

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 194/2009**

**Coram  
Shri Gireesh B. Pradhan, Chairperson  
Shri M. Deena Dayalan, Member  
Shri A.K.Singhal, Member**

**Date of Order: 27.11.2014**

**In the matter of**

Revision of fixed charges for the period 2006-09 due to additional capital expenditure incurred during the years 2006-07 (1.6.2006 to 31.3.2007), 2007-08 and 2008-09 at Badarpur Thermal Power Station (705 MW).

**And in the matter of**

Implementation of the judgment dated 26.9.2013 of the Appellate Tribunal for Electricity in Appeal No. 39/2013 (NTPC-v-CERC & ors)

NTPC Ltd, New Delhi

.....**Petitioner**

Vs

1. Delhi Transco Ltd, New Delhi
2. North Delhi Power Ltd, New Delhi
3. BSES Rajdhani Power Limited, New Delhi
4. BSES Yamuna Power Limited, Delhi.

..**Respondents**

**ORDER**

Petition No. 194/2009 was filed by the petitioner, NTPC for revision of fixed charges after considering the impact of additional capital expenditure incurred during the years 2006-07 (1.6.2006 to 31.3.2007), 2007-08 and 2008-09 in respect of Badarpur Thermal Power Station (705 MW), (hereinafter referred to as "the generating station") based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 and the annual fixed charges was determined by Commission's order dated 28.9.2010.

2. Aggrieved by the order dated 28.9.2010, the petitioner filed Review Petition No.3/2011 on the following issues:

- (a) Digital control system closed loop control for ₹1590668;
- (b) Replacement of Condenser Tubes for a 210 MW unit for an amount of ₹83966279;
- (c) Renovation of 'A' Type quarters into ET Hostel for ₹4106931;
- (d) Replacement of Battery Bank (High Discharge Performance Type) for ₹5789977; and
- (e) Liabilities incurred but not discharged for ₹7.29 lakh.

3. The Commission by interim order dated 15.3.2012, rejected the prayer of the petitioner in para 2(a) above and admitted the review petition on the issues mentioned in sub-paras (b), (c) and (d) of paragraph 2 above. As regards the issue in para 2(e) above, the Commission directed the capitalization of liabilities amounting to ₹7.29 lakh in terms of the directions of the Appellate Tribunal for Electricity (The Tribunal) in its judgments dated 10.12.2008 and 16.3.2009 in Appeal Nos.151 & 152/2007 and Appeal Nos. 133, 135, 136 and 148/2008 respectively, at the time of final disposal of this application.

4. Thereafter, the Commission by order dated 10.12.2012 in the said review petition allowed the prayer of the petitioner for capitalisation of expenditure towards renovation of 'A' type quarters in ET Hostel and replacement of Battery bank and rejected the prayer of the petitioner for capitalization of expenditure of ₹839.66 lakh towards the replacement of condenser tubes during 2007-08. Also, in terms of the judgments of the Tribunal dated 10.12.2008 and 16.3.2009 in Appeal Nos.151 & 152/2007 and Appeal Nos. 133, 135, 136 and 148/2008 respectively, the additional capital expenditure approved vide order dated 28.9.2010 was revised by the said order after including the un-discharged liabilities disallowed earlier and deducting the discharges of un-discharged liabilities considered earlier. Accordingly, the annual fixed charges of the generating station for 2006-09 as

allowed vide order dated 28.9.2010 was revised by order dated 10.12.2012 in R.P.No.3/2011 as under:

	(₹ in lakh)		
	2006-07	2007-08	2008-09
Depreciation	1578.03	1599.43	1648.50
Interest on Loan	0.00	0.00	8.36
Return on Equity	2518.42	2395.99	2346.19
Advance against Depreciation	0.00	0.00	0.00
Interest on Working Capital	2957.39	2971.35	2976.41
O & M Expenses (including annual lease rental )	14812.07	14858.79	14876.45
<b>Total</b>	<b>21865.91</b>	<b>21825.56</b>	<b>21855.91</b>

5. Aggrieved by the said order dated 10.12.2012, the petitioner filed Appeal No. 39/2013 before the Tribunal against the disallowance of the capitalization of ₹839.66 lakh towards the replacement of condenser tubes during 2007-08. By judgment dated 26.9.2013, the Tribunal allowed the prayer of the petitioner for capitalization of the said amount after writing-off the cost of replaced condenser tubes after prudence check and accordingly remanded the matter to the Commission for re-consideration. The relevant portion of the judgment is extracted as under:

*"20. In view of above, the amount incurred by NTPC on replacement of the condenser tubes of Unit-4 of Stage-II is to be considered for capitalization after writing off the cost of the replaced condenser tubes, after prudence check, as per the Tariff Regulations. Accordingly, the matter is remanded to the Central Commission for reconsideration."*

6. In compliance with the directions of the Tribunal in the judgment dated 26.9.2013, the additional capitalization of ₹839.66 lakh has been considered towards replacement of condenser tubes for 2007-08. However, as the additional capital expenditure is on account of replacement of condenser tubes, the de-capitalization value of the old asset is required to be deducted from the additional capital expenditure allowed. Accordingly, in line with the methodology adopted by the Commission in various other tariff orders of the generating stations of the petitioner, the gross value of old assets to the extent of 10% of the value of new assets has been considered for this

generating station also. Based on this, the gross value of the replaced old tubes works out to ₹83.97 lakh (839.66 x 0.10). Accordingly, the additional capital expenditure on net basis, which works out to ₹755.69 lakh (839.66-83.97) towards replacement of condenser tubes for Unit-IV of Stage-II of the generating station has been allowed during 2007-08. In view of this, the additional capital expenditure allowed for 2007-08 in order dated 10.12.2012 in R.P.No.3/2011 has been revised as under:

	(₹ in lakh)	
	<b>2007-08</b>	<b>2008-09</b>
Net Additional capital expenditure allowed by order dated 10.12.2012	145.34	2473.56
Net Additional capital expenditure allowed in terms of judgment of Tribunal dated 26.9.2013	755.69	0.00
<b>Total Additional capital expenditure allowed</b>	<b>901.03</b>	<b>2473.56</b>

7. In the circumstances, the capital cost approved for the period 2007-09 by order dated 10.12.2012 is revised as under:

	(₹ in lakh)	
	<b>2007-08</b>	<b>2008-09</b>
Opening Capital Cost	42609.72	43510.75
Total Additional capital expenditure allowed	901.03	2473.56
<b>Closing capital cost</b>	<b>43510.75</b>	<b>45984.31</b>

8. Consequently, the following components of tariff in order dated 10.12.2012 in R.P.No.3/2011 is revised as under:

### **Return on Equity**

9. Return on equity has been computed as under:

	(₹ in lakh)	
	<b>2007-08</b>	<b>2008-09</b>
Equity-Opening	17840.99	17204.51
Addition of equity due to additional capital expenditure	270.31	742.07
Repayment of equity	906.79	0.00
Equity-Closing	17204.51	17946.58
Average equity	17522.75	17575.54
<b>Return on Equity @14%</b>	<b>2453.18</b>	<b>2460.58</b>

## Interest on loan

10. Interest on loan has been computed as under:

	(₹ in lakh)	
	<b>2007-08</b>	<b>2008-09</b>
Gross Opening loan	21503.91	22134.63
Cumulative repayment of loan upto previous year	21503.91	22134.63
Net loan Opening	0.00	0.00
Addition of loan due to additional capital expenditure	630.73	1731.49
Less: Repayment of loan during the year (i.e. <i>Depreciation after adjusting the accumulated depreciation of de-capitalized asset</i> )	630.73	1600.51
Net loan closing	0.00	130.98
Average loan	0.00	65.49
Weighted average rate of interest on loan	10.50%	10.50%
<b>Interest on Loan</b>	<b>0.00</b>	<b>6.88</b>

## Depreciation

11. The necessary calculation for depreciation is as under:

	(₹ in lakh)	
	<b>2007-08</b>	<b>2008-09</b>
Gross Block-opening	42609.72	43510.75
Additions	901.04	2473.56
Gross Block- closing	43510.75	45984.31
Average Gross Block	43060.24	44747.53
Rate of Depreciation	3.7473%	3.7473%
90% Depreciable Value	38754.21	40272.78
<b>Depreciation</b>	<b>1613.59</b>	<b>1676.82</b>

## Interest on working capital

12. The necessary details in support of calculation of interest on working capital are as under:

	(₹ in lakh)	
	<b>2007-08</b>	<b>2008-09</b>
Coal Stock- 2 months	11022.96	10992.85
Oil stock -2 months	364.04	363.04
O & M expenses-1 month	1238.23	1239.70
Maintenance Spares	1346.56	1451.81
Receivables-2 months	15036.82	15022.62
Total Working Capital	29008.61	29070.03
Rate of Interest	10.25%	10.25%
<b>Total Interest on Working capital</b>	<b>2973.38</b>	<b>2979.68</b>

13. The annual fixed charges of the generating station for the period 2007-09 as approved by order dated 10.12.2012 in R.P. No.3/2011 stands revised as under:

(₹ in lakh)		
<b>Annual Fixed Charges</b>	<b>2007-08</b>	<b>2008-09</b>
Depreciation	1613.59	1676.82
Interest on Loan	0.00	6.88
Return on Equity	2453.18	2460.58
Advance against Depreciation	0.00	0.00
Interest on Working Capital	2973.38	2979.68
O & M Expenses (including annual lease rental for land )	14858.79	14876.45
<b>Total</b>	<b>21898.94</b>	<b>22000.41</b>

14. Except the above, all other terms contained in order dated 28.9.2010/10.12.2012 remains unchanged.

15. The difference in respect of the tariff determined by order dated 10.12.2012 and the tariff determined by this order, shall be recovered from the beneficiaries in three equal monthly installments.

16. The judgment of the Tribunal dated 26.9.2013 in Appeal No.39/2013 stands implemented in terms of the above.

#### **Tariff for 2009-14**

17. Consequent upon the revision of the capital cost of the generating station as on 31.3.2009 as above, the capital cost as on 1.4.2009 would undergo revision. It is noticed that the Commission by its order dated 23.5.2012 in Petition No. 332/2009 had determined the tariff of the generating station for 2009-14 and the same was revised by order dated 8.2.2013 in Review Petition No.18/2012. Thereafter, the Commission by its order dated 16.12.2013 in Petition No.18/GT/2013 had revised the tariff of the generating station for the period 2009-14 after truing-up in terms of the

proviso to Regulation 6(1) of the 2009 Tariff Regulations. It is noticed that the truing-up exercise in respect of the generating station along with the tariff petition for the next tariff period with respect to the capital expenditure including the additional capital expenditure incurred upto 31.3.2014 is to be carried out in terms of Regulation 6(1) of the 2009 Tariff Regulations, for which the petition has been filed by the petitioner. Accordingly, based on the revised capital cost as on 1.4.2009, the annual fixed charges of the generating station for 2009-14 shall be revised in the truing-up petition filed by the petitioner.

**Sd/-**  
**[A.K.Singhal]**  
**Member**

**Sd/-**  
**[M.Deena Dayalan]**  
**Member**

**Sd/-**  
**[Gireesh B. Pradhan]**  
**Chairperson**