# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

# Petition No. 128/2009 with I.A. 53/2009

# Coram

- 1. Dr. Pramod Deo, Chairperson
- 2. Shri R.Krishnamoorthy, Member
- 3. Shri S. Jayaraman, Member
- 4. Shri V.S.Verma, Member

## DATE OF HEARING: 14.10.2009

## DATE OF ORDER: 11.1.2010

## In the matter of

Approval of revised fixed charges for the period 2004-09, after considering the impact of additional capital expenditure incurred during 2006-07, 2007-08 and 2008-09 for Korba Super Thermal Power Station, (2100 MW).

# And in the matter of

# NTPC Ltd, New Delhi

Vs

- 1. Madhya Pradesh Power Trading Company Ltd, Jabalpur
- 2. Maharashtra State Electricity Distribution Company Ltd, Mumbai
- 3. Gujarat Urja Vikas Nigam Ltd, Vadodara
- 4. Chhattisgarh State Electricity Board, Raipur
- 5. Electricity Department, Govt. of Goa, Panaji
- 6. Electricity Department, Administration of Daman & Diu, Daman
- 7. Electricity Department, Administration of Dadra & Nagar Haveli, Silvassa

.....Respondents

.....Petitioner

# The following were present:

- 1. Shri V.K.Padha, NTPC
- 2. Shri A.S.Pandey, NTPC
- 3. Shri S.K.Sharma, NTPC
- 4. Shri Deepak Srivastava, MPPTCL
- 5. Shri P.V.Sajeev, CSPDCL

#### 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 years 2006-07,2007-08 and 2008-09 for Korba STPS, (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:

- (a) Approve the impact of ACE on fixed charges as per details given in Appendix-A for the period 1.4.2004 to 31.3.2009;
- (b) Allow recovery of filing fee from the respondents/beneficiaries;
- (c) Allow inclusion of liabilities for the period 2004-06 as detailed in para 11 above'
- (d) Allow recovery of Income Tax as detailed in para 18 above;
- (e) Pass any other order in this regard as the Hon'ble Commission may find appropriate in the circumstances pleaded above.

2. The generating station with a capacity of 2100 MW comprises of three units of 200 MW each and three units of 500 MW each. The date of commercial operation of the generating station is 1. 6.1990.

**3.** 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 19.7.2006 in Petition No.159/2004 based on the capital cost of Rs.169219.61 lakh as on 1.4.2004. Subsequently, vide order dated 15.6.2007 in Review Petition No.96/2006 in Petition No. 159/2004, the annual fixed charges was revised on account of ministerial error in the computation of IWC for the

period 2004-09. The Commission vide order dated 20.11.2008 in Petition No.48/2007 revised the annual fixed charges after accounting for additional capital expenditure for the years 2004-05 and 2005-06 and excluding un-discharged liabilities amounting to Rs.206.07 lakh and Rs.22.64 lakh during 2004-05 and 2005-06 respectively and including liabilities discharged amounting to Rs.118.05 lakh during 2005-06 out of the liabilities disallowed during 2004-05. The capital cost approved by the Commission, is as under:

					(Rs in	lakh)
Particulars		2004-05	2005-06	2006-07	2007-08	2008-09
Opening Capit	al Cost	169219.61	170023.68	171523.58	171523.58	171523.58
Additional	capital	804.07	1499.90	0.00	0.00	0.00
expenditure						
<b>Closing Capita</b>	I Cost	170023.68	171523.58	171523.58	171523.58	171523.58

4. The annual fixed charges approved by order dated 20.11.2008 is as under:

					(Rs in lakh)
Annual Fixed charges	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on Loan	1150.41	673.29	239.43	0.00	0.00
Interest on Working	3104.67	3135.37	3168.20	3149.42	3187.69
capital					
Depreciation	6280.48	6323.14	6350.91	2835.90	2835.90
Advance Against	0.00	0.00	0.00	0.00	0.00
Depreciation					
Return on Equity	11862.26	11910.64	11942.14	11942.14	11942.14
O&M expenses	20280.00	21087.00	21930.00	22800.00	23727.00
TOTAL	42677.82	43129.44	43630.68	40727.46	41692.73

## **INTERLOCUTORY APPLICATION**

5. The petitioner has filed interlocutory application (I.A No.53/2009) 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 in Appeal Nos.139 to142 etc of 2006 and judgment dated 16.3.2009 in Appeal Nos. 133,135 etc of 2008 of the Appellate Tribunal passed against the various tariff orders of the Commission for the period 2004-09 in respect of the generating stations of the petitioner.

6. Though the interlocutory application was taken on record, the Commission observed that tariff would be determined in accordance with law. We now proceed to examine the prayer of the petitioner for determination of tariff based on the revised calculations on the principles laid down in the judgments of the Appellate 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 as discussed in subsequent paragraphs.

7. The petitioner filed Appeal Nos. 139 to142 etc of 2006 before the Appellate Tribunal challenging the various orders of the Commission determining tariff for its generating stations during the period 2004-09. The Appellate Tribunal by its judgment dated 13.6.2007 allowed the said appeals and remanded the matters for redetermination by the Commission. Against the said judgment the Commission has filed 20 appeals before the Hon'ble Supreme Court (in C.A. Nos. 5434/2007 to 5452/2007 and 5622/2007) 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

8. 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 Appellate Tribunal. 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."

9. The petitioner in its application 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 Appellate 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 (Appellate Tribunal) does not become *non est.* 

10. The Hon'ble Supreme Court in its interim order dated 26.11.2007 had granted stay on the operation of the judgment dated 13.6.2007 of the Appellate 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 Appellate Tribunal. 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 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 the 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 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.

11. One more prayer of the petitioner in the application is for revision of capital cost of the generating station considering the undischarged liabilities, in terms of the judgment of the Appellate Tribunal dated 16.3.2009 in Appeal Nos. 133,135 etc of 2008.

12. The Commission in some of the petitions filed by the petitioner (Rihand and Ramagundam generating stations) revised the tariff for the period 2004-09 based on additional capital expenditure incurred, after deducting undischarged liabilities, on the ground that " the expenditure for the liability incurred for which payment was not made would not come under the category 'actual expenditure incurred". Against the orders, appeals were filed by the petitioner before the Appellate Tribunal (Appeal No 151&152/2007) and the Appellate Tribunal by its judgment dated 10.12.2008 held 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."

13. Similar appeals (Appeal Nos.133, 135,136 and 148/2008) were filed by the petitioner before the Appellate Tribunal against the orders of the Commission in respect of other generating stations by the petitioner on the question of deduction of undischarged liabilities, IDC etc. The Appellate Tribunal, following its judgment dated

10.12.2008 *ibid*, allowed the claim of the petitioner and directed the Commission to give effect to the directions contained in the said judgments.

14. Against the judgments of the Appellate 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 Appellate Tribunal. Accordingly, it has been decided to revise the tariff of the generating station in terms of the directions contained in the judgment *ibid* subject to the final outcome of the appeals before the Supreme Court.

15. The Appellate Tribunal in its judgment dated 10.12.2008 had directed that the capital cost incurred in respect of the generating station including the portion of such cost which has been retained or has not been paid for shall be recovered in tariff. In other words, un-discharged liability in respect of works which have been executed but payments deferred for future date has to be capitalized. As regards IDC, if the loan amount has been repaid out of the internal resources before the date of commercial operation, such repayments would earn interest. The Commission has been directed by the Appellate Tribunal to give effect to the directions contained in the judgment in the truing up exercise and subsequent tariff orders.

16. The directions of the Appellate Tribunal pertain to additional capitalization for the tariff period 2004-09 which has came 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 undischarged 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.

17. The interlocutory application No. 53/2009 is disposed of as above. We proceed to consider the petition on merits.

18. The petitioner has claimed the revised fixed charges based on additional expenditure as under:

			(Rs in	ı lakh)
Particulars	2006-07	2007-08	2008-09	Total
Additional capital expenditure	957.85	888.99	2658.39	4505.24

19. Reply to the petition has been filed by the first respondent MPPTCL.

# Additional Capitalization

20. 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 cut off date may be admitted by the commission, subject to prudence check:

(i) Deferred liabilities relating to works/services with in 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 cut-off 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 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 36.

#### Note 4

Any expenditure admitted on renovation and modernization and life extension shall be serviced on normative debt-equity ratio specified in regulation 36 after writing off the original amount of the replaced assets from the original capital cost."

21. Before considering the petitioner's claim for additional capitalization, we deal with the following two preliminary issues raised by the first respondent, MPPTCL.

- (a) The petition is not maintainable in view of the specific provision of sub-clause (4) of Regulation 18 of the 2004;
- (b) In terms of sub-section (5) of section 62 read with sub-section (3) of section 79 of the Electricity Act, 2003, the Commission should direct the petitioner to submit the actual expenditure incurred and profits earned in respect of the generating station before the determination of tariff;

22. As regards first issue above, the petitioner has submitted that the petition had been filed after finalization of accounts and in terms of the liberty granted by the Commission by order dated 29.9.2008 in Petition No.27/2007 in respect of Kahalgaon STPS. Clause (4) of Regulation 18 limits revision of tariff to two occasions during the tariff period 2004-09. The tariff in respect of the generating station for the period 2004-09 was revised based on additional capital expenditure incurred for the period 2004-06 by order dated 20.11.2008 and further revision of tariff based on additional capital expenditure for the period 2006-09 has been sought for in this petition in terms of the liberty granted by the Commission in order dated 29.9.2008 in Petition No. 27/2007, as under:

" However, if for reasons of non-finalization of accounts for the year 2008-09, it is not possible for the petitioner to make an application for revision of tariff as per 2004 regulations, the petitioner may approach the Commission for such revision for this reason, after finalization of accounts for the year 2008-09 including additional capitalization for earlier years of 2004-09 period, not claimed so far, latest by 30.9.2009."

We do not find any merit in the objection of the respondent on this issue.

23. As regards the second issue, the petitioner has submitted that the petition for additional capitalization had been filed in terms of the 2004 regulations and hence the prayer of the respondent MPPTCL for consideration in terms of sub-section (5) of section 62 of the Act, is not tenable. Section 62 (5) of the Act provides that " the Commission may require a licensee or a generating company to comply with such procedure as may be specified for calculation expected revenues from tariff and charges which he or it is permitted to recover". The Commission has initiated the process of framing the regulation under Section 62 (5) by putting the draft regulation in public domain. The regulation is yet to be finalized and notified. Till the regulations are notified, the petitioner cannot be directed to file its ARR as suggested by the respondent. In any case, the concerns of the respondent are taken care of, as the additional capital expenditure in this petition are allowed by the Commission after carrying out the prudence check in accordance with the 2004 regulations.

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

			(Rs in lakh)	
	2006-07	2007-08	2008-09	Total
Total additional expenditure of the station as per books of accounts (A)	1111.84	855.23	4000.39	5967.46
Exclusions for additional capitalization vis- à-vis books of accounts (B)	153.99	(-) 33.77	1342.00	1462.22
Total additional capitalization claimed (A-B)	957.85	888.99	2658.39	4505.24

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

			(F	Rs in lakh)
Description	2006-07	2007-08	2008-09	Total
Capital spares(Capitalized in books)	167.79	152.63	1696.05	2016.47
FERV Capitalized in books	0.15	0.00	(-) 793.14	(-) 792.98
Inter unit transfer assets from/ to other projects	(-) 139.9	(-) 497.2	0.60	(-) 636.51
MBOA and furniture (Capitalized in books)	128.71	310.81	438.5	878.02
Unserviceable Assets (De-Capitalized in books)	(-) 2.76	0.00	0.00	(-) 2.76
Total Exclusions	153.99	(-) 33.77	1342.00	1462.23

## Exclusions

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

(a) **Capitalization of Spares**: The petitioner has procured spares amounting to Rs. 2016.47 lakh during the period 2006-09 for maintaining stock of necessary spares. 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) **FERV:** The claim for exclusion of an amount of (-) Rs792.98 lakh for the period 2006-09 on account of impact of FERV is allowed, as the petitioner has billed the said amount directly to the beneficiaries in accordance with the 2004 regulations.

(c) Inter-unit transfers: An amount of (-) Rs. 636.51 lakh for the period 2006-09 has been excluded under this head on account of inter-unit transfer of assets like transformer panel, spares of TG, MBOA, 500 MW rotor, analog computer, analog memory unit, isolating transformer card, ceiling ring etc., from/to other generating stations of the petitioner. The petitioner has submitted that the Commission in the past had permitted exclusion of such temporary transfers for tariff purposes and allowed it to be retained in the capital base of the originating station. Accordingly, the petitioner has excluded the amounts as per the entries in the books of accounts for its claim for additional capitalization. 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 (-) Rs. 636.51 lakh on account of inter-unit transfer of equipment is allowed.

(d) **MBOA and furniture**: The petitioner has claimed expenditure of Rs.878.02 lakh during 2006-09 on procurement of MBOA including furniture. However, the petitioner has not claimed capitalization of these assets for the purpose of tariff in line with the Clause (3) of Regulation 18 of the 2004 regulations which does not permit capitalization of minor assets brought after the cut-off date. As such, the exclusion of Rs. 878.02 lakh under this head is allowed.

(e) Unserviceable assets de-capitalized in books, already de-capitalized by the Commission: The petitioner has sought exclusion of negative entries of (-) Rs. 2.76 lakh arising out of de-capitalization of unserviceable assets, on the ground that the Commission vide order dated 20.11.2008 had de-capitalized these unserviceable assets for the purpose of tariff. On scrutiny, it is observed that unserviceable assets

amounting to Rs.36.81 lakh, as on 1.4.2006 were de-capitalized for the purpose of tariff by the Commission in order dated 20.11.2008 and as such negative entry arising out of disposal of these unserviceable assets is excluded for the purpose of tariff. Accordingly, the exclusion of the amount is allowed.

27. Summing up, the following amount has been allowed as exclusion for the purpose of tariff.

(Rs. in lakh)						
Description	2006-07	2007-08	2008-09	Total		
Total Exclusions allowed	153.99	(-) 33.77	1342.00	1462.23		

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

(Rs in lakh)

Nature of capitalization	2006-07	2007-08	2008-09	Total
Deferred liabilities relating to works / services within original Scope of work- <b>18(2)(i)</b>	0	(-) 43.64	899.72	856.08
Liabilities to meet award of arbitration or for compliance of the order or decree of a court- <b>18(2) (ii)</b>	27.01	5.3	125.23	157.54
On account of change in law [18(2)(iii)]	94.83	0	0	94.83
Works/services which have become necessary for efficient and successful operation of the generating station, but not included in the original project cost- <b>18(2) (iv)</b>	683.83	931.01	849.23	2464.07
Deferred works relating to ash pond or ash handling system in the original scope of work [18(2)(v)]	152.17	(-) 3.68	784.22	932.71
Total	957.85	888.99	2658.4	4505.24

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, 2006-07, 2007-08 and 2008-09, the admissibility of additional capitalization is discussed in the succeeding paragraphs:

#### Deferred liabilities relating to works / services within original scope of work-18(2)(i):

30. The total claim of Rs 856.08 lakh by the petitioner is considered as under: (a) The petitioner has claimed amounts of (-) Rs. 43.64 lakh and Rs. 153.71 lakh for the years 2007-08 and 2008-09 towards Exchange Rate Variation (ERV). The petitioner has submitted that the claim is towards cost adjustment and do not relate to foreign loan. The petitioner has clarified that the claim is towards the ERV on retention money pertaining to ash handling system. In terms of the 2004 regulations, ERV is to be billed directly to the beneficiaries as and when paid for. As the amount claimed has not been discharged by the petitioner, the claim for the said amount under this head is not allowed for the purpose of tariff.

(b) The petitioner has claimed an amount of Rs.746.01 lakh for the year 2008-09 in respect of payments made to the Forest Department, State Govt. of Chhatisgarh against their demand note towards diversion of 87.002 hectare of land which is in use since the date of commercial operation (for township, oxidation plant and link road). In view of the payment made to the State Govt, then claim of the petitioner is allowed under this head.

31. Summing up, an amount of Rs.746.01 lakh for the period 2007-09, has been allowed to be capitalized against the claim of Rs.856.08 lakh under this head.

Liabilities to meet award of arbitration or for compliance of the order or decree of a court- 18(2) (ii):

32. The total claim of Rs.157.54 lakh by the petitioner is considered as under:

(a) The petitioner has claimed an amount of Rs.27.01 lakh, for 2006-07, towards payments made to contractors in respect of award pertaining to arbitration cases adjudged against the petitioner. This amount has been allowed for the purpose of tariff.

(b) The petitioner has claimed an amount of Rs.5.30 lakh, for 2007-08, towards payments made in respect of land related arbitration cases adjudged against the petitioner. This amount has been allowed for the purpose of tariff.

(c) The petitioner has claimed an amount of Rs.125.23 lakh for 2008-09, towards payments made to contractors in respect of arbitration award relating to civil works for "starter ash dyke" adjudged against the petitioner. This amount has been allowed for the purpose of tariff.

33. Summing up, the total claim of Rs.157.54 lakh for the period 2006-09 has been allowed to be capitalized under this head.

## On account of change in law [18(2)(iii)]

34. The petitioner has claimed an amount of Rs.94.83 lakh for the year 2006-07, under this head. The asset/works covered relates to the installation of energy meters in township for measuring and monitoring power consumption. As the provisions of the Electricity Act, 2003, mandate the installation and supply of electricity through meters, the expenditure is allowed for the purpose of tariff.

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

35. The total claim of Rs.2464.07 lakh by the petitioner is considered as under:

#### 2006-07

36. The admissibility of the claim for Rs. 683.83 lakh for 2006-07, on assets/works, is discussed as under:

(A) **Expenditure under CEA approved schemes:** The petitioner has claimed an amount of Rs.665.79 lakh against capital addition schemes approved by CEA vide letter dated 22.8.2000. The assets/works covered under this claim are I.D fan soft vibration monitoring & protection system (new asset), replacement of fabric expansion joints, Stage-I renovation and up-gradation of BFP, replacement of high energy drain valves and HPBP trims(Units 1 to 6), replacement of HPT/IPT fasteners, up-gradation of TDBFP recirculation control valve. The claim includes de-capitalization amount of the original assets against replacement. In terms of Note 2 under Regulation 18, the capitalization (along with de-capitalization) on CEA approved capital addition works/assets have been allowed for the purpose of tariff.

(B) **Expenditure on other assets:** The petitioner has claimed an amount of Rs.18.04 lakh in respect of transfer of D-Type quarters from IBP (the fuel supplier), digital scanner for SAPH fire sensing system, analog line card along with de-capitalization amount in respect of telephone exchange. The justification submitted by the petitioner is found to be in order and hence the amount claimed is allowed to be capitalized for the purpose of tariff. 37. In view of the above discussions, the total amount of Rs. 683.83 lakh for 2006-07, is allowed to be capitalized for the purpose of tariff under this head.

#### 2007-08

38. The admissibility of the claim for Rs. 931.01 lakh for 2007-08 on assets/works is discussed as under:

(A) Expenditure under CEA approved schemes: The petitioner has claimed an amount of Rs.605.26 lakh against capital addition schemes approved by CEA vide letter dated 22.8.2000. The assets/works covered under this claim are replacement of SH/RH spray control valves, replacement of HP heater tubes, elevator for coal handling plant (new asset), replacement of fabric expansion joints. The claim includes the de-capitalization amount of the original assets against replacement. In terms of Note 2 under Regulation 18, the capitalization (along with de-capitalization) on CEA approved capital addition works/assets have been allowed for the purpose of tariff.

(B) **Expenditure on other assets:** The petitioner has claimed an amount of Rs.325.75 lakh in respect of transfer of quarters and garages from IBP (Fuel supplier), hospital equipments, Router, ERP-software transaction licenses and enterprise server. The expenditure on transfer of quarters from IBP to the petitioner on book value of Rs.0.26 lakh is allowed. The expenditure on hospital equipment for the benefit of employees is allowed. Further, the expenditure on Router, ERP-software and server, which is necessary for successful and efficient operation of the generating station, is allowed. In view of the above, the expenditure of Rs.325.75 lakh is allowed to be capitalized for the purpose of tariff.

39. In view of the above discussions, the total amount of Rs 931.01 lakh for 2007-08 is allowed to be capitalized.

#### <u>2008-09</u>

40. The admissibility of the claim for Rs. 849.23 lakh for 2008-09 on assets/works, is discussed as under:

(A) The petitioner's claimed for an amount of Rs.9.36 lakh towards procurement of hospital equipment for the benefit of employees is allowed.

(B) **Expenditure under CEA approved schemes**: The petitioner has claimed an expenditure of Rs.704.78 lakh against capital addition schemes approved by CEA vide letter dated 22.8.2000. The assets/works covered under this claim are:

(i) H2 Purity meter for Stage-I generators- The expenditure of Rs.47.90 lakh incurred by the petitioner on CEA approved capital addition scheme for replacement of purity meters, is allowed as the asset is considered necessary for efficient operation of the generating station. However, in terms of Note-2 under Regulation 18, the expenditure on replacement can be allowed after deducting the gross value of the original asset. In this connection, the petitioner has submitted as under:

"The replacement value of old purity analyzers are "Nil" as assessed by committee of experts. Therefore, nothing is de-capitalized in books though physically asset has been replaced/discarded."

The submission of the petitioner that the gross value of original purity meters is "nil" cannot be accepted. In terms of Note-2 under Regulation 18, the asset cannot be permitted to be capitalized, in the absence of the original value. It is pertinent to mention that in most of cases under replacement, the gross value of the original asset as evaluated by the technical committee is 10% of the value of new asset. Hence, considering the fact that the asset is necessary for the efficient operation of the generating station, an amount of Rs. 43.11 lakh is allowed after deducting 10% of the value of new asset, considering it to be gross value of the original asset.

(ii) **Gas damper actuators for Stage-II boilers:** The following justification has been submitted by the petitioner has for incurring the expenditure of Rs.4.43 lakh:

"There is no damper at this location for control of Flue Gas to Secondary Air Heater. This has lead to loss of control of exit gas temperature. As per new environmental guidelines the flue gas outlet temperature needs to be controlled. Therefore it has become necessary to install damper at this point of flue gas duct. CEA has also approved this proposal vide their letter at sl. no 104"

The justification submitted by the petitioner that the expenditure incurred is towards installation of dampers is contrary to the CEA approval of expenditure for installation of actuators for existing dampers GD-7 and GD-8. In view of this, the justification submitted by the petitioner is not acceptable and the claim is not allowed.

(iii) **Retrofitting of COLTS System (Unit-II)**: The petitioner has claimed an amount of Rs.113.37 lakh against CEA approved capital addition scheme of "Retrofitting of COLTS System (Unit-II)". In view of the fact that the asset helps in maintenance of condenser vacuum at desired level, reduces maintenance period and is considered necessary for the efficient operation of the generating station, the expenditure is allowed.

(iv) **Online dissolved gas analyzer system package:** An expenditure of Rs. 13.34 lakh against CEA approved capital addition scheme for procuring this new asset is allowed as the asset helps in taking corrective and timely action, thereby avoiding failure of generator transformers.

(v) Renovation of Stage-I HP Heaters along with de-capitalization of original asset: An expenditure of Rs. 530.90 lakh against CEA approved capital addition scheme for renovation of Stage-I HP heaters is allowed in terms of Note-2 under Regulation 18 along with reduction of gross value of original asset i.e Rs.5.15 lakh.

(vi) **Expenditure on other assets:** The petitioner has claimed an amount of Rs.135.08 lakh in respect of following assets/works like BEML make bulldozer, transfer of quarters from IBP(fuel supplier), bolero camper-CISF, hold back bore dia, foam tender –CISF, pump operated combi-tool, fabric expansion joint (final bill), sewerage township, which has been considered as under:

(a) Expenditure of Rs. 72.74 lakh on purchase of a new bulldozer along with corresponding de-capitalization of Rs.25.88 lakh i.e. gross value of original bulldozer is allowed in terms of Note-2 under Regulation 18. However, the claim of Rs.1.29 lakh towards transfer of old bulldozer to "unserviceable assets" in books of accounts has not been allowed as the asset is no longer in service.

(b) Expenditure on transfer of quarters from IBP to the petitioner on book value of Rs.0.52 lakh is allowed. Expenditure of Rs.4.04 lakh, Rs. 82.52 lakh and Rs.7.97 lakh for procuring vehicle (Bolero), foam tenders and pump operated

combi-tool respectively to meet the requirements of CISF, is allowed on the consideration of safety and security.

(c) Expenditure of Rs.0.022 lakh towards "hold back bore dia" has not been allowed for want of details and justification. Expenditure of Rs.0.25 lakh on balance payment towards "expansion joints" is allowed considering the fact that original works of replacement of fabric expansion joints has been allowed during the previous period.

(d) De-capitalization of Rs.8.39 lakh towards adjustment of final bill in respect of "sewerage township package" is allowed.

41. In view of the above discussions, an amount of Rs.838.69 lakh for 2008-09 is allowed to be capitalized.

# Deferred works relating to ash pond or ash handling system in the original scope of work [18(2)(v)]

42. The petitioner has claimed amounts of Rs.152.17 lakh, (-) Rs.3.68 lakh and Rs.784.22 lakh for the years 2006-07, 2007-08 and 2008-09 respectively, under this head towards procurement of assets like UPS for ash slurry booster pump, erection of slurry pipe line and raising of ash dyke, construction of Phase-I bund for low lying area, construction of spillway over Bund-I etc. The major expenditure towards raising of ash dyke in order to make space for accumulation of ash slurry after few years of operation of generating station is allowed. The expenditure on other need-based assets relating to ash handling system like UPS and erection of slurry pipe lines along with negative entries for the year 2007-08 is also allowed. As such, the total claim of the petitioner for the period 2006-09 is allowed.

43. Based on the above discussions, the additional capital expenditure allowed for

the period 2006-09 is as under:

				(Rs. in lakh)
Capitalization	2006-07	2007-08	2008-09	Total
Deferred liabilities relating to works / services	0.00	0.00	746.01	746.01
within original Scope of work-18(2)(i)				
Liabilities to meet award of arbitration or for	27.01	5.30	125.23	157.54
compliance of the order or decree of a court-				
18(2) (ii)				
On account of change in law [18(2)(iii)]	94.83	0.00	0.00	94.83
Works/services which have become necessary	683.83	931.01	838.69	2453.53
for efficient and successful operation of the				
generating station, but not included in the				
original project cost- 18(2) (iv)				
Deferred works relating to ash pond or ash	152.17	(-) 3.68	784.22	932.71
handling system in the original scope of work				
[18(2)(v)]				
Total before adjustments of exclusions(A)	957.85	932.63	2494.14	4384.63
Exclusions not allowed (B)	0.00	0.00	0.00	0.00
Additional capital expenditure allowed.(C=A+B)	957.85	932.63	2494.14	4384.63

# Capital cost

44. As stated above, the Commission had admitted the capital cost of Rs.171523.58

lakh as on 1.4.2006, for determining tariff for the period 2004-09.

45. Taking into consideration the capital cost of the generating station as on

1.4.2006 and the additional capital expenditure approved for the years 2006-07, 2007-

08 and 2008-09 as per para 43 above, the capital cost for the period 2006-09 is worked

out as under:

		(Rs. in lak	h)
	2006-07	2007-08	2008-09
Opening Capital Cost as on 1.4.2006	171523.58	172374.26	173287.30
Additional Capital Expenditure	850.68	913.04	2170.33
Closing Capital Cost	172374.26	173287.30	175457.63
Average Capital Cost	171948.92	172830.78	174372.46

# **Debt-Equity ratio**

46. Clause (1) of Regulation 20 of the 2004 regulations, provides as under:

"(1) In case of the existing generating stations, 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 31.3.2004 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 capitalisation 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".

47. The petitioner has submitted that additional capital expenditure of Rs.4505.24 lakh has been financed partly out of loan and partly out of internal resources (i.e. equity). The debt component includes loan amount of Rs.600 lakh drawn during 2006-07 from LIC-III (T4 D4). Since the equity component of additional capitalization is more than 30%, the debt-equity ratio of 70:30 has been considered for additional capitalization in terms of sub-clause (a) of clause (1) of Regulation 20 of the 2004 regulations. Accordingly, additional notional equity of the generating station on account of capitalization approved, works out as under:

			(Rs. in lakh)
	2006-07	2007-08	2008-09
Additional Notional Equity	255.20	273.91	651.10

# Return on Equity

48. Return on equity is allowed @ 14% on the average normative equity, as follows:

			(Rs in lakh)
	2006-07	2007-08	2008-09
Opening Equity	85300.99	85556.20	85830.11
Addition of Equity due to	255.20	273.91	651.10
additional capital expenditure			
Equity-Closing	85556.20	85830.11	86481.21
Average equity	85428.60	85693.15	86155.66
Return on Equity	11960.00	11997.04	12061.79

#### Interest on loan

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

(a) The Gross opening loan on normative basis on 1.4.2006 as considered in order dated

20.11.2008 in Petition No. 48/2007 was Rs.86222.58 lakh corresponding to capital cost of

Rs.171523.58 lakh.

(b) Cumulative repayment of loan on 1.4.2006 as considered in the order dated 20.11.2008 was Rs.80249.55 lakh.

(c) Net opening loan on normative basis on 1.4.2006 as considered in the order dated 20.11.2008 was Rs.5973.03 lakh.

(d) There is addition of notional loan to the tune of Rs.595.48 lakh, Rs.639.13 lakh and Rs.1519.23 lakh during the period 2006-07, 2007-08 and 2008-09, respectively, on account of additional capital expenditure.

(e) Actual loans as considered in order dated 20.11.2008 along with addition of loan of Rs.600 lakh (drawn from LIC-III during 2006-07) have been used to work out normative repayment applicable during the period/year.

Normative repayment = Actual Repayment x Normative Loan

## Actual Loan

(f) Weighted average rate of interest on loan has been worked out after accounting for interest capitalized on loans as admitted in order dated 20.11.2008 along with addition of loan of Rs.600 lakh drawn from LIC-III (T4 D4) during 2006-07.

(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 final decision of the Hon'ble Supreme Court in Civil Appeal No. 5434/2007 and other related appeals.

# 50. Interest on loan has been computed as under:

			(Rs. in lakh)
	2006-07	2007-08	2008-09
Gross Opening Loan	86222.58	86818.06	87457.19
Cumulative Repayment of loan upto previous year	80249.55	86616.21	87457.19
Net loan Opening	5973.03	201.85	0.00
Addition of loan due to additional capital	595.48	639.13	1519.23
expenditure			
Repayment of loan during the year	6366.65	840.98	1519.23
Net loan Closing	201.85	0.00	0.00
Average loan	3087.44	100.93	0.00
Weighted Average Rate of Interest on Ioan	7.6676%	7.2138%	6.7682%
Interest on Loan	236.73	7.28	0.00

#### Depreciation

51. The petitioner has claimed Rs.3.52 lakh and 5.30 lakh during the year 2006-07 and 2007-08 respectively, towards additional payments in respect of freehold land. However, as payment has not been made, the claim of the petitioner has not been allowed. The amount can be capitalized only when the liability is discharged. As payment is against freehold land, the depreciable value would not get affected.

52. The petitioner has made additional payment of Rs.746.01 lakh towards lease hold land, against demand letter of Forest Department, State Govt. of Chhattisgarh, during 2008-09. In line with Commission's order dated 19.7.2006 in Petition No. 159/2004, the same has been considered for calculation of depreciable value.

53. As the normative opening loan balance as on 1.4.2008 is 'nil' from 2008-09 onwards the remaining depreciation recoverable through tariff, has been spread over the balance useful life of 5.10 years of the generating station. The admitted amount of additional capital expenditure is after allowing de-capitalization of certain assets. 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:

			(Rs in lakh)
	2006-07	2007-08	2008-09
Opening Capital Cost	171523.58	172374.26	173287.30
Closing Capital Cost	172374.26	173287.30	175457.63
Average Capital Cost	171948.92	172830.78	174372.46
Depreciable value @ 90 %	154028.30	154821.97	156284.09
Balance Depreciable value	24032.71	18509.95	13577.80

Balance useful life	7.10	6.10	5.10
Depreciation	6366.65	6399.31	2662.31

## **Advance Against Depreciation**

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

# **O&M** expenses

55. The O&M Expenses as considered in order dated 20.11.2008 in Petition No.48/2007 has been retained to calculate revision of tariff.

## Interest on Working capital

56. For the purpose of calculation of working capital, the operating parameters including the price of fuel components as considered in the order dated 20.11.2008 has been kept unaltered. 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:

		(Rs. in lakh)	
Particulars	2006-07	2007-08	2008-09
Coal Stock- 1.1/2 months	7497.20	7517.74	7497.20
Oil stock -2 months	688.01	689.90	688.01
O & M expenses	1827.50	1900.00	1977.25
Spares	2940.48	3116.91	3303.92
Receivables	17961.30	18116.23	17623.92
Total Working Capital	30914.49	31340.77	31090.31
Rate of Interest	10.2500%	10.2500%	10.2500%
Total Interest on Working capital	3168.74	3212.43	3186.76

57. The revised annual fixed charges for the period from 1.4.2006 to 31.3.2009 are summarized as under:

		(	(Rs. in lakh)
Annual Fixed Charges	2006-07	2007-08	2008-09
Interest on Loan	236.73	7.28	0.00
Interest on Working Capital	3168.74	3212.43	3186.76
Depreciation	6366.65	6399.31	2662.31
Advance Against Depreciation	0.00	0.00	0.00
Return on Equity	11960.00	11997.04	12061.79
O&M Expenses	21930.00	22800.00	23727.00
Total	43662.12	44416.06	41637.86

58. The target availability of 80% considered by the Commission in the original order dated 20.11.2008 remains unchanged. Similarly, other parameters viz., specific fuel consumption, Auxiliary Power consumption and Station Heat rate etc considered in the order dated 20.11.2008 have been retained for the purpose of calculation of the revised fixed charges.

59. The reimbursement of the filing fee is not being allowed in view of the Commission's general order dated 11.9.2008 in Petition No.129/2005.

60. 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.

61. The petitioner shall claim the difference between the fixed charges approved vide order dated 20.11.2008 and those approved now, from the beneficiaries in three equal monthly installments.

62. The annual fixed charges determined in this order is subject to the outcome of Civil Appeal Nos. 4112-4113/2009 and Civil Appeal Nos. 6286 to 6289/2009 and other connected appeals pending before the Hon'ble Supreme Court.

63. Petition No.128/2009 stands disposed of in terms of the above.

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