

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No.195/2009

Coram: **1. Dr.Pramod Deo, Chairperson**
 2. Shri S.Jayaraman, Member
 3. Shri V.S.Verma, Member
 4. Shri M.Deena Dayalan, Member

DATE OF ORDER: 23.6.2011

IN THE MATTER OF

Revision of order dated 20.1.2011 in the light of the judgment dated 13.6.2007 of the Appellate Tribunal for Electricity in Appeal No.156/2006- Determination of annual fixed charges due to impact of additional capital expenditure incurred during the period 2004-09 in respect of Talcher STPS-Stage-I (1000 MW) and Order of the Commission dated 1.6.2011 in Review Petition No.1/2011.

AND

IN THE MATTER OF

NTPC Ltd, New Delhi

Vs

.... **Petitioner**

1. West Bengal State Electricity Board, Kolkata
2. Bihar State Electricity Board, Patna
3. Jharkhand State Electricity Board, Ranchi
4. Grid Corporation of Orissa Ltd., Bhubaneshwar
5. Damodar Valley Corporation, Kolkata
6. Power Department, Govt. of Sikkim, Gangtok
7. Tamil Nadu Electricity Board, Chennai
8. Union Territory of Pondicherry, Electricity Department, Pondicherry
9. Uttar Pradesh Power Corporation Ltd, Lucknow
10. Power Development Department, Govt. of J&K, Srinagar
11. Power Department, Union Territory of Chandigarh, Chandigarh
12. Madhya Pradesh Power Trading Ltd., Jabalpur
13. Maharashtra State Electricity Distribution Company Ltd., Mumbai
14. Gujarat Urja Vikas Nigam Limited, Baroda
15. Electricity Department, Administration of Daman & Diu, Daman
16. Electricity Department, Administration of Dadra and Nagar Haveli, Silvassa
17. BSES Rajdhani Power Limited, New Delhi
18. BSES Yamuna Power Limited, Delhi
19. North Delhi Power Ltd, New Delhi

...**Respondents**

ORDER

This petition was filed by NTPC Ltd, the petitioner herein, for approval of revised fixed charges, after considering the impact of additional capital expenditure incurred during the period 2004-09 for Talcher STPS, Stage- I (1000 MW), (hereinafter referred to as “the generating station”) based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 (hereinafter referred to as “the 2004 regulations”). The Commission by its order dated 20.1.2011, revised the tariff of the generating station based on the capital cost as under:

Particulars	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Opening capital cost	251228.56	251773.70	251170.89	251030.46	251400.35
Additional capital expenditure allowed	545.14	(-) 602.81	(-)140.43	369.89	1664.71
Closing Capital cost	251773.70	251170.89	251030.46	251400.35	253065.06
Average Capital cost	251501.13	251472.30	251100.68	251215.41	252232.71

2. The revised annual fixed charges approved by the Commission in order dated 20.1.2011 is as under:

Particulars	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on loan	3506.04	2670.76	1822.34	1004.16	298.66
Interest on Working Capital	1946.37	1963.22	1981.21	2004.26	2028.25
Depreciation	8884.93	8883.91	8870.79	8874.84	8910.78
Advance Against Depreciation	0.00	0.00	0.00	0.00	0.00
Return on Equity	17597.45	17596.24	17580.63	17585.45	17628.17
O & M Expenses	9360.00	9730.00	10120.00	10520.00	10950.00
Total	41294.79	40844.13	40374.96	39988.71	39815.86

3. Aggrieved by the said order, petitioner filed review petition (R.P. No.1/2011) raising the following issues:

- (a) Disallowance of exclusion of de-capitalization of “bogie” for ₹23.61 lakh during the year 2007-08.
- (b) Non-consideration of escalation of 6% per annum in the Maintenance spares cost based upon historical cost of the station as on COD, for the period from 1.7.1997

(COD) to 31.3.1998 for calculating interest on working capital (IWC) for the period 2004-09.

(c) Consideration of opening capital cost in place of average capital cost for determining the total depreciable value during the corresponding year.

4. The review petition was heard on admission. After considering the submissions of the petitioner and the documents available on record, the Commission by its order dated 1.6.2011 rejected the prayer of the petitioner for review of order dated 20.1.2011 for exclusion of de-capitalisation of bogie for ₹23.61 lakh during 2007-08. The review of the said order in terms of the prayer of the petitioner at paragraph 3 (b) and (c) above were however allowed on account of certain inadvertent arithmetical/linkage errors which had crept in while considering these issues. Thus, the review application was disposed of at the admission stage on 1.6.2011, after rectification of the errors. However, the impact in tariff on account of rectification of these errors were directed to be considered while working out the tariff of the generating station separately, based on the directions contained in the judgment of the Appellate Tribunal for Electricity (‘the Tribunal’) dated 13.6.2007.

Judgment of the Tribunal dated 13.6.2007

5. The Commission by its order dated 9.5.2006 in Petition No. 144/2004 had determined the tariff of the generating station for the period 2004-09. Aggrieved by the said order, the petitioner filed Appeal No.156/2006 before the Tribunal. Similar appeals (Appeal Nos.139 to 142 etc of 2006, 10, 11 and 23/2007) were also filed by the petitioner challenging the various orders of the Commission determining tariff for other generating stations of the petitioner during the period 2004-09. Appeal No.156/2006 was clubbed along with the said appeals and the Tribunal by its common judgment dated 13.6.2007 allowed the prayers of the petitioner and remanded the matters for re-determination of tariff by the Commission. Against the judgment dated 13.6.2007, the

Commission filed Civil Appeals before the Hon'ble Supreme Court (C.A. Nos. 5434/2007 to 5452/2007 and 5622/2007) including Civil Appeal No. 5439/2007 pertaining to this generating station, on issues such as:

- (a) Consequences of refinancing of loan;
- (b) Treating of depreciation as deemed repayment of loan;
- (c) Cost of maintenance spares related to additional capitalization;
- (d) Depreciation availability up to 90% in the event of disincentive; and
- (e) Impact of de-capitalization of assets on cumulative repayment of loan

6. The Hon'ble Supreme Court on 26.11.2007 granted an interim order of stay of the operation of the order dated 13.6.2007 of the Tribunal. However, on 10.12.2007, the Hon'ble Supreme Court passed interim order as under:

“Learned Solicitor General appearing on behalf of the National Thermal Power Corporation stated that pursuant to the remand order, following five issues shall not be pressed for fresh determination:

- (a) Consequences of refinancing of loan;
- (b) Treating of depreciation as deemed repayment of loan;
- (c) Cost of maintenance spares related to additional capitalization;
- (d) Depreciation availability up to 90% in the event of disincentive; and
- (e) Impact of de-capitalization of assets on cumulative repayment of loan

The Commission may, however, proceed to determine other issues.

It is clarified that this order shall apply to other cases also.

In view of this, the interim order passed by the Court on 26th November, 2007, is vacated. The interlocutory applications are, accordingly, disposed of.”

7. During the pendency of the above Civil Appeal, the present petition was filed for approval of revised fixed charges for the generating station after considering the impact of additional capital expenditure incurred during the period 2004-09. In this petition, the petitioner had claimed determination of tariff in terms of the judgment of the Tribunal dated 13.6.2007, including those five issues covered by the interim order dated 10.12.2007 of the Hon'ble Supreme Court. However, the Commission rejected the claim of the petitioner and deferred the implementation of the judgment of the Tribunal in respect of those five issues, till final disposal of the Civil Appeals by the Hon'ble

Supreme Court. The relevant portion of the order containing the observations of the Commission is extracted hereunder:

“7. The petitioner has submitted that it has been advised that the statement of the Solicitor General of India (SGI) before the Hon’ble Supreme Court resulting in the interim order dated 10.12.2007 does not restrict it from claiming additional capitalization based on the principles laid down by the Tribunal in its judgment dated 13.6.2007 and that the effect of the statement of SGI was that it would not seek fresh determination pursuant to the remand order. The petitioner has also submitted that the Hon’ble Supreme Court has not stayed further proceedings before the Commission for determination of additional capitalization and even if it was construed as stay, the decision of the court (the Tribunal) does not become non est.

8. As stated above, the Hon’ble Supreme Court in its interim order dated 26.11.2007 had granted stay of the operation of the judgment dated 13.6.2007 of the Tribunal. In view of the undertaking given by the Solicitor General of India on behalf of the petitioner that “the five issues shall not be pressed for fresh determination”, the Hon’ble Supreme Court vacated the interim order dated 26.11.2007 and directed that “the Commission may proceed to determine the other issues”. It was clarified that “this order shall apply to other cases also”. It is the contention of the petitioner that the undertaking before the Hon’ble Supreme Court does not restrict it from claiming additional capitalization based on the principle laid down by the Tribunal. In our view, the petitioner has given an undertaking in the Civil Appeals pertaining to the tariff in the original petition before the Hon’ble Supreme Court that “the five issues shall not be pressed for fresh determination”. It is logical that original tariff as well as revision of tariff for the generating station on the basis of additional capital expenditure is decided on the basis of the same principles. Accepting the contention of the petitioner would mean that additional capitalization should be determined on the principles different from those which have fallen for consideration while determining the tariff for the generating station in the original petition. The tariff for the period 2004-09 is a composite package which needs to be determined on the same principle. From the point of view of regulatory uniformity and continuity and also in line with the spirit of the interim order of the Hon’ble Supreme Court, we are of the view that the extension of the impact of the judgment of the Tribunal on the five issues should be deferred till the final disposal of the said Civil Appeals by the Hon’ble Supreme Court”

8. Accordingly, by order dated 20.1.2011, the tariff of the generating station was determined by the Commission in this petition, after considering the additional capital expenditure for the period 2004-09.

9. While so, in an appeal [Appeal No.92/2010 (NTPC-v-CERC & ors)] filed by the petitioner before the Tribunal against the order of the Commission pertaining to one of its generating station (Talcher TPS, Stage-II), the Tribunal by its judgment dated 4.2.2011 has observed that pendency of Civil appeals before the Hon’ble Supreme Court (against the judgment of the Tribunal dated 13.6.2007) was not a ground to ignore the orders of the Tribunal. The Commission is in the process of filing Civil Appeal against

this judgment. Keeping in view the observations of the Tribunal in Appeal No. 92/2010 and considering the fact that the tariff for 2004-09 is a composite package which needs to be determined on the same principle, the tariff of the generating station is sought to be now revised after considering the issues raised by the petitioner in terms of the judgment of the Tribunal dated 13.6.2007, subject to the final decision of the Hon'ble Supreme Court in the said Civil Appeals.

10. In the above background, we now proceed to revise the annual fixed charges of the generating station through this order, after taking into consideration our observations in order dated 1.6.2011 in Review Petition No.1/2011 and the directions contained in the judgment of the Tribunal dated 13.6.2007 in respect of those five issues, subject to the final outcome of the Civil Appeals pending before the Hon'ble Supreme Court.

11. Accordingly, the annual fixed charges determined by order dated 20.1.2011 is revised as under:

12. The Capital cost approved in order dated 20.1.2011 has been considered. Also, the debt-equity ratio and Return on Equity approved in order dated 20.1.2011 remain unchanged.

Interest on loan

13. Adjustment of repayment corresponding to de-capitalization of assets: The petitioner has not claimed any adjustment of repayment of loan on account of de-capitalization of assets as on 1.4.2004 (as there were no de-capitalization up to 31.3.2004) or during the period 2004-09 (since entire de-capitalization has been claimed as exclusions). However, as most of the de-capitalisation claimed under exclusions for the period 2004-09 has been disallowed for the purpose of tariff, based on judgment of the Tribunal dated 13.06.2007, repayment of loan requires to be adjusted.

14. The Tribunal in its judgment dated 13.6.2007 had observed as under:

“When asset is not in use it is only logical that the capital base for the purpose of tariff is also proportionately reduced. It follows therefore that the appellant will not earn any depreciation, return on equity and O&M charges. However, despite the de-capitalization, the appellant is required to pay interest on loan. Whereas 10% salvage value of the de-capitalized asset should be non-tariff revenue, the interest on loan has to be borne by the beneficiaries. If the salvage value is more than 10%, amount realized above 10% should be counted as additional revenue. If salvage value is less than 10%, it will be counted as loss in the revenue.”

Therefore, in this view of the matter, the cumulative repayment of the loan proportionate to those assets de-capitalized is required to be reduced. The CERC shall act accordingly.”

15. In terms of the above decision of the Tribunal, the cumulative repayment adjustment has been worked out proportionate to assets de-capitalized such that the net opening loan prior to de-capitalisation and after de-capitalisation do not change. In line with decision of the Tribunal, calculations have been made after adjustment of cumulative repayment proportionate to the assets de-capitalized.

16. Interest on loan has been worked out as mentioned below:

- (i) Gross opening loan, cumulative repayment of loan and net opening loan on normative basis as on 1.4.2004 will remain unchanged at Rs.125614.28 lakh, Rs.83985.00 lakh and Rs.41629.28 lakh, respectively.
- (ii) The addition of notional loan on account of additional capital expenditure as considered in order dated 20.1.2011 remain unchanged.
- (iii) The weighted average rate of interest has been re-calculated considering original Government of India loan, instead of refinanced bonds, based on directions of the Tribunal.
- (iv) Normative repayment =
$$\frac{\text{Actual Repayment} \times \text{Normative Loan}}{\text{Actual Loan}}$$
- (v) Cumulative repayment during 2004-09, has been adjusted on account of de-capitalized assets in proportion to debt-equity ratio adopted for allowing additional capital expenditure during the respective years.

17. Based on the above, interest on loan has been computed as stated overleaf:

(₹ in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Opening loan considered now	125614.28	125995.88	125573.91	125475.61	125734.53
Cumulative Repayment of loan upto previous year	83985.00	91950.59	99915.65	107575.89	113812.59
Net Loan Opening	41629.28	34045.28	25658.26	17899.72	11921.95
Addition of loan due to admitted additional capital expenditure	381.60	(-) 421.97	(-) 98.30	258.92	1165.30
Repayment of loan (Normative)	7971.09	8021.83	7696.37	6336.15	4372.39
Less: Adjustment for de-cap during the period	5.50	56.77	36.13	99.45	-
Repayment of loan during the year (net)	7965.59	7965.05	7660.24	6236.70	4372.39
Net loan closing	34045.28	25658.26	17899.72	11921.95	8714.85
Average Loan	37837.28	29851.77	21778.99	14910.83	10318.40
Weighted Average Rate of Interest on Loan	16.2177%	16.2031%	16.1661%	16.0760%	15.9426%
Interest on Loan	6136.32	4836.93	3520.81	2397.06	1645.02

Depreciation

18. The petitioner has adjusted an amount of ₹21.00 lakh as disincentive for unrecovered depreciation for the year 2002-03 in the cumulative depreciation recovered as on 1.4.2004. Based on the direction of the Tribunal, no adjustment has been made to the cumulative depreciation at this stage and the unrecovered depreciation shall be allowed in tariff after the designated useful life of the generating station. Depreciation has been calculated by applying the weighted average rate of depreciation of 3.5328% as considered in order dated 20.1.2011. The necessary calculations are as under:

(₹ in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Opening capital cost	251228.56	251773.70	251170.89	251030.46	251400.35
Closing capital cost	251773.70	251170.89	251030.46	251400.35	253065.06
Average capital cost	251501.13	251472.30	251100.68	251215.41	252232.71
Depreciable value @ 90%	222909.44	222883.48	222549.03	222651.47	222658.79
Balance depreciable value	123071.58	114167.76	105013.89	96285.66	87489.42
Depreciation	8884.93	8883.91	8870.79	8874.84	8910.78

Advance Against Depreciation

19. The Advance Against Depreciation in order dated 20.1.2011 remain unchanged.

O&M expenses

20. The O&M Expenses considered in order dated 20.1.2011 has been considered.

Interest on Working capital

21. For the purpose of calculation of working capital the operating parameters including the price of fuel components as considered in the order dated 20.01.2011 have been kept unchanged. The admitted additional capital expenditure has been considered while arriving at the maintenance spares for the purpose of calculating interest on working capital. The “receivables” component of the working capital has been revised on account of revision of interest on loan, maintenance spares. The necessary details in support of calculation of interest on working capital are as under:

(₹ in lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Coal Stock- 1.1/2 months	3096.08	3096.08	3096.08	3104.56	3096.08
Oil stock -2 months	312.26	312.26	312.26	313.12	312.26
O & M expenses	780.00	810.83	843.33	876.67	912.50
Maintenance Spares	3640.77	3853.02	4082.98	4331.70	4608.14
Receivables	11771.67	11617.93	11460.58	11356.80	11308.42
Total Working Capital	19600.78	19690.13	19795.24	19982.85	20237.41
Rate of Interest	10.2500%	10.2500%	10.2500%	10.2500%	10.2500%
Total Interest on Working capital	2009.08	2018.24	2029.01	2048.24	2074.33

22. The revised annual fixed charges for the period from 1.4.2004 to 31.3.2009 are summarized as under:

(₹ in lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on loan	6136.32	4836.93	3520.81	2397.06	1645.02
Interest on Working Capital	2009.08	2018.24	2029.01	2048.24	2074.33
Depreciation	8884.93	8883.91	8870.79	8874.84	8910.78
Advance Against Depreciation	0.00	0.00	0.00	0.00	0.00
Return on Equity	17597.45	17596.24	17580.63	17585.45	17628.17
O & M Expenses	9360.00	9730.00	10120.00	10520.00	10950.00
Total	43987.78	43065.31	42121.24	41425.59	41208.30

23. The target availability of 80% considered by the Commission in the order dated 20.1.2011 remains unchanged. Similarly other parameters viz. specific fuel

consumption, Auxiliary Power consumption and Station Heat Rate etc, considered in order dated 20.1.2011 have been retained for the purpose of calculation of the revised fixed charges.

24. The annual fixed charges determined in this order are subject to the outcome of Civil Appeals as stated above, pending before the Hon'ble Supreme Court.

25. The petitioner shall claim the difference in respect of the tariff determined by order dated 23.12.2009 and the tariff determined by this order, from the beneficiaries in three equal monthly installments.

Sd/-
(M.DEENA DAYALAN)
MEMBER

Sd/-
(V.S.VERMA)
MEMBER

Sd/-
(S.JAYARAMAN)
MEMBER

Sd/-
(DR.PRAMOD DEO)
CHAIRPERSON