

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 195/2009

Coram

Dr. Pramod Deo, Chairperson

Shri S.Jayaraman, Member

Shri V.S.Verma, Member

Shri M.Deena Dayalan, Member

DATE OF HEARING: 13.5.2010

DATE OF ORDER: 20.1.2011

IN THE MATTER OF

Revision of fixed charges due to additional capital expenditure incurred during the period 2004–09 respect of Talcher STPS, Stage- I (1000 MW)

AND IN THE MATTER OF

NTPC Ltd, New Delhi

.....**Petitioner**

Vs

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

....**Respondents**

The following were present

1. Shri V.K.Padha, NTPC
2. Shri G.K.Dua, NTPC
3. Shri Ajay Dua, NTPC
4. Shri Shyam Kumar, NTPC
5. Shri Vivake Kumar, NTPC
6. Shri R.B.Sharma, Advocate, GRIDCO & BSEB



7. Shri S.Balaguru, TNEB
8. Shri R.Krishnaswami, TNEB
9. Shri Deepak Shrivastava, MPPTCL

ORDER

The petitioner has made this application for approval of the revised fixed charges, after considering the impact of additional capital expenditure incurred during the period 2004-09 for Talcher STPS, Stage- I (1000 MW), (hereinafter referred to as “the generating station”) based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 (hereinafter referred to as “the 2004 regulations”). The petitioner has made the following specific prayers:

- (i) *Approve the impact of revised fixed charges for 2004-09 (Annexure-1) for this station due to additional capital expenditure incurred during 2004-05 to 2008-09.*
- (ii) *Normative FERV for 2001-04 as part of capital cost as on 1.4.2004 as per Para – 12 above.*
- (iii) *Allow the recovery of filing fees from the beneficiary respondents.*
- (iv) *Allow the recovery of income tax from the respondents on account of any additional billing arising out of the determination of revised tariff for the period 2004-09 and being billed after March’2009.*
- (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 has a total capacity of 1000 MW, with two units of 500 MW each. The date of commercial operation of Unit-I of the generating station is 1.1.1997 and that of Unit-II and generating station is 1.7.1997. The tariff of the generating station for the period 1.4.2004 to 31.3.2009, was determined by the Commission by its order dated 9.5.2006 in Petition No.144/2004 based on the capital cost of ₹251216.00 lakh as on 1.4.2004. The annual fixed charges approved by the Commission by order dated 9.5.2006 is as under:



(₹ in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on Loan	3488.02	2655.54	1831.80	1005.88	293.32
Interest on Working Capital	1945.67	1962.60	1981.52	2004.29	2026.79
Depreciation	8874.86	8874.86	8874.86	8874.86	8874.86
Advance Against Depreciation	0.00	0.00	0.00	0.00	0.00
Return on Equity	17585.12	17585.12	17585.12	17585.12	17585.12
O & M Expenses	9360.00	9730.00	10120.00	10520.00	10950.00
TOTAL	41253.67	40808.13	40393.30	39990.14	39730.08

3. Aggrieved by the order dated 9.5.2006 determining tariff of the generating station for 2004-09 in Petition No.144/2006, the petitioner filed Appeal No. 156/2006 before the Appellate Tribunal for Electricity (the Tribunal).

4. Before we proceed to consider the additional capital expenditure, the claim of the petitioner for revision of tariff based on the principles laid down in the judgment of the Tribunal dated 13.6.2007 in Appeal Nos. 139 to 142 etc of 2006, 10, 11 and 23/2007 is examined in the subsequent paragraphs.

5. Appeal No.156/2006 was filed by the petitioner before the Tribunal challenging the order dated 9.5.2006 in Petition No.144/2006 determining tariff of the generating station for 2004-09. Similar appeals (Appeal Nos.139 to 142 etc of 2006, 10, 11 and 23/2007) were also filed by the petitioner challenging the various orders of the Commission determining tariff for other generating stations of the petitioner during the period 2004-09. Appeal No.156/2006 was clubbed along with the said appeals and the Tribunal by its common judgment dated 13.6.2007 allowed the prayers of the petitioner and remanded the matters for re-determination 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. 5439/2007 pertaining to this generating station, on issues such as:



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

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

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

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

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

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

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

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



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

9. One more aspect for consideration is the claim of the petitioner for considering the inclusion of un-discharged liabilities in terms of the judgment of the Tribunal



dated 16.3.2009 in Appeal Nos.133,135,136 and 148/2008 decided in the light of the judgment dated 10.12.2008 in Appeal Nos 151 & 152/2007.

10. 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.”

11. 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. Consequently, it has been decided to implement the judgment of the Tribunal dated 16.3.2009 subject to the final outcome of the Civil Appeals pending before the Hon’ble Supreme Court.

12. We now proceed to examine the claim of the petitioner for additional capital expenditure for the years 2004-09, in the subsequent paragraphs.

Particulars	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Additional capital expenditure	552.99	(-) 451.26	(-)88.82	511.59	1664.71



Additional Capitalization

13. 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.”

14. Reply to the petition has been filed by the respondents UPPCL (R-9), BSEB (R-2), GRIDCO(R-4) and MPPTCL(R-12).

15. The respondent, MMPTCL has pointed out that the petition is not maintainable since Clause (4) of Regulation 18 of the 2004 regulations provide for revision of tariff twice in a tariff period including revision of tariff after the cut –off date and do not provide for a retrospective revision of tariff after expiry of the tariff period. It has also submitted that since the Commission had notified the new tariff regulations applicable for the period from 1.4.2009, the present petition was not maintainable. In response, the petitioner has submitted that the petition has been filed in terms of the liberty granted by the Commission by its order dated 22.7.2008 in Petition No.27/2007, wherein, the petitioner was permitted to file the petition for additional capital expenditure by 30.9.2009. In our view, the argument of the respondent overlooks the specific provisions of clause (2) of Regulation 18, according to which certain kinds of expenditure incurred can be allowed to be capitalized, after the cut-off date. Clause (4) of Regulation 18 limits revision of tariff to two occasions during the tariff period 2004-09 and the concept of cut-off date was introduced with effect from 1.4.2004 only. In view of this and in consideration of the fact that the petitioner was



granted liberty to file the petition for revision of tariff in terms of the 2004 regulations, the contention of the respondent is not maintainable.

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

Particulars	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Closing Gross Block	642641.83	751916.16	760134.51	765561.86	778668.55
Less: Opening Gross Block of the year	516358.04	642641.83	751916.16	760134.51	765561.86
Additional capital expenditure as per books	126283.79	109274.33	8218.35	5427.35	13106.69
Less: Additional capital expenditure pertaining to Stage-II	125710.34	109935.88	8405.98	5057.83	11485.33
Additional capital expenditure pertaining to Stage-I	573.45	(-) 661.55	(-)187.63	369.52	1621.36
Less: Exclusions	20.46	(-) 210.29	(-) 98.81	(-)142.08	(-) 43.36
Net additional capital expenditure claimed	552.99	(-) 451.26	(-) 88.82	511.59	1664.71

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

Particulars	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Capital spares (capitalized in books)	56.71	41.39	0.00	0.00	0.00
Capital spares (de-capitalized in books)	0.00	0.00	0.00	0.00	(-) 43.36
Un-serviceable assets (de-capitalized in books)	(-) 7.86	(-) 251.68	(-) 98.81	(-) 142.08	0.00
Inter-unit transfer of asset to/from other project	(-)26.94	0.00	0.00	0.00	0.00
FERV (capitalized in books)	(-) 1.46	0.00	0.00	0.00	0.00
Total Exclusions claimed	20.46	(-) 210.29	(-) 98.81	(-) 142.08	(-) 43.36

Exclusions

18. In the first instance, we consider the exclusions under different heads in the claim.

- (a) **Capital spares (capitalized in the books):** The petitioner has procured capital spares amounting to ₹56.71 lakh during 2004-05 and ₹41.39 lakh during 2005-06. Since capitalization of spares over and above initial spares procured



after cut-off date are not allowed for the purpose of tariff, as they form part of O&M expenses when consumed, the petitioner has excluded the said amounts. The exclusion of the said amounts under this head is allowed.

(b) **De-capitalization of spares:** The petitioner has de-capitalized capital spares in books amounting to amounting to (-)₹43.36 lakh during 2008-09, on their becoming unserviceable. However, the petitioner has submitted that the negative entries arising out of de-capitalization of capital spares may be ignored for the purpose of tariff. In other words, these de-capitalized unserviceable capital spares are to be retained in the capital base for the purpose of tariff.

The petitioner vide its affidavit dated 20.1.2010 has submitted that the de-capitalization of these spares was on account of consumption of those spares which were not allowed by the Commission in tariff. Hence, exclusion of the same should be allowed.

In view of the fact that these spares do not form part of the capital cost of the generating station for the purpose of tariff, their de-capitalization has been allowed to be excluded.

(c) **De-capitalization of unserviceable assets:** The petitioner's claim for exclusion of de-capitalized unserviceable assets amounting to ₹500.42 lakh for the period 2004-09 has been discussed as under:

(i) **MBOA:** The petitioner has de-capitalized MBOA items in books of accounts amounting to (-) ₹7.86 lakh, (-) ₹23.68 lakh and (-) ₹87.35 lakh for the years 2004-05, 2005-06 and 2006-07, respectively. The petitioner has also submitted that de-capitalization of these MBOA items are to be excluded



since capitalization of the same has not been allowed as part of capital cost by the Commission.

The petitioner vide its affidavit dated 20.1.2010 submitted as under:

“The petitioner hereby certifies that amount of Rs.3573691/- out of total Rs.8734956/- indicated in Exclusion for the year 2006-07 in petition no. 195/2009 is on account of consumption those MBOA items which were not allowed in tariff.”

It appears that out of the total claim of the petitioner for exclusion under this head, only MBOA items amounting to ₹35.74 lakh, which was de-capitalized during 2006-07, has not been allowed to be capitalized for the purpose of tariff. In other words, the de-capitalized MBOA amounting to (-) ₹7.86 lakh, (-) ₹23.68 lakh and (-) ₹51.61 lakh (₹87.35 lakh minus ₹35.74 lakh) for the years 2004-05, 2005-06 and 2006-07, respectively form part of capital base, for the purpose of tariff.

In view of the fact that these unserviceable MBOA's do not render any useful service to the generating station, the petitioner's claim for exclusion of de-capitalization amounting to (-) ₹7.86 lakh, (-) ₹23.68 lakh and (-) ₹51.61 lakh for the years 2004-05, 2005-06 and 2006-07 has not been allowed.

(ii) **Assets which do not form part of capital base:** The petitioner has de-capitalized unserviceable assets amounting to (-) ₹189.34 lakh and (-) ₹11.46 lakh for the years 2005-06 and 2006-07, in respect of assets like KH-500 crane with accessories, bridge over village near BHEL colony, extension of office building, service buildings Stage-I, fire station and auto base building, construction of C-type quarters, construction of 132 Unit of B-type quarters, HT switch gear package supply, which were not allowed previously for the purpose of tariff. In view of fact that these unserviceable assets do not form part of the capital base of the generating station, the petitioner's claim for



exclusion under this head, has been allowed.

(iii) **Assets against which procurement action is in process:** The petitioner has de-capitalized assets amounting to (-)₹38.66 lakh and (-) ₹142.08 lakh for the years 2005-06 and 2007-08 respectively, in respect of assets like wagons, TATA crane 655 BLC, TATA crane 1055 BLC, TATA crane 955 ALC, bogie, ION liquidography system, on account of these becoming unserviceable. The petitioner has sought exclusion under this head and the justification submitted by the petitioner is as under:

“Procurement action for capitalization against the same is in progress. De-capitalization of these cranes may be considered at the time of capitalization.”

In view of the fact that these assets have become unserviceable and do not render useful service to the generating station, the petitioner’s claim for exclusion has not been allowed under this head.

(d) **Inter-unit transfers:** The petitioner has excluded an amount of (-) ₹26.94 lakh for the year 2004-05 under this head, on account of transfer of traction generator to other generating station of the petitioner namely, Kahalgaon STPS. 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 should be ignored for the purposes of tariff. In line with the said decision, exclusion of an amount of (-)₹26.94 lakh for the year 2004-05 on account of inter-unit transfer traction generator of temporary nature has been allowed.

(e) **FERV:** The claim for exclusion of a net amount of (-) ₹1.46 lakh for the year 2004-05 on account of FERV is allowed. The petitioner may recover the FERV amount directly from the beneficiaries in accordance with the 2004 regulations.



19. In view of the above discussions, the amounts allowed under exclusions are as under:

Particulars	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Capital spares (capitalized in books)	56.71	41.39	0.00	0.00	0.00
Capital spares (de-capitalized in books)	0.00	0.00	0.00	0.00	(-) 43.36
Un-serviceable assets (de-capitalized in books)	0.00	(-)189.34	(-)47.20	0.00	0.00
Inter-unit transfer of asset to/from other project	(-)26.94	0.00	0.00	0.00	0.00
FERV (capitalized in books)	(-) 1.46	0.00	0.00	0.00	0.00
Total Exclusions allowed	28.32	(-)147.95	(-) 47.20	0.00	(-) 43.36

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

Nature of capitalization	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Deferred Liabilities relating to works within original scope of work. [18(2)(i)]	182.73	(-)572.95	(-)466.79	25.02	1030.49
Additional works for efficient and successful operation of generation station, but not included in original project cost [18(2)(iv)]	0.00	70.44	26.38	0.00	79.48
Deferred works relating to Ash pond or Ash handling system, in original scope of work [18(2)(v)]	370.26	51.25	351.59	486.57	554.74
Total	552.99	(-) 451.26	(-) 88.82	511.59	1664.71

21. After applying prudence check on the asset-wise details and justification of additional capitalization claimed by the petitioner under various categories for the



years 2004-09, the admissibility of additional capitalization is discussed in the succeeding paragraphs:

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

22. The petitioner has claimed ₹182.73 lakh, (-) ₹ 572.95 lakh, (-) ₹466.79 lakh, ₹25.02 lakh and ₹1030.49 lakh under this head for the years 2004-05, 2005-06, 2006-07, 2007-08 and 2008-09, respectively. These include expenditure made towards assets/works like CI system of St-I, construction of B-Type hostel, boundary wall, higher secondary school, 44 nos. of quarters and plain drains, land, SG package, renovation of M. club, site surfacing & metalling in S/Y St-I, structural steel part-II, CISF barracks in PTS, de-capitalization of off-site equipments, de-capitalization of SG and WTP etc. On prudent check, the claim of the petitioner as above has been allowed under this head, except the claim for (-) ₹.0.38 lakh towards Renovation of M. club for the year 2007-08 (being in the nature of O&M expenses not allowed during 2005-06).

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)}

23. The petitioner has claimed amounts of ₹70.44 lakh, ₹26.38 lakh and ₹79.48 lakh under this head for the years 2005-06, 2006-07 and 2008-09, respectively. The admissibility of the said amounts are discussed as under:

2005-06

24. The petitioner's claim for the year 2005-06 consists of expenditure of ₹ 89.21 lakh is in respect of assets/works like renovation of guest house, renovation at M.club, black topping of roads and steel scaffolding system. This expenditure incurred is in the nature of O&M expenses and is not allowed. However, the claim for (-)₹18.77 lakh towards de-capitalization of BLC-1055 crane on account of inter- unit transfer of



the same to other generating station of the petitioner has been allowed, as the transfer is of a permanent nature.

2006-07

25. The petitioner has claimed an expenditure of ₹26.38 lakh towards up-gradation of Stage-I CHP PLCC and the justification for the expenditure as submitted by petitioner is as under:

“Upgradation of PLCC in CHP were carried out to avoid the obsolescence and increasing the efficiency of the station.”

As the expenditure incurred is in respect of up-gradation of an asset which is considered necessary for the efficient and successful operation of the generating station, the said amount has been allowed.

2008-09

26. The petitioner has claimed an expenditure of ₹79.48 lakh towards implementation of OPC compliance DDCMIS and the justification for the expenditure as submitted by the petitioner is as under:

“To integrate & implement uniform solution in all Stations in all areas including Material Management, O&M, Project Management, Billing & recordkeeping etc., ERP (Enterprise Resource Planning) System has been launched in NTPC. Implementation of ERP has necessitated the up-gradation of IT infrastructure to maintain compatibility with new system. It has resulted in faster data retrieval, manpower rationalization & quicker decision making. The gain in process & system efficiency is much higher compared to investment made. Hon'ble Commission may be pleased to allow the capitalization of same.”

As the expenditure incurred in respect of modern facilities and consequent up-gradation of IT infrastructure contribute to the efficient and successful operation of the generating station, the same has been allowed.

27. In view of above discussions, the expenditure of (-)₹18.77 lakh, ₹26.38 lakh and ₹79.48 lakh has been allowed for the years 2005-06, 2006-07 and 2008-09, respectively, under this head.



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

28. The claim for an expenditure of ₹370.26 lakh, ₹51.25 lakh, ₹351.59 lakh, ₹486.57 lakh and ₹554.74 lakh for the years 2004-05, 2005-06, 2006-07, 2007-08 and 2008-09, respectively in respect of works like raising of ash dyke/lagoon, drainage system in ash dyke etc, has been allowed under this head.

29. Based on the above discussions, the additional capital expenditure allowed for the years 2004-05, 2005-06, 2006-07, 2007-08 and 2008-09 is as under:

<i>(₹ in lakh)</i>					
Nature of capitalization	2004-05	2005-06	2006-07	2007-08	2008-09
Deferred liabilities relating to works within original scope of work. [18(2)(i)]	182.73	(-)572.95	(-) 466.79	25.39	1030.49
For efficient and successful operation of generation station, but not included in original project cost [18(2)(iv)]	0.00	(-)18.77	26.38	0.00	79.48
Deferred works relating to Ash pond or Ash handling system, in original scope of work- [18(2)(v)]	370.26	51.25	351.59	486.57	554.74
Total before adjustments of exclusions (A)	552.99	(-) 540.47	(-) 88.82	511.97	1664.71
Exclusions not allowed (B)	(-) 7.86	(-) 62.34	(-) 51.61	(-)142.08	0.00
Net additional capital expenditure allowed	545.14	(-) 602.81	(-)140.43	369.89	1664.71

FERV (2001-04)

30. The Commission vide its order dated 9.5.2006 in Petition No.144/2004 had allowed capitalization of FERV as on 1.4.2004, on actual basis amounting to ₹68 lakh for the period 2001-04. The petitioner has prayed that FERV amounting to ₹81 lakh for the period 2001-04 based on notional loan outstanding be considered as capital cost as on 1.4.2004 instead of ₹68 lakh, considered by the Commission in its order dated 9.5.2006.



31. The petitioner's claim for FERV on normative basis has been considered. Based on the normative loan outstanding, FERV works out to ₹80.56 lakh which has been admitted for the purpose of tariff. The necessary calculation is as under:

Particulars	(₹ in lakh)			
	2001-02	2002-03	2003-04	Total
Net opening loan (actual) - A	64381	51074	44377	-
Net opening loan (normative) - B	76275	60509	52575	-
Actual FERV allowed in order dated 9.5.2006 - C	14.00	51.00	3.00	68.00
FERV allowable on normative basis (D = C x B ÷ A)	16.59	60.42	3.55	80.56

32. Thus the differential FERV considered for the period 2001-04 works out to ₹12.56 lakh.

Capital cost

33. As stated earlier, the Commission had admitted the capital cost of ₹ 251216.00 lakh (inclusive of FERV amounting to ₹68 lakh, on actual basis, for the tariff period 2001-04) as on 1.4.2004 for determination of tariff for the period 2004-09.

34. 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 period 2004-09 at para 29 above, the capital cost for the period 2004-09 is worked out as under:

Particulars	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Opening capital cost as on 1.4.2004 vide order dated 9.5.2006	251216.00	-	-	-	-
Add: Additional FERV on normative basis for the period 2001-04	12.56	-	-	-	-
Opening capital cost	251228.56	251773.70	251170.89	251030.46	251400.35
Additional capital expenditure allowed	545.14	(-) 602.81	(-)140.43	369.89	1664.71
Closing Capital cost	251773.70	251170.89	251030.46	251400.35	253065.06
Average Capital cost	251501.13	251472.30	251100.68	251215.41	252232.71



Debt-Equity ratio

35. 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.”

36. The debt-equity ratio of 50:50 was considered by the Commission in respect of FERV (on actual basis, amounting to ₹68 lakh) for the period 1.4.2001 to 31.3.2004 vide order dated 9.5.2006. Accordingly, the additional FERV for the period 2001-04 has been allowed in the debt-equity ratio of 50:50.

37. Accordingly, the gross opening loan (normative) and normative equity as on 1.4.2004 has been revised to ₹125614.28 lakh (instead of ₹125608.00 lakh as considered in order dated 9.5.2006).Consequent upon this, the impact of the FERV amount recoverable shall be mutually settled between beneficiaries and the petitioner.

38. The petitioner has submitted that total capital expenditure claimed in the petition has been financed through internal resources. Hence, the debt-equity ratio of 70:30 has been considered for the additional capital expenditure approved in terms of



sub-clause (a) of clause (1) of 2004 regulations. Accordingly, additional notional equity of the generating station on account of capitalization approved, works out as under:

Particulars	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Additional notional equity	163.54	(-)180.84	(-) 42.13	110.97	499.41

Return on Equity

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

	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Equity-Opening considered vide order dated 9.5.2006	125614.28	125777.82	125596.98	125554.85	125665.82
Addition of Equity due to Additional capital expenditure approved	163.54	(-)180.84	(-)42.13	110.97	499.41
Equity-Closing	125777.82	125596.98	125554.85	125665.82	126165.23
Average equity	125696.05	125687.40	125575.92	125610.33	125915.52
Return on Equity @ 14%	17597.45	17596.24	17580.63	17585.45	17628.17

Interest on loan

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

- (a) Revised gross opening loan on normative basis on 1.4.2004 as mentioned above is ₹125614.28 lakh.
- (b) Cumulative repayment of loan on normative basis amounting to ₹83985.00 lakh on 1.4.2004 as considered in order dated 9.5.2006 has been considered for the purpose of tariff calculation in the instant petition.
- (c) Thus, the revised net opening normative loan as on 1.4.2004 is ₹41629.28 lakh.
- (d) There is addition of notional loan to the tune of ₹381.60 lakh, (-)₹421.97 lakh, (-)₹98.30 lakh, ₹258.92 lakh and ₹1165.30 lakh for the years 2004-05, 2005-06, 2006-07, 2007-08 and 2008-09, respectively on account of additional capital expenditure approved above.
- (e) Weighted average rate of interest as considered in order dated 9.5.2006 is considered for calculation of interest on loan.



(f) Normative repayment = Actual Repayment x Normative Loan

Actual Loan

(g) Normative repayment of loan considered is equal to the admissible depreciation for the year or normative repayment whichever is higher, as considered in the determination of the tariff for other generating stations of the petitioner for the period 2004-09. This is however subject to the final decision of the Hon'ble Supreme Court in Civil Appeal No. 5439/2007 and other related appeals.

41. Interest on loan has been computed as under:

	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Opening loan as considered in order dt.09.05.2006	125614.28	125995.88	125573.91	125475.61	125734.53
Cumulative Repayment of Loan upto previous year	83985.00	92869.93	101753.85	110624.63	119499.47
Net Loan Opening	41629.28	33125.94	23820.06	14850.98	6235.06
Addition of loan due to Additional capital expenditure approved	381.60	(-) 421.97	(-) 98.30	258.92	1165.30
Repayment of loan during the year	8884.93	8883.91	8870.79	8874.84	7400.36
Net Loan Closing	33125.94	23820.06	14850.98	6235.06	0.00
Average Loan	37377.61	28473.00	19335.52	10543.02	3117.53
Weighted Average Rate of Interest on Loan	9.3800%	9.3800%	9.4248%	9.5244%	9.5800%
Interest on Loan	3506.04	2670.76	1822.34	1004.16	298.66

Depreciation

42. In order dated 9.5.2006, the balance depreciation recoverable as on 1.4.2004 was considered as ₹122815.82 lakh. This value was arrived at after considering gross depreciable value and cumulative depreciation & Advance Against Depreciation (AAD) recovered in tariff as on 31.3.2004 amounting to ₹222652.82 lakh and ₹99837.00 lakh, respectively.



43. On account of additional FERV on normative basis amounting to ₹12.56 lakh as stated above, the balance depreciation recoverable has been revised to ₹122826.26 lakh after adjustment of ₹0.86 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 ₹99837.86 lakh. Further, there is increase in the value of land amounting to ₹0.90 lakh and ₹1009.17 lakh for the year 2007-08 and 2008-09, respectively, which has been considered for the purpose of calculating depreciable value.

44. Weighted average rate of depreciation of 3.5328% as mentioned in order dated 9.5.2006 has been used to arrive at the depreciation allowed for the tariff 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	251228.56	251773.70	251170.89	251030.46	251400.35
Closing capital cost	251773.70	251170.89	251030.46	251400.35	253065.06
Average capital cost	251501.13	251472.30	251100.68	251215.41	252232.71
Depreciable value @ 90%	222664.12	223154.75	222612.22	222485.02	221909.67
Balance depreciable value	122826.26	114439.03	105077.09	96119.20	86740.30
Depreciation	8884.93	8883.91	8870.79	8874.84	8910.78

Advance Against Depreciation

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



O&M expenses

46. The O&M Expenses as considered in order dated 9.5.2006 has been considered for revision of tariff.

Interest on Working capital

47. For the purpose of calculation of working capital the operating parameters including the price of fuel components as considered in the order dated 9.5.2006 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:

Particulars	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Coal Stock- 2 months	3096.08	3096.08	3096.08	3104.56	3096.08
Oil stock -2 months	312.26	312.26	312.26	313.12	312.26
O & M expenses	780.00	810.83	843.33	876.67	912.50
Maintenance Spares	3477.78	3686.45	3907.64	4142.10	4390.62
Receivables	11322.84	11247.73	11169.53	11117.32	11076.35
Total Working Capital	18988.97	19153.36	19328.85	19553.77	19787.82
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Total Interest on Working capital	1946.37	1963.22	1981.21	2004.26	2028.25

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

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

49. The target availability of 80% considered by the Commission in order dated 9.5.2006 remains unchanged. Similarly other parameters viz. specific fuel consumption Auxiliary Power consumption and Station Heat rate etc considered in

the order dated 9.5.2006 have been retained for the purpose of calculation of the revised fixed charges.

50. The difference in respect of the tariff determined by order dated 9.5.2006 and the tariff determined by this order, shall be recovered from the beneficiaries in three equal monthly installments.

51. 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.

52. 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 concluded by the Commission that the application filing fees was part of the allowable O&M expenses.

53. The annual fixed charges determined by this order is subject to the outcome of the Civil Appeal Nos.5439/2007 and other connected appeals, Civil Appeal Nos. 4112-4113/2009 and other connected appeals pending before the Hon'ble Supreme Court.

54. Petition No.195/2009 stands disposed of in terms of the above.

Sd/-
(M.DEENA DAYALAN)
MEMBER

Sd/-
(V.S. VERMA)
MEMBER

Sd/-
(S.JAYARAMAN)
MEMBER

Sd/-
(DR.PRAMOD DEO)
CHAIRPERSON

