

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No.129/2009

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: 30.9.2011

IN THE MATTER OF

Revision of order dated 11.1.2010 in the light of the judgment of the Appellate Tribunal for Electricity dated 13.6.2007 in Appeal Nos.139 to 142 etc., of 2006, 10, 11 and 23 of 2007 and judgment dated 16.3.2009 in Appeal Nos. 133, 135, 136 and 148/2008.

AND

IN THE MATTER OF

Approval of revised fixed charges for the period 2004-09, after considering the impact of additional capital expenditure incurred during 2008-09 for Feroze Gandhi Unchahar Thermal Power Station, Stage-I (420 MW).

AND

IN THE MATTER OF

NTPC Ltd, New Delhi
Vs

.....Petitioner

- (1) Uttar Pradesh Power Corporation Ltd, Lucknow
- (2) Jaipur Vidyut Vitran Nigam Ltd, Jaipur
- (3) Ajmer Vidyut Vitran Nigam Ltd, Ajmer
- (4) Jodhpur Vidyut Vitran Nigam Ltd, Jodhpur
- (5) North Delhi Power Ltd, Delhi
- (6) BSES Rajdhani Power Ltd, New Delhi
- (7) BSES Yamuna Power Ltd, Delhi
- (8) Haryana Power Purchase Centre, Panchkula
- (9) Punjab State Electricity Board, Patiala
- (10) Himachal Pradesh State Electricity Board, Shimla
- (11) Power Development Department, J & K, Jammu
- (12) Power Department, Union Territory of Chandigarh, Chandigarh
- (13) Uttarakhand Power Corporation Ltd, Dehradun

..... Respondents

ORDER

The petitioner, NTPC had filed this application for approval of revised fixed charges for the period 2004-09, after considering the impact of additional capital expenditure



incurred during 2008-09 for Feroze Gandhi Unchahar Thermal Power Station, Stage-I (420 MW) (hereinafter referred to as “the generating station”) in accordance with the provisions of 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 11.1.2010, revised the tariff of the generating station based on the capital cost as under:

	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Opening Capital Cost	94543.51	94504.95	94516.31	94458.75	95538.17
Additional capital expenditure allowed	(-) 38.56	11.36	(-) 57.56	1079.42	1920.73
Closing Capital cost	94504.95	94516.31	94458.75	95538.17	97458.90
Average Capital cost	94524.23	94510.63	94487.53	94998.46	96498.53

2. The additional capital expenditure approved above for the tariff period 2004-09 is after excluding un-discharged liabilities amounting to ₹13.61 lakh for the year 2008-09.

3. The revised annual fixed charges approved by the Commission in order dated 11.1.2010 is as under:

	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on loan	11.78	0.00	0.00	0.00	1.63
Interest on Working Capital	1459.57	1434.78	1450.74	1471.42	1490.03
Depreciation	3321.06	1031.78	1032.27	1074.35	1213.74
Advance Against Depreciation	0.00	0.00	0.00	0.00	0.00
Return on Equity	6617.24	6616.67	6615.70	6637.15	6700.16
O & M Expenses	4368.00	4544.40	4725.00	4914.00	5111.40
Total	15777.65	13627.63	13823.71	14096.92	14516.96

Background

4. The petitioner had filed Petition No.142/2004 for determination of tariff of the generating station for the period 2004-09 and the Commission by its order dated 9.5.2006 determined the tariff of the generating station for the said period. Aggrieved by the said order, the petitioner filed Appeal No.142/2006 before the Tribunal. Similar appeals [Appeal Nos.139 to 142 etc of 2006, 10, 11 and 23/2007 (NTPC-v-CERC & ors)]



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.142/2006 was clubbed along with the other 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.

5. Against the judgment dated 13.6.2007, the Commission has filed Civil Appeals before the Hon'ble Supreme Court (C.A. Nos. 5434/2007 to 5452/2007 and 5622/2007) including Civil Appeal No. 5438/2007 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 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. Appeal Nos.151 & 152/2007 were also filed by the petitioner before the Tribunal challenging the orders of the Commission revising the tariff of the generating stations (*Rihand STPS and Ramagundam STPS*) of the petitioner, after deduction of un-



discharged liabilities. The Tribunal by its judgment dated 10.12.2008 allowed the said appeals as under:

“25. Accordingly, we allow both the appeals in part. We direct that the appellant be allowed to recover capital cost incurred including the portion of such cost which has been retained or has not yet been paid for. We also direct that in case the Commission attributes any loan taken at the corporate level to a particular project under construction and considers any repayment out of it before the date of commercial operation the sum deployed for such repayment would earn interest as pass through in tariff.”

26. The Commission is directed to give effect to the directions given herein in the truing up exercise and consequent subsequent tariff orders.”

8. The petitioner also filed appeals (Appeal Nos. Nos.133, 135/2008, 136/2008 and 148/2008) before the Tribunal on the issue of un-discharged liabilities in respect of some of its other generating stations viz Ramagundam, Simhadri, Rihand and Vindhyachal. The Tribunal by a common judgment dated 16.3.2009 allowed the prayer of the petitioner, in line with its decision dated 10.12.2008 (in Appeal Nos. 151 & 152/2007. Against the above said judgments of the Tribunal dated 10.12.2008 and 16.3.2009, the Commission has filed Civil Appeals before the Hon'ble Supreme Court in C.A Nos. 4112-4113/2009 and C.A Nos. 6286 to 6288/2009 and the same are pending.

9. During the pendency of the above Civil Appeals, the petitioner filed Petition No. 30/2009 for revision of tariff of the generating station after considering the impact of additional capital expenditure for the period 2004-08 and the Commission by its order dated 27.10.2009 revised the tariff of the generating station.

10. Thereafter, Petition No.129/2009 was filed by the petitioner for approval of revised fixed charges for the generating station after considering the impact of additional capital expenditure incurred during the period 2008-09. The petitioner also filed Interlocutory Application (I.A. No.39/2009) to the said petition and claimed revision of tariff of the generating station in terms of the judgment of the Tribunal dated 13.6.2007 by considering those issues covered by the interim order dated 10.12.2007 of the Hon'ble



Supreme Court and the judgments of the Tribunal dated 10.12.2008 and 16.3.2009. The claims of the petitioner were disposed of by order dated 11.1.2010 as discussed in the subsequent paragraphs.

Judgment dated 13.6.2007

11. Keeping in view the spirit of the interim order of the Hon'ble Supreme Court dated 10.12.2007, the claim of the petitioner in I.A.39/2009 (in Petition No.129/2009) for implementation of the judgment of the Tribunal dated 13.6.2007 was deferred till the final disposal of the Civil Appeals by the Hon'ble Supreme Court. The relevant portion of the order containing the observations of the Commission in order dated 11.1.2010 in Petition No.149/2009 is extracted hereunder:

8.In our view, the undertaking given by the petitioner before the Hon'ble Supreme Court that "the five issues shall not be pressed for fresh determination" is binding on the petitioner and the petitioner is estopped in law from seeking fresh determination of these issues. Moreover, the petitioner seems to create a distinction between the main tariff petition and the petition for additional capitalization by stating that while the undertaking is confined to the remand order pertaining to the main petition, the additional capitalization can be considered as per the principles laid down by the Appellate Tribunal. Such an approach will lead to dichotomous situations wherein tariff for the main petition and petition for additional capitalization are determined on the basis of different principles. The tariff for the period 2004-09 is a complete 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 implementation of the judgment of the Appellate Tribunal on the five issues should be deferred till the final disposal of the said Civil Appeals by the Hon'ble Supreme Court. Accordingly, tariff for additional capitalization is determined on the basis of the existing principles, subject to the final outcome of the Civil Appeals pending before the Supreme Court"

Judgment dated 16.3.2009

12. On the issue of un-discharged liabilities, no stay of the operation of the judgment of the Tribunal dated 16.3.2009 in Appeal Nos. 133/2008, 135/2008, 136/2008 and 148/2008 was granted by the Hon'ble Supreme Court in the Civil Appeals (C.A Nos. 6286 to 6288/2009) filed by the Commission. Hence, the tariff of the generating station was revised by order dated 11.1.2010 in terms of the directions contained in the judgment dated 16.3.2009. The relevant portion of the order dated 11.1.2010 is extracted as under:



16. The directions of the Appellate Tribunal pertain to additional capitalization for the tariff period 2004-09 which has come to an end on 31.3.2009 and the exercise for implementation of the directions have been undertaken after the expiry of the said tariff period. Accordingly, tariff of the generating station is revised after considering the additional capital expenditure, capitalization of un-discharged liabilities and IDC after truing up of the expenditure as on 31.3.2009. While truing up, the liabilities discharged, liabilities reversed on account of de-capitalization of assets during the tariff period have been accounted for”

13. Against the order of the Commission dated 11.1.2010, the petitioner has filed Appeal No.85/2010 before the Tribunal and the same is pending.

14. 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 namely, Talcher TPS, Stage-II, the Tribunal by its judgment dated 4.2.2011 had observed that pendency of the Civil appeals filed by the Commission 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. Against this order the Commission has filed Civil Appeal before the Hon’ble Supreme Court. 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, the tariff of some of the generating stations of the petitioner were revised by the Commission, after considering the issues raised by the petitioner in line with directions contained in the judgments of the Tribunal dated 13.6.2007 and 16.3.2009 respectively. Accordingly, we direct the same for this generating station also.

15. In the above background, we now proceed to revise the annual fixed charges of the generating station for 2004-09 through this order, after considering the issues claimed by the petitioner in terms of the judgments of the Tribunal dated 13.6.2007 and 16.3.2009, subject to the final outcome of the Civil Appeals pending before the Hon’ble Supreme Court.



Un-discharged liabilities

16. The additional capital expenditure approved vide order dated 11.1.2010 is revised after including the un-discharged liabilities disallowed earlier and removal of the un-discharged liabilities already discharged. The revised additional capital expenditure for the period 2004-09 is as under:

	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Additional capital expenditure admitted in order dated 11.1.2010	(-) 38.56	11.36	(-) 57.56	1079.42	1920.73
Add: Un-discharged liabilities deducted earlier	0.00	0.00	0.00	0.00	13.61
Less: Discharge of liabilities allowed earlier	0.00	0.00	0.00	0.00	0.00
Additional capital expenditure admitted now	(-) 38.56	11.36	(-) 57.56	1079.42	1934.34

Capital Cost

17. The opening capital cost of ₹94543.51 lakh as on 1.4.2004 as approved in order dated 11.1.2010 remains unaltered. However, the capital cost for respective years of the period 2004-09 is revised on account of the changes in the admitted additional capital expenditure as stated above. Thus, the capital cost as approved vide order dated 11.1.2010 is revised as under:

	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Opening Capital cost (considered now)	94543.51	94504.95	94516.31	94458.75	95538.17
Additional capital expenditure approved	(-) 38.56	11.36	(-) 57.56	1079.42	1934.34
Closing Capital cost	94504.95	94516.31	94458.75	95538.17	97472.51
Average Capital cost	94524.23	94510.63	94487.53	94998.46	96505.34

Debt-Equity ratio

18. For the purpose of allowing additional capital expenditure for the period 2004-09, the debt-equity ratio of 70:30 remains the same as considered in order dated 11.1.2010.

Return on Equity

19. Based on the above, the return on equity approved vide order dated 11.1.2010 is revised as under:



	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Equity –Opening considered now	47271.76	47260.19	47263.60	47246.33	47570.16
Addition of Equity due to admitted additional capital expenditure	(-) 11.57	3.41	(-) 17.27	323.83	580.30
Equity-Closing	47260.19	47263.60	47246.33	47570.16	48150.46
Average equity	47265.98	47261.90	47254.97	47408.25	47860.31
Return on Equity @ 14%	6617.24	6616.67	6615.70	6637.15	6700.44

Interest on loan

20. Adjustment of repayment corresponding to de-capitalization of assets: In Petition No.142/2004, the petitioner had sought adjustment in cumulative repayment on account of de-capitalization of assets in such a manner that the net loan opening prior to de-cap does not undergo a change. The Tribunal in its judgment dated 13.6.2007 has decided 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 required to be reduced. The CERC shall act accordingly”.

21. In the instant petition, the petitioner has claimed such adjustment applying the formula as under:

$$\text{Repayment to be adjusted} = \frac{\text{Cumulative repayment at the beginning} \times \text{Gross value of de-capitalised asset} \times \text{Debt proportion corresponding to normative debt-equity ratio for the respective period}}{\text{Gross debt at the beginning of the year of de-capitalisation}}$$

22. 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.



23. Interest on loan has been re-worked out as mentioned below:

- (a) Gross opening loan on normative basis as on 1.4.2004 as considered in order dated 11.1.2010 was ₹47271.76 lakh.
- (b) Cumulative repayment of normative loan as on 1.4.2004 as considered in order dated 11.1.2010 was ₹46869.31 lakh. However, on account of cumulative repayment adjustment of ₹135.88 lakh corresponding to asset de-capitalized (amounting to ₹271.75 lakh) up to 31.3.2004, the cumulative repayment of normative loan as on 1.4.2004 is revised to ₹46733.44 lakh.
- (c) Accordingly, the net opening normative loan as on 1.4.2004 is revised to ₹538.33 lakh.
- (d) The addition of notional loan on account of additional capital expenditure approved for the period 2004-09 is revised to (-)₹26.99 lakh, ₹7.95 lakh, (-)₹40.29 lakh, ₹755.59 lakh and ₹1354.04 lakh for the years 2004-05, 2005-06, 2006-07, 2007-08 and 2008-09, respectively.
- (e) Weighted average rate of interest as considered in order dated 11.1.2010 has been retained for revision of tariff.
- (f) Normative repayment =
$$\frac{\text{Actual Repayment} \times \text{Normative Loan}}{\text{Actual Loan}}$$
- (g) 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.

24. Interest on loan has been re-computed as under:



	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Opening loan – considered now	47271.76	47244.77	47252.72	47212.43	47968.02
Cumulative Repayment of Loan upto previous year	46733.44	46746.70	46774.51	46800.09	46686.82
Net Loan Opening	538.33	498.07	478.21	412.34	1281.20
Addition of loan due to approved additional capital expenditure	(-) 26.99	7.95	(-) 40.29	755.59	1354.04
Repayment of loan (Normative)	48.50	51.95	58.76	29.13	70.47
Less: Adjustment for de-cap during the period	35.24	24.14	33.19	142.40	345.48
Repayment of loan during the year (net)	13.26	27.82	25.57	(-) 113.26	(-) 275.01
Net Loan Closing	498.07	478.21	412.34	1281.20	2910.25
Average Loan	518.20	488.14	445.28	846.77	2095.72
Weighted Average Rate of Interest on Loan	5.8521%	5.8516%	7.6809%	5.6088%	2.4166%
Interest on Loan	30.33	28.56	34.20	47.49	50.64

Depreciation

25. Cumulative depreciation/Advance against Depreciation of ₹67081.56 lakh (after excluding adjustment of de-capitalization of assets upto 31.3.2004 amounting to ₹188.44 lakh) upto 31.3.2004 as considered in order dated 11.1.2010 has been retained. Depreciation has been re-calculated applying weighted average rate of depreciation of 3.5134% as mentioned in order dated 11.1.2010. The necessary calculations are as under.

	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Opening capital cost	94543.51	94504.95	94516.31	94458.75	95538.17
Closing capital cost	94504.95	94516.31	94458.75	95538.17	97472.51
Average capital cost	94524.23	94510.63	94487.53	94998.46	96505.34
Depreciable value @ 90%	84750.97	84738.73	84717.94	85177.77	86533.96
Cumulative depreciation at the beginning of the year	67081.56	70365.63	73659.01	76936.58	80100.54
Balance depreciable value (at the beginning)	17669.41	14373.10	11058.92	8241.19	6433.42
Balance Useful life	14.93	13.93	12.93	11.93	10.93
Depreciation	3321.06	3320.58	3319.77	3337.72	3390.67
Cumulative depreciation adjustment on account of de-capitalization	36.99	27.20	42.20	173.36	444.19

Advance Against Depreciation

26. Advance Against Depreciation allowed vide order dated 11.1.2010 remain unchanged.



O&M expenses

27. O&M Expenses approved vide order dated 11.1.2010 remain unchanged.

Interest on Working capital

28. For the purpose of calculation of working capital the operating parameters including the price of fuel components as considered in the order dated 11.1.2010 have been kept unchanged. The additional capital expenditure allowed after the date of commercial operation 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 for the reason of revision of return on equity, interest on loan, maintenance spares. The necessary details in support of calculation of interest on working capital are as under:

	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Coal stock- 1.1/2 months	4641.12	4641.12	4641.12	4653.84	4641.12
Oil stock -2 months	133.54	133.54	133.54	133.90	133.54
O & M expenses	364.00	378.70	393.75	409.50	425.95
Maintenance Spares	1851.54	1962.76	2079.95	2215.56	2367.51
Receivables	7410.10	7441.72	7475.30	7532.45	7575.56
Total Working Capital	14400.31	14557.85	14723.66	14945.25	15143.68
Rate of Interest	10.2500%	10.2500%	10.2500%	10.2500%	10.2500%
Total Interest on Working capital	1476.03	1492.18	1509.17	1531.89	1552.23

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

	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on loan	30.33	28.56	34.20	47.49	50.64
Interest on Working Capital	1476.03	1492.18	1509.17	1531.89	1552.23
Depreciation	3321.06	3320.58	3319.77	3337.72	3390.67
Advance Against Depreciation	0.00	0.00	0.00	0.00	0.00
Return on Equity	6617.24	6616.67	6615.70	6637.15	6700.44
O & M Expenses	4368.00	4544.40	4725.00	4914.00	5111.40
Total	15812.66	16002.39	16203.84	16468.25	16805.38

30. The target availability of 80% considered by the Commission in the order dated 11.1.2010 remains unchanged. Similarly other parameters viz. specific fuel



consumption Auxiliary Power consumption and Station Heat rate etc., considered in order dated 11.1.2010 have been retained for the purpose of calculation of the revised fixed charges.

31. The revised annual fixed charges determined by this order are subject to the outcome of Civil Appeals pending before the Hon'ble Supreme Court and Appeal No. 85/2010 pending before the Tribunal.

32. The petitioner shall claim the difference in respect of the tariff determined by order dated 11.1.2010 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

