CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 120/2009 with Interlocutory Application No.43/2009

Coram: 1. Dr. Pramod Deo, Chairperson

2. Shri S. Jayaraman, Member

3. Shri V.S.Verma, Member

DATE OF HEARING: 25.2.2010 DATE OF ORDER: 21.1.2011

IN THE MATTER OF

Determination of revised fixed charges due to additional capital expenditure incurred during 2006-07, 2007-08 and 2008-09 at National Capital Thermal Power Station, Dadri, Stage-I (840 MW).

AND IN THE MATTER OF

NTPC Ltd, New Delhi

...Petitioner

Vs

- 1. Uttar Pradesh Power Corporation Limited, Lucknow
- 2. Delhi Transco Ltd, New Delhi
- 3. BSES-Rajdhani Power Ltd, New Delhi
- 4. BSES-Yamuna Power Ltd, Delhi
- 5. North Delhi Power Ltd. Delhi

....Respondents

The following were present:

- 1. Shri V.K.Padha, NTPC
- 2. Shri Manoj Saxena, NTPC
- 3. Shri Sameer Agarwal, NTPC
- 4. Shri Manish Garg, UPPCL

ORDER

The petitioner, NTPC has made this application for determination of revised fixed charges due to capital expenditure incurred during the years 2006-07, 2007-08 and 2008-09 for National Capital Thermal Power Station, Dadri, Stage-I (840 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 petitioner has made the following specific prayers:

- (i) Inclusion of disallowed capital liabilities of Rs.3.16 lakh, and Rs 111.09 lakh for the year 2004-05 and 2005-06 respectively in CERC order dated 24.11.2008 in Petition No. 34/2007 into capital base for tariff for the years 2004-05 and 2005-06 of the year sectively as per Hon'ble ATE judgment dated 16.3.2009 as brought out above at para 5 above;
- (ii) Additional capital expenditure incurred during 2006-07, 2007-08 and 2008-09;
- (iii) Allow the recovery of filing fees from the respondents;
- (iv) Allow recovery of income tax from the beneficiaries as per CERC Regulations for the period 2004-09;
- (v) Pass any other order in this regard as the Hon'ble Commission may find appropriate in the circumstances pleaded above.
- 2. The generating station comprises of 4 units of 210 MW each and was commissioned on 1.12.1995. The tariff for the generating station for the period 1.4.2004 to 31.3.2009 was approved by the Commission by its order dated 5.5.2006 in Petition No.162/2004.Subsequently, the Commission by its order dated 24.11.2008 in Petition No.34/2007 revised the tariff for the generating station based on additional capital expenditure for the years 2004-05 and 2005-06 after deducting un-discharged liabilities amounting to ₹2.31 lakh for 2004-05 and ₹111.09 lakh for 2005-06, based on the capital cost of ₹171622.00 lakh as on 1.4.2004. The capital cost, as approved by the Commission, is as under:

(₹in lakh) 2004-05 2005-06 2006-07 2008-09 **Particulars** 2007-08 171790.68 Opening Capital Cost 171622.00 171655.69 171790.68 71790.68 Additional Capital 33.69 134.99 0.00 0.00 0.00 Expenditure Closing Capital Cost 171655.69 171790.68 171790.68 171790.68 171790.68 171790.68 171790.68 171790.68 Average Capital Cost 171638.84 171723.18

3. The annual fixed charges allowed by the Commission by order dated 24.11.2008 is as under:

(₹in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on Loan	2239.03	1712.66	1198.19	681.01	206.40
Interest on Working Capital	3530.60	3545.59	3561.87	3586.80	3599.09
Depreciation	5918.84	5921.75	5924.08	5924.08	5924.08

Advance Against Depreciation	0.00	0.00	0.00	0.00	0.00
Return on Equity	12014.25	12017.79	12020.62	12020.62	12020.62
O & M Expenses	8736.00	9088.80	9450.00	9828.00	10222.80
TOTAL	32438.72	32286.59	32154.75	32040.51	31973.00

- 4. Aggrieved by order dated 24.11.2008 in Petition No.34/2007, the petitioner filed Appeal No.54/2009 before the Appellate Tribunal for Electricity (the Tribunal) raising the following issues:
 - (a) Un-discharged liabilities
 - (b) Cost of maintenance spares corresponding to additional capital cost.
 - (c) Interest on loan considering the depreciation as normative loan repayment while computing interest on loan.
- 5. The Tribunal by its judgment dated 21.8.2009 allowed the prayers of the petitioner with regard to the above issues in the light of its earlier judgments dated 10.12.2008 in Appeal Nos.151 & 152/2007 and 16.3.2009 in Appeal Nos.133,135 etc of 2008 and the judgment dated 13.6.2007 in Appeal Nos.139 to 142 etc of 2006 and 10, 11 and 23 of 2007 and remanded the matter to the Commission to implement the directions as contained therein.
- 6. Against the judgment dated 21.8.2009 in Appeal No. 54/2009, the Commission is in the process of filing the Civil Appeal before the Hon'ble Supreme Court on the issues mentioned therein.

INTERLOCUTORY APPLICATION

7. The petitioner has filed Interlocutory Application (I.A.No.43/2009) for amendment of Annexure-I to the petition taking into account the revised calculations for fixed charges based on the principles laid down in the tariff orders of the Commission and the judgment dated 13.6.2007 of the Tribunal in Appeal Nos.139 to 142 etc of 2006 and 10, 11 and 23 of 2007 and the judgment dated 16.3.2009 in Appeal Nos.133,135 etc of 2008 of the Tribunal passed against the various tariff

orders of the Commission for the period 2004-09 in respect of the generating stations of the petitioner.

- 8. We now proceed to examine as to whether the prayer of the petitioner for determination of tariff based on the revised calculations on the principles laid down in the judgments of the Tribunal dated 13.6.2007 in Appeal Nos.139 to142 etc of 2006, and judgment dated 16.3.2009 in Appeal Nos.133,135 etc of 2008 could be considered for revision of tariff in this order.
- 9. Appeal No. 151/2006 was filed by the petitioner before the Tribunal challenging the order of the Commission dated 5.5.2006 in Petition No. 162/2004 determining tariff for the period 2004-09. Similar appeals (Appeal Nos.139 to142 etc of 2006 and 10, 11 and 23 of 2007) were also filed by the petitioner before the Tribunal challenging the various orders of the Commission determining the tariff for other generating stations during the period 2004-09. Appeal No.151/2006 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 redetermination by the Commission. Against the judgment dated 13.6.2007, the Commission filed 20 Civil Appeals before the Hon'ble Supreme Court (C.A. Nos. 5434/2007 to 5452/2007 and 5622/2007) including Civil Appeal No. 5452/2007 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
- 10. The Hon'ble Supreme Court on 26.11.2007 granted interim order of stay of the operation of the order of the Appellate Tribunal dated 13.6.2007. However, on 10.12.2007, the Hon'ble Supreme Court passed an 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."

- 11. The petitioner in its petition 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 of the Hon'ble Supreme Court 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*.
- 12. The undertaking given by the petitioner before the Hon'ble Supreme Court to the effect that "the five issues shall not be pressed for fresh determination" is binding on the petitioner and the petitioner cannot seek fresh determination of these issues by creating a distinction between the main tariff petition and the petition for additional capitalization on the ground that the undertaking was confined only to the remand order pertaining to the main petition. It was for this reason that the prayer of the petitioner for determination of tariff based on additional capital expenditure for the period 2004-09 for some of the generating stations of the petitioner was deferred by

the Commission by its various orders, subject to the final decision of the Hon'ble Supreme Court in the said Civil Appeals.

- 13. Keeping in view that the distinction between the main tariff petition and the petition for additional capitalization could not be made since tariff for 2004-09 was a composite package which needs to be determined on the same principle and in compliance with the directions contained in the judgment of the Tribunal dated 21.8.2009 in Appeal No.54/2009, it has been decided to revise the tariff for the generating station by this order after considering the issues raised in the petition, subject to the final outcome of the said Civil Appeals pending before the Hon'ble Supreme Court.
- 14. One more aspect for consideration is the prayer of the petitioner in the petition for inclusion of un-discharged liabilities in terms of the judgment of the Tribunal dated 16.3.2009 in Appeal Nos.133,135,136 and148/2008 decided in the light of the judgment dated 10.12.2008 in Appeal Nos.151 & 152/2007.
- 15. The Tribunal in its judgment dated 10.12.2008 Appeal Nos.151 & 152/2007 observed 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."
- 16. The first respondent, UPPCL has submitted that it has also filed appeal against the judgment dated 16.3.2009 before the Hon'ble Supreme Court and prayed that the Commission may maintain status quo till the matter was finally decided by the Hon'ble Supreme Court.

- 17. Against the judgments of the Tribunal dated 10.12.2008 and 16.3.2009 above, the Commission has filed Civil Appeal Nos. 4112-4113/2009 and Civil Appeal Nos. 6286 to 6289/2009 before the Hon'ble Supreme Court. These Civil Appeals are pending and there is no stay of the operation of the judgments of the Tribunal. In view of this, and in compliance with the directions contained in the judgment dated 21.8.2009 in Appeal No.54/2009 as regards un-discharged liabilities, it has been decided to revise the tariff of the generating station subject to the final outcome of the Civil Appeals before the Hon'ble Supreme Court.
- 18. As regards the petitioner's prayer for inclusion of liabilities amounting to ₹3.16 lakh and ₹111.09 lakh for the years 2004-05 and 2005-06 respectively, it is noticed that the Commission has disallowed liabilities amounting to ₹2.31 lakh only vide order dated 24.11.2008 in Petition No.34/2007. Accordingly, the un-discharged liabilities disallowed vide order dated 24.11.2008 has been allowed for the purpose of tariff as claimed by the petitioner. Further un-discharged liabilities corresponding to assets allowed have been treated as part of the capital cost for the purpose of tariff. Also, FERV for the period 2001-04 has been allowed on normative basis. Similarly, additional capital expenditure has been considered while working out the maintenance spares for working capital, the cumulative repayment has been adjusted on account of de-capitalisation proportionate to 70% of the value of de-capitalised assets and the consequences of refinancing of loan has been considered in terms of the directions of the Tribunal.
- 19. Considering the above adjustments, the revised additional capital expenditure for the period 2004-06 is as under:

(₹ in lakh)

Particulars	2004-05	2005-06	Total
Additional Capital Expenditure allowed	33.69	134.99	168.68
in order dated 24.11.2008 (A)			
Un-discharged liabilities disallowed	2.31	111.09	113.40

earlier(B)			
Liabilities discharged during the year	0.00	1.31	1.31
considered earlier (C)			
Additional Capital Expenditure now	36.00	244.77	280.77
allowed (E= A+B-C)			

- 20. The Interlocutory Application No.43/2009 is disposed of in terms of the above. We now proceed to examine the additional capital expenditure claimed by the petitioner.
- 21. The petitioner has claimed revised fixed charges based on additional expenditure as under:

(₹ in lakh)

Particulars	2006-07	2007-08	2008-09
Additional capital expenditure	431.21	1671.67	0.18

22. Reply to the petition has been filed by the respondent UPPCL.

Additional Capitalization

- 23. Regulation 18 of the 2004 regulations provides for considering the additional capital expenditure for tariff as under:
 - "18. (1) The following capital expenditure within the original scope of work actually incurred after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:
 - (i) Deferred liabilities;
 - (ii) Works deferred for execution;
 - (iii) Procurement of initial capital spares in the original scope of work, subject to ceiling specified in regulation 17;
 - (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
 - (v) On account of change in law.

Provided that original scope of work along with estimates of expenditure shall be submitted along with the application for provisional tariff.

Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation of the generating station.

- (2) Subject to the provisions of clause (3) of this regulation, the capital expenditure of the following nature actually incurred after cutoff date may be admitted by the commission, subject to prudence check:
- (i) Deferred liabilities relating to works/services within the original scope of work;

- (ii) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;
- (iii) On account of change in law;
- (iv) Any additional works/services which have become necessary for efficient and successful operation of the generating station, but not included in the original project cost; and
- (v) Deferred works relating to ash pond or ash handling system in the original scope of work.
- (3) Any expenditure on minor items/assets like normal tools and tackles, personal computers, furniture, air-conditioners, voltage stabilizers, refrigerators, fans, coolers, TV, washing machine, heat-convectors, carpets, mattresses etc. brought after the cutoff date shall not be considered for additional capitalization for determination of tariff with effect from 1.4.2004.
- (4) Impact of additional capitalization in tariff revision may be considered by the Commission twice in a tariff period, including revision of tariff after the cut-off date.

Note 1

Any expenditure admitted on account of committed liabilities within original scope of work and the expenditure deferred on techno-economic grounds but falling within the original scope of work shall be serviced in the normative debt equity ratio specified in regulation 20.

Note 2

Any expenditure on replacement of old assets shall be considered after writing off the gross value of the original assets from the original project cost, except such items as are listed in clause (3) of this regulation."

Note 3

Any expenditure admitted by the Commission for determination of tariff on account of new works not in the original scope of work shall be serviced in the normative debt-equity ratio specified in regulation 20.

Note 4

Any expenditure admitted by the Commission for determination of tariff on renovation and modernization and life extension shall be serviced on normative debt-equity ratio specified in regulation 20 after writing off the original amount of the replaced assets from the original capital cost."

24. The additional capital expenditure claimed as per books of accounts is as under:

(₹in lakh)

Particulars Particulars	2006-07	2007-08	2008-09
Total additional expenditure of the	398.65	1621.52	(-) 247.28
generating station as per books of accounts			
(A)			
Exclusions for additional capitalization vis-	(-) 32.56	(-) 50.14	(-) 247.46
à-vis books of accounts (B)			
Total additional capitalization (A-B)	431.21	1671.67	0.18

25. The summary of exclusions from the books of accounts claimed is as under:

			(₹ in lakh)
Description	2006-07	2007-08	2008-09
Inter-unit transfer of assets	2.22	(-) 32.23	0.00
Furniture and office equipments (de-	0.00	(-) 17.91	(-) 46.78
capitalized in books)			
Capital spares (Capitalized)	0.00	0.00	405.62
Capital spares (de-capitalized)	(-) 34.78	0.00	(-) 20.32
FERV	0.00	0.00	(-) 585.98
Total Exclusions	(-) 32.56	(-) 50.14	(-) 247.46

Exclusions

- 26. In the first instance, we consider the exclusions under different heads in the claim.
 - (a) Inter-unit transfers: The petitioner has excluded amounts of ₹2.22 lakh and (-) ₹ 32.23 lakh for the years 2006-07 and 2007-08, respectively under this head, on account of transfer of DG sets to and office furniture & equipments from other generating stations of the petitioner. The Commission while dealing with applications for additional capitalization in respect of other generating stations of the petitioner has decided that both positive and negative entries arising out of inter-unit transfers of temporary nature shall be ignored for the purposes of tariff. In consideration of the said decisions, the exclusion of the amount of ₹2.22 lakh and (-) ₹32.23 lakh for the years 2006-07 and 2007-08, on account of inter-unit transfer of assets is allowed.
 - (b) **De-capitalization of unserviceable assets:** The petitioner has de-capitalized unserviceable assets (office furniture/equipments) in books of accounts amounting to (-) ₹17.91 lakh and (-) ₹46.78 lakh for the years 2007-08 and 2008-09, respectively. However, the petitioner has prayed that these de-capitalized unserviceable assets may be retained in the capital base for the purpose of tariff.

The ground on which the exclusion has been sought by the petitioner is as under:

"These Assets, as they have become unserviceable have been written off and have been decapitalised in the books. As replacement of such bought out items was purchased in the previous year but not allowed in the tariff during 2001-04 & 2004-06 for total amount of Rs. 1,13,56,406.00 & replacement of some items may be purchased and re-capitalized in the books in coming years. In view of the decision of the Hon'ble Commission of not allowing addition of such items in capital base, after so many years after COD, these items now decapitalised in the books may not be considered for the purpose of tariff as there replacement will not be considered for capitalization by Hon'ble Commission. It is therefore, proposed that the same may be retained in the capital base."

The petitioner vide its affidavit dated 11.9.2009 has submitted that "all assets de-capitalized were put to use on COD".

In view of the fact that these assets form part of the capital cost for the purpose of tariff and has been de-capitalized on it becoming unserviceable, the de-capitalization has not been allowed to be excluded as the assets do not render useful service.

- (c) **Capital spares capitalized**: The petitioner has procured spares amounting to ₹405.62 lakh during 2008-09. Since capitalization of spares is not allowed after the cut-off date, the petitioner has not claimed the capitalization of these spares for the purpose of tariff. As such, the petitioner's claim for exclusion of the spares is allowed.
- (d) **De-capitalization of spares:** The petitioner has de-capitalized capital spares in books of accounts amounting to (-) ₹34.78 lakh and (-) ₹20.32 lakh during the years 2006-07 and 2008-09, respectively, on the ground that it was unserviceable. However, the petitioner has prayed that negative entries arising out of de-capitalization of capital spares may be ignored for the purpose of tariff i.e these de-capitalized unserviceable spares be retained in the capital base for the purpose of tariff. The ground on which the exclusion has been sought for by the petitioner is as under:

"The unserviceable spares have been de-capitalized for accounting purposes. However, as new purchase of capital spares is not being allowed to be capitalized for tariff purposes by Hon'ble Commission (i.e. Rs.10.92 Crore in tariff period 2001-04 and Rs.5.56 Crore in the tariff period 2004-05 and 2005-06), this de-capitalization may be excluded for tariff purposes."

The prayer of the petitioner for exclusion of de-capitalized spares would be justified only if these de-capitalized spares are the ones which were disallowed for the purpose of tariff. Thee petitioner vide affidavit dated 11.9.2009 has submitted that "all assets de-capitalized were put to use on COD".

In view of the fact that these spares were a part of capital cost for the purpose of tariff and have been de-capitalized on these becoming unserviceable, their decapitalization may not to be allowed to be excluded as they do not render any useful service.

- (e) **FERV:** The petitioner claim for exclusion of a net amount of (-) Rs.585.98 lakh for the year 2008-09 on account of FERV is allowed. The petitioner may recover the FERV amount from the beneficiaries in terms of the 2004 regulations.
- 27. In view of the above discussions, the following amounts are allowed under exclusions:

(₹ in lakh) Description 2006-07 2007-08 2008-09 Inter-unit transfer of assets 2.22 (-) 32.23 0.00 Furniture and office equipments 0.00 0.00 0.00 capitalized in books) 405.62 Capital spares (Capitalized) 0.00 0.00 0.00 0.00 0.00 Capital spares (de-capitalized) (-) 585.98 **FERV** 0.00 0.00 **Total Exclusions** (-) 180.36 2.22 (-) 32.23

28. The year-wise and category-wise break-up of the additional expenditure claimed by petitioner is as under:

		(₹ in lak	:h)
Nature of capitalization	2006-07	2007-08	2008-09
Deferred liabilities relating to works within original	50.85	492.07	0.18
scope of work. [18(2)(i)]			
Award of arbitration or for compliance of the order	(-) 14.86	75.48	0.00
or decree of a court [18(2)(ii)]			
Additional works/services necessary for efficient and	390.02	1104.11	0.00
successful operation of generation station, but not			
included in original project cost [18(2)(iv)]			
Deferred works relating to Ash pond or Ash handling	5.21	0.00	0.00
system, in original scope of work [18(2)(v)]			
Total	431.21	1671.67	0.18

29. After applying prudence check on the asset-wise details and justification of additional capitalization claimed by the petitioner under various categories for the years 2006-09, the admissibility of additional capitalization is discussed in the succeeding paragraphs:

Deferred liabilities relating to works within original scope of work. [18(2)(i)]

30. The petitioner has claimed amounts of ₹50.85 lakh, ₹492.07 lakh and ₹0.18 lakh under this head, for the years 2006-07, 2007-08 and 2008-09, respectively. The admissibility of the claims is discussed as under:

2006-07

31. The petitioner's claim for ₹50.85 lakh is towards the final payment on closure of contract in respect of works like civil work-piling for air washer room, mobile equipment shed, control room building 400 kV, electrification work, railway siding mgr, pump house, station lighting, supply & erection of 400/200 switch yard, construction of power supply system, pilot project for oil extraction (bio-diesel). In view of the fact that oil extraction is in nature of R&D and does not pertain to the operation of the generating station, an amount of ₹0.58 lakh incurred towards the pilot project for oil extraction has not been allowed.

2007-08

32. The petitioner's claim of ₹492.07 lakh towards final payment in respect of land and boundary wall is allowed under this head.

2008-09

33. The petitioner's claim for an expenditure of ₹0.18 lakh towards land adjustment on account of the order of Court has not been allowed under this head. However, the same has been considered under Regulation 18(2)(ii).

Award of arbitration or for compliance of the order or decree of a court [18(2) (ii)]

- 34. The petitioner has claimed an amount of (-) ₹14.86 lakh for the year 2006-07 in respect of adjustment towards land finally allotted by Government and payment under arbitration in respect of fire station. As the said expenditure is incurred in terms of award, the same is allowed, under this head.
- 35. The petitioner's claim for expenditure of ₹75.48 lakh for the year 2007-08 towards payment in terms of Arbitration Award in respect of assets like carpeting road, railway siding, siding mgr, AHP pkg., fire proof cabling is allowed under this head.

Additional works/services necessary for efficient and successful operation of the generating station, but not included in the original project cost {Regulation 18 (2)(iv)}

- 36. The petitioner has claimed expenditure of ₹390.02 lakh and ₹1104.11 lakh for the years 2006-07 and 2007-08 respectively, under this head. The petitioners claim is in respect of assets like "Muradnagar assets & land, supply/installation of microwave link, jaws for windows talking software for blinds, people soft HRMS, up-gradation of GDAMS" for the year 2006-07 and on assets like "de-capitalization of 2 nos. H-type & 3 semi-storage sheds, supply & commissioning of energy monitoring system, heating ventilation and air-conditioning system of administration building auditorium, generator transformer supply and erection, multitech make MVP-410 -supply, CCTV with DVR, CCTV systems, fibre network NCPS hospital supply erection/testing / communication fibre network supply/erection" for the year 2007-08.
- 37. The petitioner was directed to clarify the claim for an amount of ₹363.91 lakh in respect of Muradnagar assets & land for the year 2006-07. The petitioner has clarified that these assets were used to cater the co-ordination activities of many generating stations of the petitioner. Thus, it is evident from the petitioner's

clarification that the asset was used generally in respect of various other generating stations of the petitioner and was not specifically utilized for this generating station. In view of this, the expenditure incurred has not been allowed to be capitalized. The claim of the petitioner in respect of other assets amounting to ₹26.11 lakh for 2006-07 is allowed.

- 38. As regards the claim of the petitioner for the year 2007, the following expenditure has not been permitted as discussed as under:
- (a) Heating ventilation and air conditioning system of administration building auditorium: The petitioner has claimed an amount of ₹88.05 lakh towards this asset, and the justification submitted is as under:

"This was part of original scope of work of Administrative Building which took place in two phases. Construction of Phase-I had already been completed and Phase -II has been implemented subsequently".

The provisions of above regulations provides for capitalization of expenditure incurred for any additional works /services but not included in the original project cost. In view of this, the expenditure of ₹88.05 lakh in respect of the asset which forms part of the original project cost, is not allowed to be capitalized.

(b) **Generator Transformer supply and erection:** The petitioner has incurred an expenditure of ₹1054.37 lakh in respect of this asset and the justification for incurring the expenditure is as under:

"Generator Transformers are critical equipments and their reliability and availability is of paramount importance as outage of Generator transformer leads to unit outage seriously affecting the station availability especially under ABT regime. There had been 15 numbers of GT failures for 500 MW units and 07 nos of GT failures for 200/210 MW units in the past due to various reasons namely, Di-electric failures and Components failures etc. In case of outage of any GT, if spare GT is not available at Station, requirement to revive the unit is met by diversion from the other stations which causes delays due to transportation and modifications in bus duct and foundations etc. that causes loss of generation and availability. In view of above, availability of one spare GT at NCTPS for all the 04 units of Stage-I is absolutely essential."

The capitalization of spare transformer which is included in the original scope of the project is not permissible. Hence, the expenditure has not been allowed.

Deferred works relating to ash pond or ash handling system in original scope of work. $\{Regulation\ 18(2)(v)\}$

- 39. The petitioner has claimed an expenditure of ₹5.21 lakh for the year 2006-07 on "AHP spreader" towards shifting work of conveyor belt of ash handling system and the same is allowed under this head.
- 40. Based on the above discussions, the additional capital expenditure allowed for the purpose of tariff for the years 2006-07, 2007-08 and 2008-09 is as under:

(₹in lakh)

Nature of capitalization	2006-07	2007-08	2008-09
Deferred Liabilities relating to works within	50.27	492.07	0.00
original scope of work. [18(2)(i)]			
Award of arbitration or for compliance of the	(-) 14.86	75.48	0.18
order or decree of a court [18(2)(ii)]			
For efficient and successful operation of	26.11	(-) 38.31	0.00
generation station, but not included in			
original project cost [18(2)(iv)]			
Deferred works relating to Ash pond or Ash	5.21	0.00	0.00
handling system, in original scope of work			
[18(2)(v)]			
Total before adjustments of exclusions (A)	66.73	529.25	0.18
Exclusions not allowed (B)	(-) 34.78	(-) 17.91	(-) 67.10
Additional capital expenditure allowed	31.94	511.34	(-) 66.92
(C=A+B)			

FERV (2001-04)

- 41. Commission vide order dated 5.5.2006 in Petition No.162/2004 had allowed capitalization of FERV as on 1.4.2004, on actual basis amounting to ₹206.50 lakh for the period 2001-04.
- 42. The petitioner, in its interlocutory application has prayed that FERV amounting to ₹167 lakh corresponding to the normative loan be added to the capital cost as on 1.4.2004 in line with methodology adopted by the Commission in the other tariff petitions for the period 2004-09, instead of an amount of ₹.206.50 lakh, allowed (on actual basis) vide order dated 5.5.2006.

43. The petitioner's claim of FERV on normative basis has been considered. Based on normative loan outstanding, FERV works out to ₹167.73 lakh, which has been admitted for the purpose of tariff. The necessary calculation is shown as under:

			(₹ in lal	kh)
Particulars	2001-02	2002-03	2003-04	Total
Net opening loan (actual) - A	54610	46414	36774	-
Net opening loan (normative) - B	44357	37699	29870	-
Actual FERV allowed in order	(-) 30.00	236.50	0.00	206.50
dated 5.5.2006 - C				
FERV allowable on normative	(-) 24.37	192.09	0.00	167.73
basis (D = $C \times B \div A$)				

44. Thus the differential FERV considered for the tariff period 2001-04 works out to (-) Rs.38.77 lakh.

Capital cost

- 45. As stated above, the Commission had admitted the capital cost of ₹171622.00 lakh (inclusive of FERV amounting to ₹206.50 lakh, on actual basis, for the tariff period 2001-04) as on 1.4.2004 and ₹171790.68 lakh as on 1.4.2006 for determination of tariff for the period 2004-09.
- 46. Taking into account the capital cost of the generating station as on 1.4.2004, the additional FERV allowed for tariff period 2001-04, the additional capital expenditure approved for the years 2004-05 and 2005-06 and the additional capital expenditure approved at para 40 above, the capital cost for the period 2004-09 is worked out as under:

(₹in lakh) Year 2004-05 2005-06 2006-07 2007-08 2008-09 Opening Capital cost as on 171583.23 171619.22 171863.99 171895.93 172407.27 1.4.2004 Additional capital 36.00 244.77 31.94 511.34 -66.92 expenditure considered **Closing Capital cost** 171619.22 171863.99 171895.93 172407.27 172340.35 **Average Capital cost** 171601.23 171741.61 171879.96 172151.60

Debt-Equity ratio

47. Regulation 20 of the 2004 Regulations provides that:

"(1) In case of the existing project, debt-equity ratio Considered by the Commission for the period ending 31.3.2004 shall be considered for determination of tariff with effect from 1.4.2004.

Provided that in cases where the tariff for the period ending 31.03.2004 has not been determined by the Commission, debt equity ratio shall be as may be decided by the Commission:

Provided further that in case of the existing generating stations where additional capitalization has been completed on or after 1.4.2004 and admitted by the Commission under regulation 18, equity in the additional capitalization to be considered shall be:-,

- (a) 30% of the additional capital expenditure admitted by the Commission; or
- (b) Equity approved by the competent authority in the financial package, for additional capitalization; or
- (c) Actual equity employed,

Whichever is the least:

Provided further that in case of additional capital expenditure admitted under the second proviso, the Commission may consider equity of more than 30% if the generating company is able to satisfy the Commission that deployment of such equity of more than 30% was in the interest of general public.

- 48. The debt-equity ratio of 50:50 was considered by the Commission in respect of FERV (on actual basis amounting to ₹.206.50 lakh) for the period 1.4.2001 to 31.3.2004 vide order dated 5.5.2006. The differential FERV amounting to (-) ₹38.77 lakh allowed in the petition for the period from 1.4.2001 to 31.3.2004 has been allocated in the debt equity ratio of 50:50.
- 49. As a result, the gross opening loan (normative) as on 1.4.2004 has been revised from to Rs.85791.61 lakh (from ₹85811.00 lakh as considered in order dated 24.11.2008) and the normative equity as on 1.4.2004 has been revised to ₹85791.61 lakh (from ₹85811.00 lakh as considered in order dated 24.11.2008).
- 50. Consequent upon the above revision of the amount of FERV for the period 1.4.2001 to 31.3.2004, the difference if any, in respect of the impact of FERV amount shall be mutually settled between respondents and the petitioner.
- 51. The petitioner has stated that the total capital expenditure claimed in the petition has been financed through internal accruals and from its own resources.

Hence, in terms of sub-clause (a) of clause (1) of Regulation 20 of 2004 regulations, the debt-equity ratio of 70:30 has been considered for the additional capital expenditure approved. Accordingly, additional notional equity of the generating station on account of capitalization approved, works out as under:

(₹in lakh)

	2006-07	2007-08	2008-09
Additional Notional Equity	9.58	153.40	(-)20.08

Return on Equity

52. Return on equity is allowed @ 14% on the average normative equity, as under:

₹in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Equity – Opening	85791.61	85802.41	85875.84	85885.43	86038.83
Addition of equity due to admitted additional capital expenditure	10.80	73.43	9.58	153.40	(-)20.08
Equity-Closing	85802.41	85875.84	85885.43	86038.83	86018.75
Average Equity	85797.01	85839.13	85880.63	85962.13	86028.79
Return on Equity @ 14%	12011.58	12017.48	12023.29	12034.70	12044.03

Interest on loan

- 52. Interest on loan has been worked out as mentioned below:
 - (a) Revised gross opening loan on normative basis on 1.4.2004 was ₹85791.61 lakh.
 - (b) Cumulative repayment of loan on normative basis amounting to ₹57931.26 lakh on 1.4.2004 as considered in order dated 24.11.2008 has been considered.
 - (c) The revised net opening normative loan as on 1.4.2004 is ₹27860.35 lakh.
 - (d) There is addition of notional loan to the tune of ₹.22.36 lakh, ₹357.94 lakh and(-)₹46.85 lakh for the years 2006-07, 2007-08 and 2008-09 respectively, on account of the admitted additional capital expenditure.
 - (e) Weighted average rate of interest has been calculated applying the original GoI loans as per the directions of the Tribunal.
 - (f) Normative repayment = Actual Repayment x Normative Loan
 Actual Loan
 - (g) As stated above, the cumulative repayment has been adjusted on account of de-capitalization proportionate to 70% the value of de-capitalized assets.

54. Interest on loan has been computed as under:

(₹in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Gross opening loan	85791.61	85816.81	85988.15	86010.51	86368.45
Cumulative Repayment of	57931.26	64003.37	70133.53	75928.70	80330.05
Loan upto previous year					
Net loan opening	27860.35	21813.44	15854.62	10081.81	6038.39
Addition of loan due to	25.20	171.34	22.36	357.94	(-)46.85
admitted additional capital					
expenditure					
Repayment of loan during the	6118.59	6138.77	5819.51	4470.59	3400.60
year(normal)					
Les: Adjustment for de-	46.48	8.61	24.35	69.24	46.97
capitalization during the					
period					
Repayment of loan during the					
year(net)	6072.11	6130.16	5795.17	4401.36	3353.63
Net Loan Closing	21813.44	15854.62	10081.81	6038.39	2637.92
Average loan	24836.90	18834.03	12968.31	8060.10	4338.15
Weighted Average Rate of	15.9395%	15.9202%	15.8689%	15.7341%	15.5301%
Interest on loan					
Interest on Loan	3958.87	2998.42	2057.91	1268.18	673.72

Depreciation

- 55. In order dated 24.11.2008, the balance depreciation recoverable as on 1.4.2004 was considered as ₹57395.02 lakh. This value was arrived at after considering the gross depreciable value and cumulative depreciation and AAD recovered, amounting to ₹91643.54 lakh, as on 31.3.2004. However, the depreciation amounting to ₹10.00 lakh recovered by the petitioner corresponding to FERV allowed for the years 2001-04, was inadvertently not added to balance cumulative depreciation as on 1.4.2004. This has been rectified and accordingly the balance depreciable value of ₹57385.02 lakh as on 1.4.2004 has been considered.
- 56. On account of additional FERV on normative basis amounting to (-) ₹38.77 lakh, the balance depreciation recoverable has been reduced to ₹.57351.68 lakh after adjustment of (-)₹1.55 lakh in respect of depreciation recovered on account of additional FERV for the period 1.4.2001 to 31.3.2004. Thus, the cumulative depreciation as on 1.4.2004 is revised to ₹91651.99 lakh.

57. The weighted average rate of depreciation of 3.4484% as considered in order dated 24.11.2008 has been used to arrive at the depreciation allowed for the period 2004-09. Adjustment of cumulative depreciation on account of de-capitalization of assets has been considered in the calculations as carried out in the tariff orders for the period 2004-09 for other generating stations of the petitioner. The necessary calculations are as under:

(₹in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Opening capital cost	171583.23	171619.22	171863.99	171895.93	172407.27
Closing capital cost	171619.22	171863.99	171895.93	172407.27	172340.35
Average capital cost	171601.23	171741.61	171879.96	172151.60	172373.81
Depreciable value @	149019.86	149146.21	149284.08	149085.74	149285.57
90%					
Balance depreciable	57367.87	51636.44	45861.52	39757.91	34110.24
value					
Balance useful life	17.12	16.12	15.12	14.12	13.12
Depreciation	5917.54	5922.39	5927.16	5936.52	5944.19

Advance Against Depreciation

58. The petitioner has not claimed Advance Against Depreciation. Therefore, the petitioner's entitlement to Advance Against Depreciation is "nil".

O&M expenses

59. The O&M Expenses as considered in order dated 24.11.2008 has been considered for revision of tariff.

Interest on Working capital

60. For the purpose of calculation of working capital the operating parameters including the price of fuel components as considered in the order dated 24.11.2008 have been kept unchanged. The "receivables" component of the working capital has been revised for the reason of revision of return on equity interest on loan etc. 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- 2 months	12703.36	12703.36	12703.36	12738.16	12703.36
Oil stock -2 months	267.06	267.06	267.06	267.79	267.06
O & M expenses	728.00	757.40	787.50	819.00	851.90
Maintenance Spares	2599.34	2757.74	2923.45	3103.96	3289.37
Receivables	18671.82	18573.86	18480.83	18455.00	18391.05
Total Working Capital	34969.57	35059.42	35162.20	35383.91	35502.74
Rate of Interest	10.2500%	10.2500%	10.2500%	10.2500%	10.2500%
Total Interest on	3584.38	3593.59	3604.13	3626.85	3639.03
Working capital					

61. 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	3958.87	2998.42	2057.91	1268.18	673.72
Interest on Working Capital	3584.38	3593.59	3604.13	3626.85	3639.03
Depreciation	5917.54	5922.39	5927.16	5936.52	5944.19
Advance Against Depreciation	0.00	0.00	0.00	0.00	0.00
Return on Equity	12011.58	12017.48	12023.29	12034.70	12044.03
O & M Expenses	8736.00	9088.80	9450.00	9828.00	10222.80
Total	34208.38	33620.67	33062.48	32694.25	32523.77

- 62. The target availability of 80% as considered by the Commission in order dated 24.11.2008 remains unchanged. Similarly, other parameters viz. specific fuel consumption Auxiliary Power consumption and Station Heat rate etc considered in the order dated 24.11.2008 have been retained for the purpose of calculation of the revised fixed charges.
- 63. The difference in respect of the tariff determined by order dated 24.11.2008 and the tariff determined by this order shall be adjusted by the parties in equal monthly installments.
- 64. In addition to the charges approved above, the petitioner is entitled to recover other charges like incentive, claim for reimbursement of income-tax, other taxes, cess levied by statutory authority, in accordance with the 2004 regulations, as applicable.

- 65. The petitioner's claim for reimbursement of filing fees is not allowed in terms of the Commission's general order dated 11.9.2008 in Petition No.129/2005 wherein it was directed that filing fee during the period 2004-09 would not be reimbursed, as the same has been factored in the normalized O&M expenses under the 2004 regulations.
- 66. This order is however subject to the final outcome of the said Civil Appeals pending before the Hon'ble Supreme Court of India.
- 67. Petition No.120/2009 along with interlocutory application 43/2009 stands disposed of in terms of the above.

Sd/-(V.S.VERMA) MEMBER Sd/-(S.JAYARAMAN) MEMBER Sd/-(DR.PRAMOD DEO) CHAIRPERSON