

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 141/2009

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 Hearing: 17.11.2011
Date of order: 21.8.2012**

IN THE MATTER OF

Revision of order dated 11.1.2010 in the light of the judgment of the Appellate Tribunal for Electricity dated 8.12.2010 in Appeal No. 58/2009 and judgment dated 20.10.2011 in Appeal No. 74/2010.

AND

IN THE MATTER OF

Revision of fixed charges due to additional capital expenditure incurred during 2006-07 , 2007-08 and 2008-09 at Faridabad Gas Power Station (431.586 MW).

AND

IN THE MATTER OF

NTPC Ltd, New DelhiPetitioner
Vs	
Haryana Power Purchase Centre, PanchkulaRespondent

Parties present:

1. Shri Sameer Aggarwal, NTPC
2. Shri Naresh Anand, NTPC
3. Shri Ajay Dua, NTPC

ORDER

The petitioner, NTPC had filed this petition for approval of the revised fixed charges for the period 2004-09, after considering the impact of additional capital expenditure incurred during the year 2006-09 in respect of Faridabad Gas Power Station (431.586 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 Tariff Regulations”) and the Commission by its order dated 11.1.2010 revised the annual fixed charges of the generating station for the period 2004-09 based on the capital cost as under:

(` in lakh)

	2004-05	2005-06	2006-07	2007-08		2008-09
				1.4.2007 to 31.8.2007	1.9.2007 to 31.3.2008	
Opening Capital cost (A)	94090.60	94832.85	94358.38	95338.40	98821.24*	99017.68
Additional capital expenditure allowed earlier	742.25	(-) 474.47	980.02	141.11	196.44	242.51
Closing Capital Cost	94832.85	94358.38	95338.40	95479.51	99017.68	99260.19
Average capital cost	94461.73	94595.62	94848.39	95408.96	98919.46	99138.94

* Inclusive of cost of transferred switchyard on gross value amounting to ₹3341.73 lakh as per order dated 9.6.2009 in Petition No.140/2008

2. The un-discharged liabilities disallowed and the discharge of liabilities allowed in the above additional capital expenditure was as under:

(` in lakh)

	2004-05	2005-06	2006-07	2007-08		2008-09
				1.4.2007 to 31.8.2007	1.9.2007 to 31.3.2008	
Un-discharged liabilities disallowed	50.82	3.90	20.26	13.12	18.26	15.36
Discharge of liabilities allowed	-	32.55	1.53	11.49	15.99	44.80

3. The annual fixed charges approved by order dated 11.1.2010 is as under:

(` in lakh)

	2004-05	2005-06	2006-07	2007-08		2008-09
				1.4.2007 to 31.8.2007	1.9.2007 to 31.3.2008	
Interest on loan	3971.68	3671.42	3375.97	1329.87	1865.05	2933.23
Interest on Working Capital	1243.86	1248.89	1254.80	529.01	739.31	1275.53
Depreciation	3798.77	3804.16	3814.32	1603.94	2315.09	3986.87
Advance Against Depreciation	0.00	0.00	0.00	0.00	0.00	0.00
Return on Equity	6601.92	6607.55	6618.16	2776.45	3933.20	6767.67
O & M Expenses	3366.00	3500.00	3643.00	1582.25	2202.75	3936.00
Total	18982.23	18832.02	18706.25	7821.52	11055.40	18899.30

Background

4. The tariff of the generating station for the period 1.4.2004 to 31.3.2009 was approved by the Commission vide its order dated 9.5.2006 in Petition No.156/2004. Aggrieved by the said order, the petitioner filed Appeal No.140/2006 before the Appellate Tribunal for

Electricity ('the Tribunal'). Similar appeals (Appeal Nos.140 to142 etc of 2006, 10, 11 and 23/2007) were also filed by the petitioner challenging the various orders of the Commission determining the tariff for other generating stations of the petitioner. Appeal No.140/2006 was clubbed with the said appeals and the Tribunal by its common judgment dated 13.6.2007 in Appeal Nos. 139 to 142 etc of 2006 and 10, 11, 23 of 2007) allowed the prayers of the petitioner and remanded the matters for re-determination 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.5434/2007 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*

5. 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."

6. In Appeal Nos.151 & 152/2007 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.”

7. Similar appeals, Appeal Nos.133/2008, 135/2008, 136/2008 and 148/2008 were also filed by the petitioner before the Tribunal in respect of other generating stations on the issue of disallowance of un-discharged liabilities and the Tribunal, in line with its earlier decision dated 10.12.2008, disposed of these appeals by a common judgment dated 16.3.2009. 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.

8. Meanwhile, the petitioner filed Petition No. 23/2007 before the Commission for revision of annual fixed charges for 2004-09 on account of additional capital expenditure incurred during the years 2004-05 and 2005-06 and the Commission by its order dated 12.11.2008 revised the tariff of the generating station for 2004-09.

9. Against the Commission's order dated 12.11.2008, the petitioner filed Appeal No.58/2009 before the Tribunal on the following issues:

(i) Exclusion of part of the capital expenditure validly incurred, but pending actual disbursement/payment from the capital cost for the purpose of tariff;

(ii) Equating depreciation with normative loan repayment;

(iii) Disallowance of cost of maintenance spares; and

(iv) Disallowance of cost of capital applying the principle of cut-off date.

10. During the pendency of the above appeal, the petitioner filed the instant petition (Petition No. 141/2009) for revision of tariff due to additional capital expenditure during 2006-09. In the said petition, the petitioner filed Interlocutory Application (I.A.No.48/2009) taking into account the revised calculations (in Annexure-I) for fixed charges based on the directions contained in the judgment of the Tribunal dated 13.6.2007 in Appeal Nos.139

to142 etc of 2006, 10, 11 and 23/2007 and the judgment of the Tribunal dated 16.3.2009 in Appeal Nos.133,135 etc of 2008 of the Tribunal (on disallowance of un-discharged liabilities) passed against the various tariff orders for the period 2004-09 in respect of the generating stations of the petitioner. The claims of the petitioner were disposed of by order of the the Commission dated 11.1.2010 as stated 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.48/2009 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 is extracted hereunder:

"10.....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 dated 11.1.2010, the petitioner filed Appeal No. 74/2010 before the Tribunal raising the following issues:

- (i) Liability actually incurred but payment deferred i.e un-discharged liabilities have been disallowed;*
- (ii) Depreciation amount has been treated as a normative loan repayment, thus reducing the capital base to be served by loan to the above extent;*
- (iii) Disallowance of cost of maintenance spares on additional capitalization in calculation of interest on working capital;*
- (iv) Consequences of refining of loan;*
- (v) Impact of de-capitalization of assets on cumulative repayment of loan;*
- (vi) Additional capitalization after the actual commercial operation of the generating station;*
- (vii) Disallowance of an expenditure of `116.44 lakh claimed towards balance payment made in respect of transfer of switchyard from PGCIL when such transfer was approved by the Commission by order dated 9.6.2009 in Petition No. 140/2008;*

14. Thereafter, the Tribunal by its judgment dated 8.12.2010 in Appeal No. 58/2009 allowed the prayers of the petitioner (i) to (iii) (as shown in paragraph 9 above) in line with its decision contained in earlier judgments dated 13.6.2007 in Appeal Nos.139 to142 etc of 2006, 10, 11 and 23/2007 and the judgment dated 16.3.2009 in Appeal Nos.133/2008, 135/2008, 136/2008 and 148/2008. However, the prayer regarding ‘Disallowance of cost of capital applying the principle of cut-off date’ was disposed of by the Tribunal in terms of its earlier judgments, the relevant portion of which is extracted as under:

“The first two issues have been covered by the judgment of this Tribunal in Appeal Nos. 133 and 135 of 2008 dated 16.03.2009 and Appeal Nos. 139 and 140, etc. of 2006 dated 13.05.2007. As far as the third and fourth issues namely disallowance of cost of maintenance spares and disallowance of cost of capital applying the principle of cut-off date, the same are covered in the judgments rendered by this Tribunal in Appeal Nos. 139, 140, etc of 2006 dated 13.06.2007 and Appeal No. 54/09 by the judgment dated 21.08.2009 and Appeal No. 66/08 dated 18.08.2010. This fact has not been disputed by the Respondents. Therefore, Appeal No. 58/09 is also allowed in terms of the judgments passed earlier by this Tribunal, referred to above.”

15. Pursuant to this, the Tribunal by its judgment dated 20.10.2011 in Appeal No. 74/2010 allowed the prayers (i) to (vi) raised by the petitioner (as in paragraph 13 above) in

terms of its earlier judgments and directed the Commission to pass consequential orders. Against this judgment, the Commission has filed Civil Appeals before the Hon'ble Supreme Court on the issues (i) to (v) and the same is pending. On the question of disallowance of an expenditure of `116.44 lakh claimed towards balance payment made in respect of transfer of switchyard from PGCIL, the Tribunal in its judgment dated 20.10.2011 observed as under:

"(ii) As regards the seventh issue in respect of additional capitalisation incurred on account of transfer of switch yard at Faridabad Station from PGCIL to the Appellant, it is to be stated that out of claim of additional capital expenditure of `116.44 lakhs incurred and capitalised in the year 2007-08 after the date of transfer, `112.85 lakh account for the Statutory Stamp Duty had been paid to the State Government for transfer of immovable assets. This expenditure ought to have been considered and allowed by the Central Commission"

16. As stated above, the Tribunal in its judgments dated 8.12.2010 (in Appeal No.58/2009) and 20.10.2011 (in Appeal No. 74/2010) had disposed of the prayer of the petitioner questioning the disallowance of additional capital expenditure by applying the principle of cut-off date, in terms of its findings in the judgment dated 18.8.2010 in Appeal No. 66/2008.

17. Appeal No. 66/2008 was filed by the petitioner, challenging the Commission's order dated 31.1.2008 in Petition No.179/2004 (pertaining to determination of tariff for 2004-09 in respect of Talcher STPS, Stage-II, on various issues including prayer for extension of cut-off date for additional capitalization. The prayer of the petitioner for extension of 'cut-off date' for additional capitalization was disposed of by the Tribunal by its judgment dated 18.8.2010, as under:

"45. We have examined the details of the items where the orders were placed after the cut-off date submitted by the appellant. These are essentially the initial spares required for the power plant. In view of the explanation offered by the appellant we are convinced that it is a fit case for consideration of the Commission to exercise its power to relax under the Tariff Regulations, 2004. Accordingly we remand this matter to the Commission to consider the request of the appellant to extend the cut-off date appropriately in exercise of its power to relax.

46. xxxxxx

47. With regard to the "cut-off" date we remand the matter to the Commission to consider the submissions of the appellant to extend the cut-off date appropriately in exercise of its power to relax under the Tariff Regulations, 2004.

48. xxxxxxxx.

49. *The result of this discussion as aforesaid would be that the Respondent No. 1 is to re-examine the case and pass a fresh order on the issue referred to above in the light of the observations made in the body of the judgment.*

50. *Accordingly, we allow the appeal in part, set aside the order dated 31.1.2008 passed in Petition No.179/04 to the extent as indicated above and remand the matter back to the Commission for re-examination on the issues as above so as to have a fresh decision reached in accordance with the law after hearing the parties."*

18. In terms of the above decision, Petition No. 23/2007 and Petition No. 141/2009 filed by the petitioner in respect of this generating station for additional capitalization for the periods 2004-06 and 2006-09 respectively were heard on 17.11.2011 and the Commission reserved its orders on the petition. During the hearing the representative of the petitioner submitted that the cut-off date of the generating station may be relaxed in exercise of the 'Power to relax' under Regulation 13 of the 204 Tariff Regulations, for the purpose of additional capital expenditure for the period 2004-06 (in Petition No.23/2007) and for 2006-09 (in Petition No. 141/2009), keeping in view the observations of the Tribunal in its judgment dated 18.8.2010 in Appeal No. 66/2008. None appeared on behalf of the respondent.

19. In compliance with the directions of the Tribunal for re-examination of the issues and arrive at a fresh decision, we consider the prayer for extension of cut-off date for additional capital expenditure for the generating station in the light of the judgment of the Tribunal in Appeal No. 66/2008, based on the submissions of the parties' and the documents available on record, as discussed in the subsequent paragraphs.

Relaxation of Cut-off date for additional capitalization

20. The concept of cut-off date under the 2004 Tariff Regulations was defined to mean '*the date of first financial year closing after one year of the date of commercial operation of the generating station*'. The date of commercial operation of Talcher, STPS, Stage-II, was 1.8.2005 and in terms of the above definition, the cut-off date expired on 31.3.2007. Since, the generating station had come into commercial operation during the period when the concept of cut-off date had already been introduced, it had no opportunity to execute the orders within the cut-off date as defined under the 2004 Tariff Regulations. Accordingly, the

prayer made by the petitioner in Appeal No. 66/2008 for extension of cut-off date in exercise of power to relax was considered by the Tribunal in its judgment dated 18.8.2010. The relevant portion of the judgment is extracted as under:

"44. The Appellant has submitted that the orders for certain work for a sum of `76 crore could not be placed by 31.03.2007 due to detailed review of initial spares. After detailed exercise enquiry for some of the spares was issued in July and September, 2006 against which offers were received from BHEL in September and November, 2006. The order could be placed after negotiation and bringing down the cost only after 31.03.2007. Also some orders relating to Civil Works were placed after 31.03.2007. It has been argued by the learned counsel for the Appellant that the present case is a just and proper case for exercising the Power to Relax.

45. We have examined the details of the items where the orders were placed after the cut off date submitted by the appellant. These are essentially the initial spares required for the power plant. In view of the explanation offered by the appellant we are convinced that it is a fit case for consideration of the Commission to exercise its power to relax under the Tariff Regulations, 2004.'

21. Accordingly, the Commission by its order dated 29.12.2011 had allowed the cut-off date for Talcher, STPS, Stage-II generating station to 31.3.2008, in exercise of the 'power to relax', in terms of Regulation 13 of the 2004 Tariff Regulations.

22. We however notice that the facts in respect of this generating station are different from the facts pertaining to Talcher-STPS, Stage-II generating station of the petitioner (in Appeal No.66/2008). The date of commercial operation of the instant generating station (Faridabad GPS) is 1.1.2001 and it is observed that the petitioner had procured initial spares amounting to `250.46 lakh and `111.93 lakh during 2004-05 and 2005-06 respectively, much after a period of 4 to 5 years approximately. The concept of cut-off date was introduced under the 2004 Tariff Regulations, applicable for the period 2004-09 and the petitioner had ample time to capitalize the initial spares prior to this. Capitalization of spares on piece meal basis in deviation of the provisions of the Tariff Regulations defeats the very purpose of specifying the cut-off date, which is aimed at ensuring that the original capital cost of the project is firmed up at the earliest, in order to ensure regulatory certainty. Moreover, the capitalization of initial spares loses its relevance if procured after a long gap of about 4 to 5 years. The petitioner having not taken adequate steps to capitalize initial spares for the generating station, cannot now seek the extension of cut-off date, for capitalization of spares

procured during 2004-05 and 2005-06. In view of this, we are of the considered view that there is no reason for us to allow extension of 'cut-off date' for capitalization of initial spares in exercise of the 'power to relax' under Regulation 13 of the 2004 Tariff Regulations.

23. As regards additional capitalization during 2006-09, the petitioner had procured spares amounting to `1735.90 lakh during 2006-07, `299.82 lakh during 2007-08 and `319.24 lakh during 2008-09 for maintaining stock of necessary spares. However, as capitalization of spares over and above initial spares procured after cut-off date are not allowed for tariff as they form part of O&M expenses, the petitioner had excluded the said amounts and the exclusions were allowed by the Commission in its order dated 11.1.2010. Moreover, by the same order, expenditure of `389.78 lakh claimed towards the capitalization of initial spares during 2006-07, against the de-capitalization of initial spares amounting to `381.485 lakh during 2001-04, has been allowed by the Commission. When seen in the above background, we are of the view that there is no reason for us to consider the extension of cut-off date for capitalization of initial spares for this generating station. Accordingly, on re-examination of the issues, the claim of the petitioner for capitalization of initial spares for 2004-06 by extension of cut-off date in exercise of power to relax under Regulation 13 of the 2004 Tariff Regulations is accordingly rejected.

Transfer of switchyard from PGCIL

24. In compliance with the directions contained in the judgment of the Tribunal dated 20.4.2011 in Appeal No. 74/2010, the expenditure of `112.85 lakh on account of statutory stamp duty paid to the state government for transfer of immovable assets has been allowed in this order.

Other issues

25. The Tribunal in its judgments dated 8.12.2010 (in Appeal No. 58/2009) and 20.4.2011 (in Appeal No. 74/2010) has allowed the prayers of the petitioner in respect of issues like (a)

liability actually incurred but payment deferred i.e un-discharged liabilities (b) Equating depreciation with normative loan repayment (c) Disallowance of cost of maintenance spares, (d) Consequences of refinancing of loan and (e) impact of de-capitalization of assets on cumulative repayment of loan, on the ground that the same are covered by the judgments dated 13.6.2007 in Appeal Nos.139 to142 etc of 2006, 10, 11 and 23/2007 and the judgment of the Tribunal dated 16.3.2009 in Appeal Nos.133,135 etc of 2008 of the Tribunal (on disallowance of un-discharged liabilities) passed against the various tariff orders of the Commission for the period 2004-09 in respect of the generating stations of the petitioner.

26. The Commission in its various orders pertaining to the tariff of the generating stations of the petitioner for 2004-09 had revised the annual fixed charges on the issues raised by the petitioner, considering the fact that tariff for 2004-09 is a composite package, in line with the directions contained in the judgments of the Tribunal dated 13.6.2007 and 16.3.2009 respectively. Accordingly, in line with the decision contained in the judgments of the Tribunal dated 8.12.2010 and 20.10.2011 in Appeal Nos. 58/2009 and 74/2010, respectively, we direct the revision of the annual fixed charges of the generating station for 2004-09, subject to the final outcome of the Civil Appeals pending before the Hon'ble Supreme Court.

27. Based on the above, the annual fixed charges of the generating station for 2004-09 are revised as under:

Un-discharged liabilities

28. Un-discharged liabilities disallowed earlier are included in the capital cost for the purpose of tariff. As a consequence of the same, the liabilities discharged earlier allowed for the purpose of tariff are being deducted from the additional capital expenditure admitted earlier.

Capital Cost

29. The capital cost, after inclusion of un-discharged liabilities and the expenditure towards stamp duty is approved as under:

(` in lakh)

	2004-05	2005-06	2006-07	2007-08		2008-09
				1.4.2007 to 31.8.2007	1.9.2007 to 31.3.2008	
Opening Capital cost to be considered now (A)	94090.60	-	-	-	-	-
Additional capital expenditure allowed on transfer of switchyard as on 1.9.2007	-	-	-	-	3341.73	-
Capital cost now considered	94090.60	94883.67	94380.55	95379.30	98863.77	99175.33
Additional capital expenditure allowed	742.25	(-) 474.47	980.02	141.11	196.44	242.51
Add: Un-discharged liabilities disallowed in additional capital expenditure	50.82	3.90	20.26	13.12	18.26	15.36
Less: Discharge of liabilities allowed earlier	0.00	32.55	1.53	11.49	15.99	44.80
Add: Additional capital expenditure related to stamp duty	-	-	-	-	112.85	-
Additional capital expenditure to be considered now (B)	793.07	(-) 503.12	998.75	142.73	311.56	213.07
Closing capital cost (A+B)	94883.67	94380.55	95379.31	95522.04	99175.33	99388.40
Average capital cost	94487.14	94632.11	94879.93	95450.67	99019.55	99281.87

Debt-Equity ratio

30. In line with sub-clause (a) of clause (1) of Regulation 20 of the 2004 Tariff Regulations, the debt-equity ratio of 50:50 has been considered for the capital cost up to 31.3.2004 and debt-equity ratio of 70:30 has been considered for the admitted additional capital expenditure. Accordingly, the additional notional equity due to admitted additional capital expenditure is as under:

(` in lakh)

	2004-05	2005-06	2006-07	2007-08		2008-09
				1.4.2007 to 31.8.2007	1.9.2007 to 31.3.2008	
Additional Notional Equity due to additional capital expenditure	237.92	(-) 150.94	299.63	42.82	93.47	63.92

31. Further, the additional normative equity and normative loan amounting to `783.25 lakh and `2558.48 lakh respectively corresponding to the transferred switchyard as considered in order dated 9.6.2009, has been considered for revision of tariff.

Return on Equity

32. Return on equity has been worked out at 14% per annum on the normative equity.

Accordingly, Return on Equity for the period 2004-09 is worked out as under:

(` in lakh)

	2004-05	2005-06	2006-07	2007-08 (1.4.2007 to 31.8.2007)	2007-08 (1.9.2007 to 31.3.2008)	2008-09
Equity-Opening as considered in the instant petition	47045.30	47283.22	47132.29	47431.91	48257.98*	48351.46
Addition of Equity due to Additional capital expenditure	237.92	(-) 150.94	299.63	42.82	93.47	63.92
Equity-Closing	47283.22	47132.29	47431.91	47474.73	48351.46	48415.37
Average equity	47164.26	47207.75	47282.10	47453.32	48304.72	48383.42
Return on Equity	6603.00	6609.09	6619.49	2777.19	3935.65	6773.68
Return on Equity (annualised)	6603.00	6609.09	6619.49	6643.47	6762.66	6773.68

*after including equity of `783.25 lakh corresponding to transfer of switchyard.

Interest on loan

33. Adjustment of repayment corresponding to de-capitalization of assets: In the original petitions filed for the period 2004-09 in respect of various other generating stations of the petitioner for determination of tariff, the petitioner has sought adjustment in cumulative repayment on account of de-capitalization of assets in such a manner that the net loan opening prior to de-capitalization 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”.

34. 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.

35. Interest on loan has been calculated as under:

- (a) The gross normative loan as on 1.4.2004 is `47045.30 lakh.
- (b) Cumulative repayment of loan up to 31.3.2004, amounting to `911.90 lakh has been considered corresponding to order dated 30.6.2003. However, considering cumulative repayment adjustment (based on the directions of Tribunal) amounting to `190.74 lakh as on 1.4.2004 corresponding to de-capitalization of assets (amounting to `381.485 lakh) as per order dated 7.4.2005 for the period up to 31.3.2004, the cumulative repayment as on 01.4.2004 is revised to `721.15 lakh.
- (c) Accordingly, net opening loan as on 1.4.2004 works out to `46324.15 lakh.
- (d) There is addition of notional loan to the tune of `555.15 lakh, (-) `352.18 lakh, `699.13 lakh, `318.00 lakh and `149.15 lakh for the years 2004-05, 2005-06, 2006-07, 2007-08 and 2008-09, respectively on account of additional capital expenditure approved.
- (e) Further, as considered in order dated 9.6.2009 in Petition No.140/2008, normative loan amounting to `2558.48 lakh has been added to gross opening loan balance as on 1.9.2007 on account of Switchyard transfer. Further, in terms of the said order, cumulative repayment as on 1.9.2007 has been increased by `858.48 lakh (cumulative depreciation pertaining to switchyard).
- (f) Annual repayment of actual loan has been used to calculate normative repayment of loan. Normative repayment has been worked out as per formula below:-
$$\text{Normative repayment} = \frac{\text{Actual Repayment} \times \text{Normative Loan}}{\text{Actual Loan}}$$
- (g) Weighted average rate of interest as considered in order dated 11.1.2010 has been modified after taking into account the original GOI loans (as against the re-financed Bonds-XIII A).

36. The interest on loan is computed as under:

(` in lakh)

	2004-05	2005-06	2006-07	2007-08 (1.4.2007 to 31.8.2007)	2007-08 (1.9.2007 to 31.3.2008)	2008-09
Gross Opening Loan – Considered now	47045.30	47600.45	47248.27	47947.39	50605.79	50823.88
Cumulative Repayment of Loan upto previous year	721.15	3291.04	7660.86	13197.94	16966.72	19912.69
Net Loan Opening	46324.15	44309.41	39587.40	34749.46	33639.07	30911.19
Addition of loan due to Additional capital expenditure for 2004-09	555.15	(-) 352.18	699.13	99.91	218.09	149.15
Repayment of loan (Normative)	2569.89	4372.98	5577.38	2910.30	2945.97	5701.47
Less: Repayment adjustment on account of de-capitalization	0.00	3.17	40.30	0.00	0.00	0.00
Repayment of loan during the year (Normative-after adjustment)	2569.89	4369.81	5537.08	2910.30	2945.97	5701.47
Net Loan Closing	44309.41	39587.41	34749.45	31939.07	30911.19	25358.87
Average Loan	45316.78	41948.41	37168.42	33344.26	32275.13	28135.03
Weighted Average Rate of Interest on Loan	12.1554%	12.3845%	12.5818%	12.6213%	12.7067%	13.0241%
Interest on Loan (annualised)	5508.43	5195.09	4676.45	4208.49	4101.11	3664.32

Depreciation

37. The cost of land as on 1.4.2004 is `8377.46 lakh. The gross depreciable value of the asset, excluding land is `77141.83 lakh as on 1.4.2004 [0.9 x (`94090.60 lakh *minus* `8377.46 lakh)]. The cumulative depreciation and Advance Against Depreciation (AAD) recovered in tariff up to 31.3.2004 is `15651.14 lakh as per calculations corresponding to orders dated 30.6.2003 in Petition Nos.23/1999 and 81/2002. Further, on account of reduction of cumulative depreciation of `82.12 lakh due to de-capitalization up to 31.3.2004, the cumulative depreciation and AAD recovered in tariff up to 31.3.2004 works out to `15569.02 lakh. Weighted average rate of depreciation of 4.0215% as considered in calculations corresponding to order dated 11.1.2010 has been retained for the purpose of tariff. Further, depreciation recovered amounting to `858.48 lakh corresponding to the

Switchyard transferred has also been added to arrive at cumulative depreciation as on 1.9.2007. The necessary calculations of depreciation are as under:

(` in lakh)

	2004-05	2005-06	2006-07	2007-08 (1.4.2007 to 31.8.2007)	2007-08 (1.9.2007 to 31.3.2008)	2008-09
Opening Capital cost	94090.60	94883.67	94380.55	95379.31	98863.77	99175.33
Closing capital cost	94883.67	94380.55	95379.31	95522.04	99175.33	99388.40
Average Capital cost	94487.14	94632.11	94879.93	95450.67	99019.55	99281.87
90% Depreciable value calculated on average capital cost (excluding freehold land)	77498.71	77629.19	77852.22	78365.89	81032.70	81268.78
Value of freehold land	8377.46	8377.46	8377.46	8377.46	8983.22	8983.22
Balance depreciable value	61929.69	58260.37	54679.24	51397.42	51601.11	49519.77
Depreciation recovered (pro-rata)	3799.79	3805.62	3815.59	1604.64	2317.43	3992.61
Depreciation recovered (annualised)	3799.79	3805.62	3815.59	3838.54	3982.06	3992.61
Cumulative Depreciation & AAD (at the end of the period)	19368.81	23174.44	26988.57	28573.11	31749.02	35741.63
Cumulative Depreciation reduction due to de-capitalization	-	1.46	20.10	-	-	-
Cumulative Depreciation/AAD after adjustment due to de-capitalization (at the end of the period)	19368.81	23172.98	26968.47	28573.11	31749.02	35741.63

Advance Against Depreciation

38. The petitioner's entitlement to Advance Against Depreciation is "nil".

O&M expenses

39. O&M Expenses approved vide order dated 11.1.2010 has been retained for the purpose of tariff.

Interest on Working capital

40. 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 (1.4.2007 to 31.8.2007)	2007-08 (1.9.2007 to 31.3.2008)	2008-09
Fuel Cost - 1 month	2475.37	2475.37	2475.37	2482.16	2482.16	2475.37
Liquid Fuel Cost (Naptha)- 1/2 months	216.27	216.27	216.27	216.86	216.86	216.27
O & M expenses	280.50	291.67	303.58	315.42	315.42	328.00
Maintenance spares	1077.86	1137.27	1215.64	1326.24	1326.24	1406.81
Receivables	8375.89	8348.73	8290.06	8258.80	8285.14	8228.03
Total Working Capital	12425.90	12469.31	12500.93	12599.47	12625.81	12654.48
Rate of Interest	10.2500%	10.2500%	10.2500%	10.2500%	10.2500%	10.2500%
Total Interest on Working capital (annualized)	1273.65	1278.10	1281.34	1291.45	1294.15	1297.08

Annual Fixed Charges

41. The 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 (1.4.2007 to 31.8.2007)	2007-08 (1.9.2007 to 31.3.2008)	2008-09
Interest on loan	5508.43	5195.09	4676.45	4208.49	4101.11	3664.32
Interest on Working Capital	1273.65	1278.10	1281.34	1291.45	1294.15	1297.08
Depreciation	3799.79	3805.62	3815.59	3838.54	3982.06	3992.61
Advance Against Depreciation	0.00	0.00	0.00	0.00	0.00	0.00
Return on Equity	6603.00	6609.09	6619.49	6643.47	6762.66	6773.68
O & M Expenses	3366.00	3500.00	3643.00	3785.00	3785.00	3936.00
Total (annualised)	20550.87	20387.91	20035.88	19766.94	19924.98	19663.70

42. 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.

43. The annual fixed charges determined by this order are subject to the outcome of Civil Appeals pending before the Hon'ble Supreme Court.

44. 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