

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram

- 1. Shri Bhanu Bhushan, Member**
- 2. Shri R. Krishnamoorthy, Member**

Petition No. 48/2007

In the matter of

Approval of revised fixed charges for the period 2004-09, after considering the impact of additional capital expenditure incurred during 2004-05 and 2005-06 for Korba Super Thermal Power Station, (2100 MW)

And in the matter of

NTPC Limited, New Delhi

.....Petitioner

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

The following were present:

1. Shri S.N.Goel, NTPC
2. Shri A.S.Pandey, NTPC
3. Shri A.K.Juneja, NTPC
4. Shri S.K.Johar, NTPC
5. Ms. Pranav Kapoor, NTPC
6. Shri S.K.Agarwal, NTPC
7. Shri S.S.Reddy, NTPC
8. Shri Vivake Kumar, NTPC
9. Shri D.Kar, NTPC
10. Shri Ajay Dua, NTPC
11. Shri N.N.Sadasivan, NTPC
12. Shri D.G.Salpekar, NTPC
13. Shri S.D.Jha, NTPC
14. Shri S.Saran, NTPC
15. Shri Deepak Srivastava, MPPTCL

16. Shri A.K.Garg, MPPTCL
17. Ms. Yogmaya Agnihotri, Advocate, CSEB
18. Shri Harsh Gautam, CSEB

ORDER
(DATE OF HEARING: 23.10.2007)

The petitioner has made this application for approval of revised fixed charges in respect of Korba Super Thermal Power Station, (2100 MW) (hereinafter referred to as “the generating station”) for the period 2004-09, after considering the impact of additional capital expenditure incurred during 2004-05 and 2005-06, 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 additional capital expenditure on fixed charges as per details given in Annexure-I for the period 1.4.2004 to 31.3.2006.*
- (ii) allow the servicing of expenditure from the year the same is incurred.*
- (iii) allow the petitioner to approach the Hon’ble Commission for another revision of fixed charges before 31.3.2009 and one revision after the tariff period i.e 31.3.2009 when the accounts of 2008-09 are finalized.*
- (iv) allow the recovery of filing fees from the beneficiary respondents.*
- (v) pass any other orders in this regard as the Hon’ble Commission may find appropriate in the circumstances pleaded above”.*

2. The generating station comprises 3 units of 200 MW each and 3 units of 500 MW each. The first three units of 200 MW were commissioned between 1983 and 1984 and the last three units of 500 MW between 1988 to 1990. The Commission by its order dated 19.7.2006 in Petition No.159/2004 determined tariff for the generating station for the period 1.4.2004 to 31.3.2009, based on the

capital cost of Rs.169220 lakh (inclusive of FERV of Rs.606 lakh, additional capitalization on works amounting to Rs.21302 lakh and decapitalisation of assets worth Rs.76 lakh). Subsequently, the Commission by its order dated 15.6.2007 in Review Petition No. 96/2006 revised the annual fixed charges in modification of the fixed charges approved vide order dated 19.7.2006, retaining the capital cost of Rs.169220 lakh. The revised annual fixed charges approved by the Commission are as under:

(Rs. in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on Loan	1219	651	183	0	0
Interest on working capital	3105	3133	3164	3141	3179
Depreciation	6266	6266	6266	2450	2450
Advance Against Depreciation	0	0	0	0	0
Return on Equity	11845	11845	11845	11845	11845
O&M Expenses	20280	21087	21930	22800	23727
Total	42715	42981	43388	40236	41202

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

(Rs. in lakh)

Particulars	2004-05	2005-06	Total
Additional capital expenditure	1726.11	2008.21	3734.32

4. Reply to the petition has been filed by the respondents MPPTCL, MSEDCL, and CSEB.

5. The first respondent, MPPTCL in its affidavit dated 25.6.2007 has submitted a counter-claim, stated to be under Rule 6 A of Order VIII of the Civil Procedure Code for re-adjustment of FERV amount apportioned to equity based on the judgment of the Appellate Tribunal for Electricity (the Appellate Tribunal)

dated 4.10.2006 in Appeals Nos.135-140/2005 and 22.12.2006 in Appeal No.161/2006. It has been stated that as per the Appellate Tribunal's judgments, equity can be affected by FERV only if it is in foreign currency. The argument made is that no equity in respect of the generating station has been invested in foreign currency, FERV for the period 2001-04 was not required to be apportioned to equity. It has been submitted that the respondent and the ultimate consumers would be required to bear the unfair burden of inflated equity by serving at the rate of 14% through out the life of the assets. The first respondent has prayed for acceptance of the counter-claim while considering the impact of additional capital expenditure. The petitioner in its rejoinder dated 11.7.2007 has stated that the counter-claim is beyond the scope of the present petition and is contrary to the 2004 regulations and may, therefore, be ignored.

6. First of all, we are of the view that the provisions of Civil Procedure Code have limited application to the proceedings before the Commission to the extent mentioned in clauses (a) to (g) of sub-Section (1) of Section 94 of the Electricity Act, 2003. As Order VII, Rule 6-A of the Code is not covered under Section 94 of the Act, we are of the view that counter-claim, which involves adjustment of FERV for the period, that is 2001-04, raised by the first respondent in the present petition cannot be sustained. Further, the Appellate Tribunal in its judgment dated 22.12.2006 in Appeal No. 161/2006 (Madhya Pradesh State Electricity Board Vs PGCIL & others) reiterating its earlier decision in judgment dated 4.10.2006 in Appeals Nos. 135-140/2005 (Tamil Nadu Electricity Board vs PGCIL and others) while interpreting the Ministry of Power notification dated 16.12.1998

as applicable to PGCIL, held that any increase on account of FERV was not to be allocated to equity if the entire equity was secured from the domestic resources only and not through foreign currency. The judgment of the Appellate Tribunal has been fully implemented as regards the transmission systems owned by PGCIL. The present petition pertains to the approval of the revised fixed charges from 1.4.2004 onwards, on account of additional capitalization for the years 2004-05 and 2005-06 in respect of the generating station. The request of the first respondent for adjustment of the impact of FERV for the period 2001-04 based on the judgment of the Appellate Tribunal in Appeal No.161/2006 is beyond the scope of the present petition. Any person seeking extension of the judgment of the Appellate Tribunal and revision of tariff based thereon of the generating station is at liberty to approach the Commission in accordance with law, through an appropriate application.

Additional Capitalization

7. 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 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-convector, 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."

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

(Rs.in lakh)

Items	2004-05	2005-06	Total
Additional expenditure as per books of accounts (A)	1629	2267	3896
Exclusions of additional capitalization vis-à-vis books of accounts (B)	(-) 97	259	162
Total additional capitalization (A-B)	1726	2008	3734

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

(Rs. in lakh)

Head	2004-05	2005-06	Total
FERV	24.39	256.07	280.46
Inter-Unit transfers	5.52	3.27	8.79
Decapitalisation of assets in books of accounts	(-) 114.91	-	(-) 114.91
Capitalization of works not allowed	(-) 12.00	-	(-) 12.00
Total	(-) 97.00	259.34	162.34

Exclusions

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

(a) **FERV:** The claim for exclusion of an amount of Rs.280.46 lakh for the years 2004-05 and 2005-06 { Rs.24.39 lakh in 2004-05 and Rs.256.07 lakh in 2005-06} 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.

(b) **Inter-unit transfer:** An amount of Rs.8.79 lakh (Rs.5.52 lakh for 2004-05 and Rs.3.27 lakh for 2005-06) has been excluded under this head on account

of transfer of certain assets like capacitor voltage transmitter, belt conveyor with feeder bin, FSB making machine, pallet trucks, pan mixture, wheel barrows, communication equipment, furniture etc., 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 the tariff purpose 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 additional capitalization petitions 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 decision, the exclusion of the amount of Rs.8.79 lakh on account of inter-unit transfer of equipment is allowed.

(c) Decapitalisation of assets in Books of Accounts: The Commission by its order dated 7.7.2005 in Petition No.195/2004, while determining the additional capitalization of the generating station for the period 2001-04 had allowed de-capitalisation of certain assets amounting to Rs.114.91 lakh. The petitioner by way of negative entries has now excluded the said amount in the year 2004-05 in the books of accounts as the expenditure has been de-capitalised. Thus, a total amount of Rs.114.91 lakh is allowed to be excluded.

(d) Capitalisation of works not admitted by the Commission earlier: An amount of Rs.12 lakh has been excluded on account of works not admitted by

the Commission in order dated 7.7.2005 in Petition No.195/2004, while determining the additional capitalization impact for the period 2001-04 for the generating station. As the works were not allowed, de-capitalisation has been effected in the books of accounts in the year 2004-05. As such, exclusion on this count is in order and is allowed.

11. The Commission vide its order dated 6.11.2007 directed the petitioner to furnish the detailed categorization and consolidation for each asset under different clauses of Regulation 18 of the 2004 regulations for which capitalization has been claimed, with proper justification. The petitioner by its affidavit dated 27.11.2007 has submitted details of capitalization of items under different clauses of Regulation 18 of the 2004 regulations. The year-wise and category-wise break-up of the additional expenditure claimed by petitioner is as under:

(Rs. in lakh)

	Category	2004-05	2005-06	Total
Deferred liabilities relating to works/services with in the original scope of work	18(2)(i)	208.59	(-)106.76	101.83
Works/services which have become necessary for efficient and successful operation of station	18(2)(iv)	1506.74	1108.74	2615.48
Deferred works relating to ash pond or ash handling system in the original scope of work	18(2)(v)	10.78	1006.23	1017.01
Total		1726.11	2008.21	3734.32

12. After examining the asset-wise details and justification for additional capitalisation/ decapitalisation claimed by the petitioner, under various categories and by applying prudence check, the admissibility of additional capitalisation is discussed in the subsequent paragraphs.

Expenditure on balance payments against works admitted by the Commission {Regulation 18(2)(i)}

13. The petitioner has claimed capital expenditure of Rs.101.83 lakh (Rs.208.59 lakh for the year 2004-05 and de-capitalisation of Rs.106.76 lakh for the year 2005-06) on account of the balance payments against civil works already admitted by the Commission/Gol during for the previous tariff periods. The deferred liabilities include civil works such as ash dyke, ash handling system, R&M of CHP, furniture, communication and IT equipments etc. It is further observed that the petitioner has also capitalised/de-capitalised some worn out assets like furniture, communication and IT equipments for the year 2004-05. These assets which are in the nature of minor works are not admissible for capitalization in terms of clause (3) of Regulation 18 of the 2004 regulations and hence the claim for capitalization/de-capitalisation of expenditure on these items is not allowed. The year-wise details of additional capital expenditure claimed, de-capitalisation of assets and details of undischarged liability are as under:

(Rs in lakh)					
Year	Additional capital expenditure claimed including decapitalisation	De-capitalisation considered in the claim	Assets not allowed for capitalisation	Undischarged liability not considered	Net additional capital expenditure allowed
2004-05	208.59	24.12	(-) 12.38	5.69	215.28
2005-06	(-)106.76	-	-	-	(-)106.76
Total	101.82	24.12	(-) 12.38	-	108.51

14. In view of the above, capitalization of an amount of Rs.108.51 lakh on account of balance payments is allowed under Regulation 18(2)(i) of the 2004 regulations.

Additional capital expenditure relating to new works under CEA approved R&M scheme (Regulation 18(2)(iv))

15. The petitioner has claimed capital expenditure amounting to Rs.2615.48 lakh for the period 2004-06 (Rs.1506.74 lakh for 2004-05 and Rs.1108.74 lakh for 2005-06) on account of works/services which became necessary for efficient and successful operation of the generating station. The petitioner has claimed capitalization of expenditure on items/assets procured mainly on account of R&M approved by CEA, including RLA study, residential quarters taken over from IBP, energy metering systems for effective implementation of ABT, weighing machine, communication equipments, trolley, solar power system, projector, fans, additional motor for PA heater, furniture, capital spares which are not part of approved cost etc.

16. The petitioner has formulated various R&M schemes considering the condition of the equipment in line with the 'Guidelines for Renovation and Modernisation of Thermal Power Stations' issued by CEA under Section 3(1)(v) of the Electricity (Supply) Act, 1948, since repealed and obtained the approval of CEA for Rs.3119 lakh vide letter dated 3.7.1996 and for Rs.10686 lakh vide letter dated 22.8.2000.

17. The petitioner vide affidavit dated 11.7.2007 has submitted that the Renovation and Modernisation (R&M) programme was taken up to overcome the problems related to:

- Obsolescence
- Non-availability of spares
- Generic defects

- Equipment erosion/degradation due to poor quality of coal and frequency variation
- Compliance to environmental regulations
- Safety of operating personnel and plant/equipment.

18. The petitioner has also submitted that some parts of the R&M works were completed during the previous tariff period and the remaining works were undertaken for completion during 2004-05 and 2005-06.

19. In terms of sub-clause (iv) of clause (2) of Regulation 18 of the 2004 regulations, any additional works/services which have become necessary for efficient and successful operation of the generating station can be capitalized. On prudence check, it is noticed that some of the assets are in the nature of O&M expenses or minor items/assets like weighing machine, communication equipments, trolley, solar power system, projector, fans, additional motor for PA heater, furniture etc. As the necessity of these assets for efficient and successful operation of the generating station has not been established by the petitioner, the claim for additional capitalization of the expenditure of Rs.239.49 lakh on these items for the period 2004-06 is not allowed.

20. The petitioner has claimed capital expenditure amounting to Rs.358.38 lakh during the year 2005-06 towards conducting RLA studies on various R&M works. After verification, it is observed that the expenditure relates to R&M scheme approved by the CEA. In our view, capitalization of expenditure on RLA studies may be considered only after R&M works are undertaken and completed

on the basis of RLA, thereby benefiting the generating station. In view of this, the claim for capitalization of an amount of Rs.358.38 lakh is not admitted.

21. The petitioner has also claimed capital expenditure of Rs.77.62 lakh for procurement of new Electrolyser rectifier during 2004-05 under the R&M scheme approved by CEA. However, it is observed that the old Electrolyser rectifier is still in good working condition and the item has been procured for use as a spare machine. In view of this, capitalization of Rs.77.62 lakh for purchase of new Electrolyser Rectifier as spares is disallowed.

22. The petitioner has claimed capital expenditure on spares, amounting to Rs. 547.53 lakh for the period 2004-06 which do not form part of the approved cost. The first respondent in its reply vide affidavit dated 25.6.2007 has submitted that spares procured after the date of commercial operation of the generating station should not be allowed to be capitalized. It has been pointed out that in terms of the orders of the Commission dated 10.10.2002 in Petition No. 34/2002 and order dated 17.6.2005 in Petition No. 170/2004, spares purchased after the date of commercial operation cannot be capitalized and should be met from O&M expenses.

23. In response to the Commission's order dated 27.8.2007, the petitioner by affidavit dated 8.11.2007, has categorized the spares as insurance and capital spares, amounting to Rs.437.67 lakh. On prudence check, it is observed that the spares procured by the petitioner are for consumption in future and are presently

lying in stores. The petitioner has already been allowed to capitalize initial spares in the capital cost of the generating station and the petitioner has been claiming the maintenance spares as a component of the working capital in terms of the 2004 regulations. These spares should be charged to revenue as and when consumed and hence, the expenditure on this count is not allowed to be capitalized.

24. The year-wise details of additional capital expenditure claimed, de-capitalisation of replaced assets, details of undischarged liability and additional expenditure allowed to be capitalized are as under:

	Additional capital expenditure claimed	De-capitalisation considered in the claim	Undischarged liability not considered	Capitalisation not considered	(Rs in lakh) Net additional capital expenditure allowed
2004-05	1506.74	312.09	185.99	656.12	664.63
2005-06	1108.74	83.43		566.90	541.83
Total	2615.48	395.52	185.99	1223.03	1206.47

25. In view of the above, an amount of Rs.1206.47 lakh under this head is allowed to be capitalized.

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

26. The petitioner has claimed a capital expenditure of Rs.1017.01 lakh during the period 2004-06 (Rs.10.78 lakh in 2004-05 and Rs.1006.23 lakh in 2005-06) under this head on new works within the approved cost. It is observed that the expenditure incurred is towards construction and development works of dry ash collection system, strengthening of discharge channel for ash dyke, civil works relating to raising of ash dyke, construction and laying of ash slurry pipeline work

etc., The expenditure is found to be justified based on environmental considerations and capitalisation of Rs.979.98 lakh after deduction of undischarged liabilities, is allowed, as under:

(Rs in lakh)			
Year	Additional capital expenditure claimed	Undischarged liability not considered	Net Additional capital expenditure allowed
2004-05	10.78	14.39	(-) 3.61
2005-06	1006.23	22.64	983.59
Total	1017.01	37.03	979.98

Assets not in use as on 1.4.2005 and 1.4.2006

27. The Commission vide orders dated 27.8.2007 and 6.11.2007 directed the petitioner to furnish the details of assets which were not in use or were unserviceable as on 1.4.2005 and 1.4.2006. The petitioner vide affidavit dated 8.11.2007 has submitted that all assets as per gross block provided in the balance sheet, including the assets for which additional capitalization has been claimed were in use as on 1.4.2005 and 1.4.2006. The petitioner has, however, stated that unserviceable assets amounting to Rs.5.85 lakh as on 1.4.2005 and Rs.3.32 lakh as on 1.4.2006 like vehicles, air compressors, road roller, dozer etc, have been taken out of service and where their disposal is pending, value of such assets have been retained in the gross block at lower of their net book value/net realizable value. The petitioner has in its affidavit dated 21.8.2008 submitted that the gross value of unserviceable assets are Rs.73.23 lakh and Rs 36.81 lakh as on 1.4.2005 and 1.4.2006 respectively. As unserviceable assets taken out cannot be allowed to remain in the capital base for the purposes of tariff, the value of such assets amounting to Rs.72.23 lakh for 2004-05 and Rs.36.81 lakh for 2005-06 has been taken out from the gross block as on 1.4.2005 and 1.4.2006.

Undischarged liability

28. The Commission vide order dated 27.8.2007 had directed the petitioner to furnish the undischarged liability included in the additional capital expenditure as on 1.4.2004, 1.4.2005, 1.4.2006. The petitioner vide letter dated 12.9.2008 has submitted that undischarged liabilities amounting to Rs.209.52 lakh as on 1.4.2005 and Rs.35.01 lakh as on 1.4.2006 are included in the claim for additional capitalization.

29. It is noticed that undischarged liability for the year 2004-05 includes Rs.3.45 lakh in respect of assets like stream electrolyser rectifier, erection of EPAX and erection and supply of fabric expansion joints and for the year 2005-06 includes Rs.12.37 lakh, in respect of assets for erection and supply of fabric expansion joints, RLA work for boiler pressure parts etc, which have not been allowed for capitalization. Accordingly, the above amounts have been deducted from the undischarged liability as on 1.4.2005 and 1.4.2006 respectively and accordingly the undischarged liabilities of Rs.206.07 lakh and Rs.22.64 lakh included in the claim for additional capitalization as on 1.4.2005 and 1.4.2006 respectively have been disallowed. Out of the undischarged liability of Rs.206.07 lakh for the year 2004.-05, the petitioner has discharged liability of Rs.118.05 lakh during the year 2005-06, which is allowed.

30. Based on the discussions in the preceding paragraphs, the additional capital expenditure for the years 2004-05 and 2005-06 after excluding the liabilities and the cost of unserviceable assets is allowed as under:

(Rs.in lakh)				
Category	Total Amount claimed	Additional Capital Expenditure allowed		
		2004-05	2005-06	Total
1. Balance payment-18(2)(I)	101.82	215.28	(-)106.76	108.51
2. Works/services which have become necessary for efficient and successful operation of station-18(2)(IV)	2615.48	664.63	541.83	1206.47
3. Ash Dyke work within approved scope of work - 18(2)(v)	1017.01	(-) 3.61	983.59	979.98
4. Undischarged liabilities discharged	-	-	118.05	118.05
5. Less- Assets not in use	-	72.23	36.81	109.04
Total	3734.32	804.07	1499.90	2303.97

Capital Cost

31. As already noted, the Commission had admitted the capital cost of Rs.169220 lakh (inclusive of FERV of Rs.606 lakh, additional capitalization on works amounting to Rs.21302 lakh and decapitalisation of assets worth Rs.76 lakh), for determining tariff for the period 2004-09.

32. Taking into account the capital cost of the generating station as on 1.4.2004 and the additional capital expenditure approved for the years 2004-05 and 2005-06 as per para 30 above, the capital cost for the period 2004-09 is worked out as under:

(Rs. In lakh)					
	2004-05	2005-06	2006-07	2007-08	2008-09
Opening capital cost	169219.61	170023.68	171523.58	171523.58	171523.58
Additional capital expenditure	804.07	1499.90	-	-	-
Closing capital cost	170023.68	171523.58	171523.58	171523.58	171523.58
Average capital cost	169621.64	170773.63	171523.58	171523.58	171523.58

Debt-Equity ratio

33. Clause (1) of Regulation 20 of the 2004 regulations, as amended, provides that:

“(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”.

34. The petitioner in its affidavit dated 8.11.2007 has stated that the additional capital expenditure has been financed from its internal accruals/resources. However part of the loan to the tune of Rs.1600 lakh has been made from Central Bank of India. 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)	
	2004-05	2005-06
Notional Equity	241.22	449.97

Return on Equity

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

		(Rs in lakh)				
	Order dated 15.6.2007	2004-05	2005-06	2006-07	2007-08	2008-09
Equity opening	84610	84610	84851	85301	85301	85301
Equity due to Additional capitalization		241	450	0	0	0
Equity closing		84851	85301	85301	85301	85301
Average equity		84730	85076	85301	85301	85301
Return on equity	14%	11862	11911	11942	11942	11942

Interest on loan

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

- (a) The normative loan outstanding as on 1.4.2004 as per order dated 15.6.2007 was Rs.16963.87 lakh corresponding to gross loan of Rs 84610 lakh. The normative loan arising on account of additional capital expenditure during 2004-05 and 2005-06 was Rs.562.85 lakh and Rs.1049.93 lakh respectively. Hence, the total outstanding notional loan as on 1.4.2005 and 1.4.2006 was Rs.85173 lakh and Rs.86223 lakh respectively.
- (b) Weighted average rate of interest on loan has been worked out after accounting for interest capitalized on loans as admitted in order dated 15.6.2007 along with addition of loan of Rs.1600 lakh drawn from Central Bank of India.
- (c) Normative repayment of loan considered is equal to the admissible depreciation for the year and restricted to maximum of notional loan amount in the year 2006-07, as allowed in the orders dated 19.7.2006 and 15.6.2007, subject to the final decision of the

Hon'ble Supreme Court in Civil Appeal No.5434/2007 and other related appeals preferred by the Commission.

37. Interest on loan has been computed as under:

(Rs in lakh)						
Details	Order dated 15.6.2007	2004-05	2005-06	2006-07	2007-08	2008-09
Gross loan opening	84610	84610	85173	86223	86223	86223
Cumulative repayment of loan upto previous year	67646	67646	73926	80250	86223	86223
Net loan opening	16964	16964	11246	5973	0	0
Addition of additional capital expenditure loan		563	1050	0	0	0
Repayment of loan during the year		6280	6323	5973	0	0
Net loan closing		11246	5973	0	0	0
Average loan		14105	8610	2987	0	0
Wt. average rate of Interest		8.1560%	7.8201%	8.0169%	7.6465%	7.4515%
Interest on Loan		1150	673	239	0	0

Depreciation

38. The petitioner has calculated the weighted average rate of depreciation as 3.70% in terms of order dated 15.6.2007 and the same has been considered for computation of tariff on account of additional capital expenditure for the years 2004-05, 2005-06 and 2006-07 as notional loan is still outstanding during these years. However, the normative loan arising on account of additional capital expenditure also gets repaid through depreciation by the year 2006-07 and the remaining depreciation recoverable from the year 2007-08 is spread over the balance useful life of 6.10 years. Adjustment of cumulative depreciation on account of de-capitalisation 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 petitioner has furnished the depreciation recovered based

on the books of accounts and has limited it to 90% of the total value of the assets. The necessary calculations are as under:

(Rs in lakh)						
	Order dated 15.6.2007	2004-05	2005-06	2006-07	2007-08	2008-09
Opening capital cost	169220	169220	170024	171524	171524	171524
Closing capital cost		170024	171524	171524	171524	171524
Average capital cost		169622	170774	171524	171524	171524
Depreciable value @ 90%	151572	151934	152971	153645	153645	153645
Balance depreciable value	33742	34104	29177	23650	17299	14463
Balance useful life	9.1	9.10	8.10	7.10	6.10	5.10
Depreciation		6280	6323	6351	2836	2836
Cumulative Depreciation	117830	124110	130117	136346	139182	142018

Advance Against Depreciation

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

O&M expenses

40. O&M expenses as considered in the order dated 15.6.2007 in Review Petition No.96/2006 have been considered.

Interest on Working capital

41. For the purpose of calculation of working capital, the operating parameters including the price of fuel components as considered in the order dated 15.6.2007 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)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Coal Stock- 1.1/2 months	7497	7497	7497	7518	7497
Oil Stock- 2 months	688	688	688	690	688
O & M expenses	1690	1757	1828	1900	1977
Maintenance spares	2617	2774	2940	3117	3304
Receivables	17797	17873	17956	17501	17633
Total Working Capital	30289	30589	30909	30726	31099
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest on Working Capital	3105	3135	3168	3149	3188

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

	(Rs. in lakh)				
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on Loan	1150	673	239	0	0
Interest on Working Capital	3105	3135	3168	3149	3188
Depreciation	6280	6323	6351	2836	2836
Advance Against Depreciation	0	0	0	0	0
Return on Equity	11862	11911	11942	11942	11942
O & M Expenses	20280	21087	21930	22800	23727
TOTAL	42678	43129	43631	40727	41693

43. The target availability of 80% considered by the Commission in the original order dated 19.7.2006 remains unchanged. Similarly, other parameters viz., specific fuel consumption, Auxiliary Power consumption and Station Heat rate etc considered in the order dated 19.7.2006 have been retained for the purpose of calculation of the revised fixed charges.

44. The petitioner shall claim the difference in tariff on account of additional capitalization from the beneficiaries in three equal monthly installments.

45. The petitioner's prayer in clause (iii) of the petition as extracted in para 1 of this order stands disposed of in terms of the decision of the Commission in para 46 of the order dated 29.9.2008 in Petition No. 27/2007 pertaining to revision of fixed charges based on impact of additional capital expenditure in respect of Kahalgaon Super Thermal Power Station, Stage-I, (840 MW)

46. As regards the prayer of the petitioner for reimbursement of filing fees from the beneficiaries, the decision of the Commission in order dated 11.9.2008 in Petition No. 129/2005 (*suo motu*) pertaining to reimbursement of application fees and publication charges would be applicable.

47. Petition No.48/2007 stands disposed of in terms of the above.

Sd/-
(R. KRISHNAMOORTHY)
MEMBER

Sd/-
(BHANU BHUSHAN)
MEMBER

New Delhi dated the 20th November, 2008