BRPL has submitted that the expenditure claimed by the petitioner under this head may be considered under the head Corporate Social Responsibility. It has also pointed out that the generating station has been granted special allowance and hence the said expenditure claimed may not be allowed.



22. The matter has been examined. The Ministry of Power, GOI by letter dated 8.3.2014 had granted exemption in respect of 8 ongoing projects around the generating stations of the petitioner, including this generating station. The Commission has also by order dated 15.5.2014 observed that the expenditure under this head will be considered at the time of truing-up of tariff. During the hearing on 27.2.2015, the petitioner clarified that the infrastructure created under the said scheme has been handed over to the respondent, UPPCL and certificate to that effect received from the respondent has been enclosed. Though the respondent, UPPCL was directed to clarify on affidavit as to whether the said official of the respondent was authorised to take possession of the assets created by NTPC under the scheme, no clarification has been submitted by the respondent.

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

### **De-capitalization**

24. The petitioner has de-capitalized an amount of ₹5.82 lakh towards implementation of SAP in 2012-13. Since the asset is not in use, the de-capitalization of ₹5.82 lakh has been allowed.

25. The petitioner has de-capitalized an amount of ₹13.39 lakh from the gross block in respect of assets held for disposal in 2012-13 thereby revising the opening gross block as on 1.4.2012. Based on the entry in the foot note of the Auditor certified gross block, the petitioner has submitted that the difference in the opening gross block as on 1.4.2012 is on account of the change in accounting policy. The matter has been examined. It is observed from the details of assets held for disposal, that out of the assets amounting to ₹13.39 lakh, only assets for ₹11.53 lakh form part of



the capital cost and the balance assets for ₹1.86 lakh has not been allowed as they do not form part of the capital cost. In view of this, the de-capitalization of ₹11.53 lakh towards assets held for disposal which form part of the capital cost, has been reduced from the opening capital cost as on 1.4.2012.

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

	(₹ in lakh)	
	2012-13	2013-14
Closing gross block as per Audited balance sheet as on 31.3.2012	155173.76	160683.82
Less: Assets held for disposal	13.39	0.00
Opening Gross Block as on 1 <sup>st</sup> April of year <b>(A)</b>	155160.37	160683.82
Closing Gross Block as on 31 <sup>st</sup> March of year <b>(B)</b>	160683.82	166913.90
Addition during the year (as per books) C=(B-A)	5523.45	6230.08
<b>Exclusions (D)</b>	<b>5326.09</b>	<b>5889.77</b>
Additional Capitalization including liabilities (C-D) = E	197.36	340.31
less Un-discharged Liabilities <b>(F)</b>	12.84	133.70
<b>Net Additional capitalization claimed on cash basis (E – F)</b>	<b>184.52</b>	<b>206.61</b>

### Exclusions

27. The summary of exclusions claimed for the years 2012-13 to 2013-14 as per books of accounts is as under:

		(₹ in lakh)	
		2012-13	2013-14
<b>A</b>	<b>items disallowed</b>		
i	Renovation of economiser coil for 500 MW	3447.06	10.63
ii	Renovation for LP turbine for 200 MW	6.29	0.00
iii	Renovation of DAS	0.00	11.20
iv	Boiler lift stage-I	0.00	36.44
v	DM plant instrumentation	0.00	122.29
<b>Sub Total - A</b>		<b>3453.35</b>	<b>180.56</b>
<b>B</b>	<b>De-capitalization of items disallowed</b>		
i	Economiser coils for 500 MW	(-) 637.55	0.00
ii	Boiler lift stage-I	0.00	(-)2.38
iii	DM plant instrumentation	0.00	(-)14.09
iv	generator transformer (1 no) St-II	0.00	(-)1019.59
<b>Sub Total - B</b>		<b>(-) 637.55</b>	<b>(-) 1036.06</b>
<b>C</b>	<b>Items not claimed</b>		
i	Hydra crane	10.50	0.00
ii	Hydrobin Package	19.89	0.00
iii	Mill Reject system	11.27	0.00
iv	Slew Bearings in Stacker & Reclaimer	93.44	0.00
v	CHP control system	0.49	0.00
vi	Expansion of campus wide network	34.20	0.00



vii	SOE system	0.00	10.01
viii	BOBR wagons (21 nos)	0.00	818.61
ix	Manual trolley sigma hoist	0.00	25.34
x	Megger (hand drive)	0.00	0.71
xi	gasket cutting machine	0.00	0.28
xii	Inflatable air jack	0.00	4.28
<b>Sub Total - C</b>		<b>169.79</b>	<b>859.23</b>
	<b>FERV</b>	<b>267.43</b>	<b>313.20</b>
<b>D</b>	<b>Inter-Unit Transfer</b>		
i	MBOA items	1.10	0.79
ii	<b>Loco</b>	975.68	0.00
<b>Sub Total - D</b>		<b>976.78</b>	<b>0.79</b>
I	Capitalization of Spares	3399.63	6231.95
li	De-capitalization of spares : part of capital cost	(-) 136.61	(-) 24.38
lii	De-capitalization of spares : Not part of capital cost	(-) 2452.76	(-) 874.49
Iv	Capitalization of MBOA items	298.76	263.17
v	De-Capitalisation of MBOA items - part of capital cost	(-) 18.66	0.00
vi	De-capitalisation of MBOA not part of capital cost	(-) 0.01	(-) 18.13
vii	Misc. items (minor in nature)	5.93	0.00
viii	Liability Reversal	0.00	(-)6.08
<b>Total Exclusions claimed</b>		<b>5326.08</b>	<b>5889.76</b>

28. We now consider the exclusions under different heads in the claim for the purpose of tariff as discussed in subsequent paragraphs.

#### Items disallowed

29. The petitioner has excluded amounts of ₹3453.35 lakh (₹3447.06 lakh for Renovation of Economiser coils, ₹6.29 lakh for Renovation of LP turbine) in 2012-13 and ₹180.56 lakh (₹10.63 lakh for Renovation of Economiser coils, ₹11.20 lakh for Renovation of DAS, ₹36.44 lakh for Boiler lift and ₹122.29 lakh for DM plant) in 2013-14. Since the items relating to the additional capital expenditure on CEA approved R&M schemes had not been allowed in Commission's order dated 7.8.2012 in Petition No. 225/2009 on the ground that Special allowance in lieu of R&M for life extension as contained in Regulation 10 of the 2009 Tariff Regulations is admissible for this generating station, these amounts do not form part of the capital cost. Accordingly, the exclusion of the same is in order and has been allowed.

#### De-capitalization of items disallowed

30. The petitioner has excluded amounts of (-) ₹637.55 lakh in 2012-13 towards de-capitalization of economizer coils and (-) ₹1036.06 lakh in 2013-14 towards de-capitalization of assets



(Generator Transformer, Boiler lift St-I and DM Plant Instrumentation) disallowed by Commission's order dated 15.5.2014 in Petition No. 188/GT/2013. In justification of the same, the petitioner has submitted that capitalization of these assets have not been allowed on the ground that Special Allowance is admissible. It has also submitted that the Commission vide its order dated 15.5.2014 had allowed the corresponding de-capitalisation against the replaced items.

31. The matter has been examined. The submissions of the petitioner are not acceptable. It is noticed that an amount of ₹30151.60 lakh in the form of Special Allowance has been allowed to the generating station by order dated 7.8.2012 and the expenditure on such assets can be met from the special allowance granted. Therefore, there is no merit in the contention of the petitioner that since capitalization of these assets have not been allowed, the corresponding de-capitalization should be considered under exclusion. Hence, de-capitalization of these assets is not allowed under exclusion as it form part of the capital cost.

32. The Commission in order dated 15.5.2014 in Petition No.188/GT/2013 while considering the exclusions for the period 2009-14 had observed in para 39 as under:

***“Items disallowed***

*39. The petitioner has excluded an amount of ₹1812.71 lakh with corresponding de-capitalization of (-) ₹ 31.35 lakh which were disallowed during 2009-10, ₹974.80 lakh with corresponding de-capitalization of (-) ₹104.71 lakh during 2010-11 and ₹1103.63 lakh during 2011-12 on assets disallowed by the Commission (on cash basis) under different heads of tariff in books of accounts. Since these assets were not allowed in tariff and do not form part of capital cost, these amounts are allowed under exclusion. The corresponding de-capitalization of (-) ₹31.35 during 2009-10 and (-) ₹104.71 lakh during 2010-11 has also been allowed as exclusion.”*

33. It is observed from the above that the de-capitalization of (-) ₹31.35 lakh in 2009-10 and (-) ₹104.71 lakh in 2010-11 have been allowed under the head 'Exclusion' on the ground that the capitalization of replaced items / assets have not been allowed. This, in our view, is an inadvertent error considering the fact that expenditure on such assets can be met from the Special Allowance allowed to the generating station. Accordingly, the error is rectified suo-motu and the de-capitalization of the said amounts has not been allowed in this order as they form part of capital cost.

34. Also, the error in disallowing the exclusion of (-) ₹465.74 lakh instead of (-) ₹384.29 lakh



under the sub-head 'de-capitalization of spares as part of capital cost' under the head 'exclusion' in 2011-12 as observed in Commission's order dated 15.5.2014 is rectified suo-motu in this order.

### **Items not claimed**

35. The petitioner has excluded amounts of ₹169.79 lakh in 2012-13 (Hydra crane for ₹10.50 lakh, Hydrobin package for ₹19.89 lakh, Mill reject system for ₹11.27 lakh, Slew bearings in stacker & Reclaimer for ₹93.44 lakh, CHP control system for ₹0.49 lakh and Expansion of campus wide network for ₹34.20 lakh) and ₹859.23 lakh in 2013-14 (SOE system for ₹10.01 lakh, BOBR wagons for ₹818.61 lakh, Manul trolley sigma hoist for ₹25.34 lakh, Megger for ₹0.71 lakh, Gasket sutting machine for ₹0.28 lakh and Inflatable air jack for ₹4.28 lakh). Since these items have not been claimed for the purpose of tariff and do not form part of capital cost, the exclusion of these amounts is allowed.

### **FERV**

36. The petitioner has excluded amounts of ₹267.43 lakh in 2012-13 and ₹313.20 lakh in 2013-14 on account of impact of FERV. As the petitioner has billed the said amount directly to the beneficiaries in accordance with the 2004 Tariff Regulations, the exclusion of the said amounts are in order and is allowed.

### **Inter-Unit transfer**

37. The petitioner has excluded amounts of ₹976.78 lakh in 2012-13 and ₹0.79 lakh in 2013-14 under this head on account of inter-unit transfer of certain assets such as MBOA items and locos. The Commission in its various orders while dealing with the application for additional capitalization in respect of other generating stations of the petitioner had decided that both positive and negative entries arising out of inter-unit transfers of a temporary nature shall be ignored for the purposes of tariff. In line with the said decision, the exclusion of the said amounts on account of inter-unit transfer is allowed.



### **Capitalization of Capital Spares**

38. The petitioner has capitalized capital spares in books of accounts for ₹3399.36 lakh in 2012-13 and ₹6231.95 lakh in 2013-14. Since capitalization of capital spares over and above the initial spares procured after the cut-off date of the generating station are not allowed for the purpose of tariff, the exclusion of the same by the petitioner is in order and has been allowed.

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

39. The petitioner has de-capitalized in the books of accounts capital spares amounting to (-) ₹136.61 lakh in 2012-13 and (-) ₹24.38 lakh in 2013-14 on these spares becoming unserviceable. It is observed from the submission of the petitioner that these spares were part of the capital cost allowed in tariff and these spares on becoming un-serviceable have been taken out of the capital cost. Since, these expenses form part of the capital cost, the exclusion for de-capitalization of these spares for the said amounts has not been allowed.

### **De-capitalization of spares not part of capital cost**

40. The petitioner has de-capitalized capital spares amounting to (-) ₹2452.76 lakh in 2012-13 and (-) ₹874.49 lakh in 2013-14 in books of accounts on these spares becoming unserviceable. It is observed from the submission of the petitioner that these spares were not allowed in tariff and hence do not form part of capital cost. Since, these expenses do not form part of the capital cost, the exclusion for de-capitalization of these spares for the said amounts is allowed.

### **Capitalization of Miscellaneous Bought Out Assets (MBOA)**

41. The petitioner has capitalized MBOA items for ₹298.76 lakh (including liability of ₹5.62 lakh) in 2012-13 and ₹263.17 lakh (including liability of ₹0.38 lakh) in 2013-14. The capitalization of MBOA items after the cut-off date is not allowed for the purpose of tariff. Thus, the exclusions for of the said amounts are in order and has been allowed.

### **De-capitalization of Miscellaneous Bought out Assets (MBOA) items part of capital cost**

42. The petitioner has de-capitalized in the books of accounts MBOA items for (-) ₹18.66 lakh as part of capital cost, (-) ₹0.01 lakh in 2012-13 and (-) ₹18.13 lakh in 2013-14 on these assets





becoming un-serviceable. It is observed from the submissions of the petitioner that these MBOA items were part of the capital cost allowed in tariff and these MBOA items on becoming un-serviceable have been taken out of the capital cost. Since, these expenses form part of the capital cost, the exclusion for de-capitalization of these spares for the said amounts are not allowed.

**De-capitalization of Miscellaneous Bought out Assets (MBOA) items not part of capital cost**

43. The petitioner has de-capitalized MBOA items for (-) ₹0.01 lakh in 2012-13 and (-) ₹18.13 lakh in 2013-14 in books of accounts on these spares becoming un-serviceable. It is observed from the submissions of the petitioner that these MBOA items have not been allowed in tariff and do not form part of the capital cost. Since, these expenses do not form part of the capital cost, the exclusion for de-capitalization of these MBOA items for the said amounts are allowed.

**Miscellaneous Items (Plant and Machinery - Minor in nature)**

44. The petitioner has excluded an amount of ₹5.93 lakh towards Miscellaneous items such as Inflatable Jack, furniture / Office equipments, Induction heater etc., in 2012-13. Since, these are the minor assets which were not claimed / allowed in tariff, the exclusion on these items for the said amount is in order and is allowed.

**Reversal of Liabilities**

45. The petitioner has excluded liability reversal of (-) ₹6.08 lakh in 2013-14. The petitioner in its justification has submitted that since tariff is on cash basis, this liability is kept under exclusion. In view of the submission of the petitioner, the reversal of liability is allowed.

46. Based on the above discussions, the summary of exclusions allowed and disallowed for the period 2009-14 are as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Exclusions claimed (A)	6262.14	3558.38	2697.56	5326.08	5889.76
Exclusion allowed (B)	6472.07	3876.36	3213.88	6118.90	6950.20
<b>Exclusions not allowed (B-A)</b>	<b>209.93</b>	<b>317.98</b>	<b>516.32</b>	<b>792.82</b>	<b>1060.44</b>

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



	(₹ in lakh)	
	2012-13	2013-14
<b>New Items</b>		
Dyke Sub-lagooning civil work	0.00	0.00
Expenditure on 5 km electricity supply scheme Regulation-9(2)(ix)	0.00	0.00
<b>Total additional capital expenditure allowed (A)</b>	<b>0.00</b>	<b>0.00</b>
De-capitalization – implementation of SAP (B)	5.82	0.00
<b>Additional capital expenditure allowed (A-B) = C</b>	<b>(-) 5.82</b>	<b>0.00</b>
Exclusions not allowed (D)	792.82	1060.44
<b>Net additional capital expenditure allowed (C-D)</b>	<b>(-) 798.64</b>	<b>(-) 1060.44</b>

48. Accordingly, the net additional capital expenditure allowed (excluding discharge of liabilities) for 2009-14 is as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Additional Capital Expenditure allowed (excluding discharge of liabilities)	0.22	7.79	32.94	(-) 5.82	0.00
Exclusions not allowed	209.93	317.98	516.32	792.82	1060.44
<b>Net Additional Capital Expenditure allowed</b>	<b>(-) 207.71</b>	<b>(-) 310.19</b>	<b>(-) 483.38</b>	<b>(-) 798.64</b>	<b>(-) 1060.44</b>

49. Considering the discharges during the tariff period, the net additional capital expenditure allowed for the period 2009-14 is as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Net additional capital expenditure allowed	(-) 207.71	(-) 310.19	(-) 483.38	(-) 798.64	(-) 1060.44
Add: Discharges of liabilities (against allowed assets)	1.96	53.14	48.21	25.53	1.03
<b>Net Additional Capital Expenditure allowed</b>	<b>(-) 207.75</b>	<b>(-) 257.05</b>	<b>(-) 435.17</b>	<b>(-) 773.10</b>	<b>(-) 1059.41</b>

50. Based on the above, the capital cost allowed for the purpose of tariff for 2009-14 is as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Capital Cost	127479.47	127271.72	127014.67	126579.49	125806.39
Add: Additional Capital Expenditure	(-) 207.75	(-) 257.05	(-) 435.17	(-) 773.10	(-) 1059.41
<b>Closing Capital Cost</b>	<b>127271.72</b>	<b>127014.67</b>	<b>126579.49</b>	<b>125806.39</b>	<b>124746.99</b>
<b>Average Capital Cost</b>	<b>127375.60</b>	<b>127143.19</b>	<b>126797.08</b>	<b>126192.94</b>	<b>125276.69</b>

## Debt–Equity

51. The gross loan and equity amounting to ₹66695.63 lakh and ₹61166.18 lakh respectively as on 31.3.2009 considered vide order dated 15.6.2011 in Review Petition No. 2/2011 in Petition No.



186/2009 has been considered as gross loan and equity as on 1.4.2009. However, un-discharged liabilities amounting ₹382.35 lakh deducted from the capital cost as on 1.4.2009 and has been adjusted in the debt-equity ratio of 50:50 for assets/works capitalised prior to 2004 and in the debt equity ratio of 70:30. As such the gross normative loan and equity as on 1.4.2009 is revised to ₹66445.98 lakh and ₹61033.49 lakh respectively. Further, the admitted additional expenditure above has been allocated in the debt-equity ratio of 70:30.

### Return on Equity

52. In terms of Regulation 15 of the 2009 Tariff Regulations, return on equity has been worked out as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Notional Equity- Opening	61033.49	60971.16	60894.05	60763.50	60531.56
Addition of equity due to additional capital expenditure	(-) 62.33	(-) 77.12	(-)130.55	(-) 231.93	(-) 317.82
<b>Normative Equity - Closing</b>	<b>60971.16</b>	<b>60894.05</b>	<b>60763.50</b>	<b>60531.56</b>	<b>60213.74</b>
Average Normative Equity	61002.33	60932.60	60828.77	60647.53	60372.65
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
Tax Rate for respective years	33.990%	33.218%	32.445%	32.445%	33.990%
Rate of Return on Equity (Pre Tax)	23.481%	23.210%	22.944%	22.944%	23.481%
<b>Return on Equity (Pre Tax)- (annualized)</b>	<b>14323.96</b>	<b>14142.46</b>	<b>13956.55</b>	<b>13914.97</b>	<b>14176.10</b>

### Interest on loan

53. In terms of Regulation 16 of the 2009 Tariff Regulations, interest on loan has been worked out as under:

- (a) The gross normative loan of ₹66695.63 lakh as on 1.4.2009 has been considered.
- (b) Cumulative repayment amounting to ₹56293.63 lakh as on 31.3.2009 as considered in order dated 15.6.2011 in Review Petition No. 2/2011 (in Petition No. 189/2009) has been considered as cumulative repayment as on 1.4.2009. However, after taking in to account proportionate adjustment (duly taking into account the liability and debt position as on 1.4.2004 along with additions during the period 2004-09, if any) 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 ₹56150.64 lakh.
- (c) Accordingly, the net normative opening loan as on 1.4.2009 works out to ₹10295.34 lakh.



(d) Addition to normative loan on account of admitted additional capital expenditure has been considered.

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

(f) In line with the provisions of the above regulations, the weighted average rate of interest has been calculated by applying the actual loan portfolio existing as on 1.4.2009 along with subsequent additions during the period 2009-14, if any. In case of loans carrying floating rate of interest, the rate of interest as provided by the petitioner has been considered for the purpose of tariff. However, in case of LIC-III (T3, D1, T4 D1&D4), it is observed that petitioner has claimed additional interest of 0.0221% towards upfront fees. These loans have been allocated to various other generating stations of the petitioner, namely Barh STPS, FGUTPS –I & III, Koldam HPS, Kahalgaon STPS-II, Rihand STPS-II, Sipat TPS-I&II, Vindhyachal STPS-I & III, Farakka TPS-I&II, Ramagundam STPS-I, II & III, Talcher TPS, Anta GPS, Badarpur TPS, Korba STPS-I&II & Tanda TPS. It is observed that petitioner has not claimed any upfront fee towards aforementioned LIC-III loans in the respective final true-up petitions (like Sipat TPS-II, Vindhyachal STPS-I&III, Kahalgaon STPS-II, Ramagundam STPS-III, Anta GPS, Korba STPS-I&II). We notice the inconsistency on the part of the petitioner in claiming such upfront fees in respect of other generating stations where the same loan has been allocated. It is observed that the claim of the petitioner towards upfront fees had been disallowed by the Commission while working out the weighted average rate of interest on loan in respect of Badarpur TPS vide tariff order dated 15.5.2014 in Petition No. 304/2009. In line with this decision and for the purpose of consistency, the claim of the petitioner towards upfront fees for this generating station has not been allowed.

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

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross opening loan	66445.98	66300.56	66120.62	65816.00	65274.83
Cumulative repayment of loan upto previous year / period	56150.64	56210.34	56192.20	55864.44	55320.57
Net Loan Opening	10295.34	10090.22	9928.42	9951.56	9954.26
Addition due to Additional capitalisation	(-)145.43	(-)179.94	(-)304.62	(-)541.17	(-)741.58
Repayment of loan during the year	205.50	184.81	1.29	2.16	2.16
Less: Repayment adjustment on account of de-capitalization	146.96	222.59	361.43	554.97	742.30
Add: Repayment adjustment on	1.15	19.65	32.37	8.94	0.36



discharges corresponding to un-discharged liabilities deducted as on 1.4.2009					
Net Repayment	59.70	(-)18.14	(-)327.76	(-)543.87	(-)739.78
Net Loan Closing	10090.22	9928.42	9951.56	9954.26	9952.46
Average Loan	10192.78	10009.32	9939.99	9952.91	9953.36
Weighted Average Rate of Interest on Loan	4.7375%	3.6607%	3.4648%	5.1033%	7.3790%
<b>Interest on Loan</b>	<b>482.88</b>	<b>366.41</b>	<b>344.40</b>	<b>507.93</b>	<b>734.46</b>

## Depreciation

55. The Cumulative depreciation as on 31.3.2009, as considered in order dated 15.6.2011 in Review Petition No. 2/2011 (in Petition No. 189/2009) is ₹113538.92 lakh. Further, proportionate adjustment has been made to this cumulative depreciation on account of un-discharged liabilities deducted as on 1.4.2009. Accordingly, the revised cumulative depreciation as on 1.4.2009 works out to ₹113196.51 lakh. Further, the value of freehold land as considered in order dated 15.5.2014 is ₹1081.00 lakh and same has been considered for calculating the depreciable value. Also, cumulative depreciation has been adjusted for de-capitalisation, if any, considered during the period 2009-14. In terms of the decision contained in para 57 of the order dated 7.8.2012 in Petition No.225/2009, the Commission in order dated 15.5.2014 in Petition No. 188/GT/2013 observed as under:

*"57. We have given a serious thought on this issue. Since these assets are being capitalized during the terminal year of the generating station, we are of the view that allowing 90% of the depreciation would not be in the interest of the beneficiaries and therefore these assets should be depreciated at the rates specified in Appendix-III of the 2009 Tariff Regulations. The petitioner has not indicated the period for which the life of the generating station would be extended beyond its useful life. In the absence of the said information, the Commission cannot decide as to how the expenditure incurred on DAETP and Ash water recirculation system during the terminal year of the life of the generating station would be serviced in tariff. Therefore, the Commission considers it appropriate to allow the depreciation of the assets capitalized during the terminal year as per the rate specified in Appendix-III of the 2009 Tariff Regulations. The petitioner would be required to run the generating station for sufficiently longer period to recover the full depreciation of the said assets. This will be in the interest of the beneficiaries as they will not be overburdened with payment of admissible depreciation during the terminal year of the generating station"*

*In the light of above decision, depreciation has been calculated considering the balance depreciation of the existing old assets to be spread over the remaining useful life of 2.28 years. However, in respect of new assets, the rate of depreciation as specified in Appendix-III of the 2009 Tariff Regulations has been considered. Further, proportionate adjustment has been made to the cumulative depreciation on account of de-capitalization of assets as also on account of discharges/reversal of liabilities out of un-discharged liabilities deducted from capital cost as on 1.4.2009"*



56. Accordingly, the calculations in support of depreciation are as under:

	( in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening capital cost	127479.47	127271.72	127014.67	126579.49	125806.39
Additional capitalisation (existing + new)	(-)207.75	(-)257.05	(-)435.17	(-)773.10	(-)1059.40
Closing capital cost	127271.72	127014.67	126579.49	125806.39	124746.99
Average capital cost	127375.60	127143.19	126797.08	126192.94	125276.69
Value of freehold land on accrual basis	1081.00	1081.00	1081.00	1081.00	1081.00
Depreciable value @ 90% (existing)	113666.62	113453.85	113124.02	112565.48	111740.85
Depreciable Value of new additions @90%	0.10	3.70	22.03	36.86	36.86
Remaining useful life at the beginning of the year (existing)	2.28	1.28	0.28	0.00	0.00
Balance depreciable value (existing assets)	468.54	236.27	0.00	0.00	0.00
Remaining Depreciable value of additions	0.10	3.70	21.81	35.34	33.18
Depreciation for the period (existing assets)	205.50	184.59	0.00	0.00	0.00
Depreciation for the period (new assets @ 5.28%)	0.01	0.22	1.29	2.16	2.16
<b>Depreciation (annualized) (existing + addition)</b>	<b>205.50</b>	<b>184.81</b>	<b>1.29</b>	<b>2.16</b>	<b>2.16</b>
Cumulative depreciation at the end (existing assets)	113403.58	113402.17	113164.20	112783.82	112093.14
Cumulative depreciation at the end (additions)	0.01	0.22	1.52	3.68	5.84
Cumulative depreciation at the end	113403.59	113402.39	113165.71	112787.49	112098.98
Add: Cumulative depreciation reduction on account of discharges out of un-discharged liabilities deducted as on 1.4.2009	(-) 2.94	(-) 47.59	(-) 82.78	(-) 22.87	(-) 0.92
Add: Depreciation reduction due to de-capitalization	188.94	285.56	463.16	713.54	39.06
Cumulative depreciation (at the end of the period) Existing	113217.58	113164.20	112783.82	112093.15	112055.00
Cumulative Depreciation after adjustment due to de-capitalization (at the end of the period) Addition	0.01	0.22	1.52	3.68	5.84
Cumulative Depreciation after adjustment due to de-capitalization (at the end of the period) (Existing + Addition)	113217.59	113164.42	112785.33	112096.83	112060.84

### Normative Annual Plant Availability Factor

57. The Normative Annual Plant Availability Factor of 85% as considered in order dated 15.5.2014 in Petition No.188/GT/2013 has been considered for the purpose of tariff.



## O&M Expenses

58. O&M expenses as considered in order dated 15.5.2014 as stated below has been considered.

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
31200.00	32980.00	34870.00	36870.00	38980.00

## Interest on Working Capital

59. The cost of coal for 1.5 months and cost of secondary fuel for two months as considered in order dated 15.5.2014 in Petition No. 188/GT/2013 as stated below, has been considered.

(₹ in lakh)					
	2009-10	2010-11	2011-12	2012-13	2013-14
Cost of coal – 1.5 months	16282.95	16282.95	16327.56	16282.95	16282.95
Cost of secondary fuel oil – 2 months	529.30	529.30	530.75	529.30	529.30

## Maintenance Spares

60. Maintenance spares as considered in order dated 15.5.2014 in Petition No. 188/GT/2013 as stated below, has been considered.

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
6240.00	6596.00	6974.00	7374.00	7796.00

## Receivables

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

(₹ in lakh)					
	2009-10	2010-11	2011-12	2012-13	2013-14
Variable Charges- 2 months	21710.60	21710.60	21770.09	21710.60	21710.60
Fixed Charges- 2 months	10203.33	10659.15	10980.41	11404.10	12392.07
<b>Total</b>	<b>31913.93</b>	<b>32369.76</b>	<b>32750.49</b>	<b>33114.70</b>	<b>34102.68</b>

## O&M Expenses (1 month)

62. O & M expenses for 1 month as considered in order dated 15.5.2014 is considered as under:

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
2600.00	2748.33	2905.83	3072.50	3248.33

63. SBI PLR of 12.25% has been considered in the computation of the interest on working



capital. Necessary computations in support of calculation of interest on working capital are given as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Coal Stock- 2 months	16282.95	16282.95	16327.56	16282.95	16282.95
Cost of secondary fuel oil – 2 months	529.30	529.30	530.75	529.30	529.30
O & M expenses- 1 Month	2600.00	2748.33	2905.83	3072.50	3248.33
Maintenance Spares	6240.00	6596.00	6974.00	7374.00	7796.00
Receivables- 2 Months	31913.93	32369.76	32750.49	33114.70	34102.68
<b>Total Working Capital</b>	<b>57566.18</b>	<b>58526.34</b>	<b>59488.64</b>	<b>60373.45</b>	<b>61959.26</b>
Rate of Interest	12.2500%	12.2500%	12.2500%	12.2500%	12.2500%
<b>Total Interest on Working capital</b>	<b>7051.86</b>	<b>7169.48</b>	<b>7287.36</b>	<b>7395.75</b>	<b>7590.01</b>

64. Compensation Allowance and Special Allowance as allowed in order dated 15.5.2014 in Petition No. 188/GT/2013 has been considered.

### Annual Fixed Charges

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

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	205.50	184.81	1.29	2.16	2.16
Interest on Loan	482.88	366.41	344.40	507.93	734.46
Return on Equity	14323.96	14142.46	13956.55	13914.97	14176.10
Interest on Working Capital	7051.86	7169.48	7287.36	7395.75	7590.01
O&M Expenses	31200.00	32980.00	34870.00	36870.00	38980.00
Cost of Secondary Fuel Oil	3175.77	3175.77	3184.47	3175.77	3175.77
Compensation Allowance	780.00	650.00	650.00	650.00	325.00
Special Allowance	4000.00	5286.00	5588.36	5908.01	9368.93
<b>Total</b>	<b>61219.97</b>	<b>63954.92</b>	<b>65882.44</b>	<b>68424.59</b>	<b>74352.43</b>

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

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

67. Petition No. 315/GT/2014 is disposed of in terms of the above.

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

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

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

