# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Coram
Shri R. Krishnamoorthy, Member
Shri S. Jayaraman, Member
Shri V.S.Verma, Member

**Petition No. 32/2007** 

#### In the matter of

Revision of fixed charges for the period 2004-09 after considering the impact of additional capital expenditure incurred during 2004-05 and 2005-06 in respect of Farakka STPS, (1600 MW).

#### And in the matter of

NTPC Ltd, New Delhi ......Petitioner

Vs

- 1. West Bengal State Electricity Distribution Co. Ltd., Calcutta
- 2. Bihar State Electricity Board, Patna
- 3. Jharkhand State Electricity Board, Ranchi
- 4. Grid Corporation of Orissa Ltd., Bhubaneshwar
- 5. Damodar Valley Corporation, Calcutta
- 6. Power Department, Govt. of Sikkim, Gangtok
- 7. Tamil Nadu Electricity Board, Chennai
- 8. Union Territory of Pondicherry, Pondicherry
- 9. Uttar Pradesh Power Corporation Ltd., Lucknow
- 10. Power Development Department, Govt. of J&K, Srinagar
- 11. Power Department, UT of Chandigarh, Chandigarh
- 12. Madhya Pradesh Power Trading Co. Ltd., Jabalpur
- 13. Gujarat Urja Vikas Nigam Ltd, Vadodara
- 14. Electricity Department, Administration of Daman & Diu, Daman
- 15. Electricity Department, Administration of Dadra & Nagar Haveli, Silvassa
- 16. Delhi Transco Ltd, New Delhi
- 17. Maharashtra State Electricity Distribution Co. Ltd., Mumbai ... Respondents

#### Following were present

- 1. Shri V.K.Padha, NTPC
- 2. Shri G.K Dua, NTPC
- 3. Shri Vivek Kumar, NTPC
- 4, Shri R.B.Sharma, Advocate, BSEB

# ORDER (Date of hearing: 22.10.2009)

The petitioner had made this application for approval of the revised fixed charges for the period 2004-09, after considering the impact of additional capital expenditure incurred during 2004-05 and 2005-06, in respect of Farakka Super Thermal Power Station (1600 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").

2. The Commission by its order dated 9.5.2006 in Petition No.153/2004 determined the tariff for the generating station for the period 2004-09. Against the said order, the petitioner filed Review Petition No. 59/2006 and by order dated 27.10.2006, the Commission modified the order dated 9.5.2006 after correction of the balance useful life of the generating station. Subsequently, the Commission by order 22.7.2008 in Petition No. 32/2007 revised the annual fixed charges of the generating station after accounting for additional capital expenditure for the years 2004-05 and 2005-06. The annual fixed charges of the generating station by order dated 24.12.2008, after correction of ministerial errors in the computation of interest on loan, as under:

(Rs in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on Loan	587	175	0	0	0
Interest on Working Capital	4549	4586	4559	4614	4656
Depreciation	11400	11440	7455	7455	7455
Advance Against Depreciation	0	0	0	0	0

Return on Equity	21398	21442	21470	21470	21470
O & M Expenses	15600	16222	16870	17540	18252
TOTAL	53534	53864	50354	51079	51833

- 3. Aggrieved by order dated 22.7.2008, the petitioner filed Review Petition No.100/2008 seeking review of the said order on the following two grounds, namely,
  - (a) Correction of ministerial errors;
  - (b) Disallowance of capitalization of expenditure on Residual Life Assessment (RLA) studies; and
  - (b) Disallowance of capitalization of IDC.
- 4. The Commission rejected the prayer of the petitioner for review of order on the ground of capitalization of expenditure on Residual Life Assessment studies, by order dated 25.6.2009, relying on the Appellate Tribunal's judgment dated 16.3.2009 in Appeal No.133/2008. By the same order certain ministerial errors in the order were corrected. On the question of capitalization of IDC, the Commission allowed review of order dated 22.7.2008 and directed that the petition be set down for hearing, by order dated 29.9.2009. Accordingly, the petition has been reopened to consider the question of capitalization of IDC.
- 5. Heard the parties present.
- 6. The petitioner has pointed out that in the past the Commission had been allowing capitalization of IDC under similar circumstances and on account of denial of its claim, the interest paid during the period of construction would remain un-serviced, resulting in perpetual loss. The petitioner also submitted that it had actually incurred expenses towards IDC and the same ought to be considered as part of the capital cost for the purpose of tariff. The petitioner further emphasized that IDC in respect of loan applied to

the works executed under R&M, forms part of the capital cost and added that the accounting rules also permitted capitalization of IDC.

- 7. Learned counsel for the respondent No.2, Bihar State Electricity Board, submitted that the petitioner was not entitled to the claim for capitalization of IDC as the Commission in its order dated 22.7.2008 had given sufficient reasons for rejection of the claim. Learned counsel also pointed out that the petitioner had failed to point to any provision of the tariff regulations supporting capitalization of IDC and therefore, no relief could be granted. Learned counsel further submitted that determination of tariff of the generating stations was guided by the tariff regulations framed by the Commission and not by the accounting principles adopted by the petitioner. Learned counsel submitted that the petitioner had questioned the findings of the Commission in the said order dated 22.7.2008 which could only be considered in an appeal, and not on a review application, as there existed definitive limits for exercise of the power of review. To substantiate, the learned counsel referred to para 3 of the judgment dated 24.3.2009 of the Appellate Tribunal in Review Petition No. 1/2009 in Appeal No.64/2008 (H.M.Steel Ltd & ors-v-HPERC & ors) and submitted that the claim of the petitioner should be rejected. On the petitioner's averment that capitalization of IDC was allowed by the Commission in the past, learned counsel submitted that the issue had neither been raised in the petition nor in any of the annexures accompanying the petition. Learned counsel reiterated that the claim of the petitioner deserved no consideration and prayed that the application be rejected.
- 8. The petitioner has claimed capitalization of IDC of Rs 23.09 lakh during 2005-06, which was disallowed by the Commission by order dated 22.7.2008 in Petition No.

32/2007 for the reason that the 2004 regulations were silent on the question of capitalization of IDC on year-to-year basis. The petitioner in the past had claimed IDC for its other generating stations and the same was permitted by the Commission to be capitalized along with capitalization of the additional expenditure. This fact has not been denied by the respondents. The Commission has allowed capitalization of IDC in several other cases which fact was overlooked while approving the revised fixed charges for the generating station by order dated 22.7.2008. We are convinced that the judgment of the Appellate Tribunal dated 24.3.2009 in Review Petition No. 1/2009 in Appeal No.64/2008 (H.M.Steel Ltd & ors-v-HPERC & ors) referred to by learned counsel for the respondent BSEB, is not applicable to the instant case, since the departure from established practice to allow capitalization of IDC constitutes an 'error apparent on the face of the record' justifying review of the order dated 22.7.2008.

- 9. The learned counsel for respondent vehemently objected to the claim of Rs 23.09 lakh by the petitioner as IDC for the year 2005-06 and submitted that the said claim should be examined by the Commission, as the source of inclusion of IDC was not available to the respondent BSEB. In reply, the petitioner submitted that the expenditure incurred as IDC forms part of the actual capital expenditure of the approved R&M work/scheme in terms of sub-clause (iv) of clause (2) of Regulation 18 of the 2004 regulations for bringing the asset to use and should form part of the capital cost of the asset.
- 10. It is observed that capitalization of expenditure reflected in the books of accounts of the petitioner in respect of the works in progress contains the element of IDC. We are convinced that by not allowing IDC on works in respect of which additional expenditure

has been incurred, the component of interest incurred by the petitioner would remain un-serviced. The information sought for by the Commission as to the amount of IDC along with CWIP changes on year to year basis was to ensure that the total interest capitalized and charged to revenue does not exceed the amount payable by the petitioner. In the light of the above discussions, we allow the capitalization of Rs 23.09 lakh as IDC, during the year 2005-06.

11. Based on the above, we now proceed to revise the tariff for the generating station after considering the IDC of Rs 23.09 lakh for the year 2005-06, as under:

#### **CAPITAL COST**

- 12. The Commission has considered the gross block of Rs. 305438.14 lakh (inclusive of Rs. 1880.999 lakh as FERV) as on 1.4.2004. The same has been considered as the opening capital cost for the purpose of revision of tariff on account of the additional capital expenditure and IDC for the period 2004-09.
- 13. The additional capital expenditure allowed by the Commission for the years 2004-05 and 2005-06 after excluding the liabilities, cost of unserviceable assets etc, by order dated 22.7.2008, is as under:

			(Rs in lakh)
Year	2004-05	2005-06	Total
Additional capital expenditure	803.60	1320.36	2123.96

14. The amount of Rs.1320.36 lakh allowed as additional capital expenditure during the year 2005-06 did not include the amount of IDC of Rs. 23.09 lakh. After considering

the amount of Rs 23.09 lakh for the period 2005-06, the revised additional capital expenditure considered for the purpose of tariff is as under:

(Rs in lakh)

Year	2004-05	2005-06	Total
Additional capital expenditure	803.60	1343.45	2147.05

15. The capital cost for the purpose of tariff is revised for the purpose of tariff as under:

(Rs in lakh)

Year	2004-05	2005-06	2006-07	2007-08	2008-09
Opening capital cost	305438.14	306241.74	307585.19	307585.19	307585.19
Additional capital expenditure	803.60	1343.45			
Closing capital cost	306241.74	307585.19	307585.19	307585.19	307585.19
Average capital cost	305839.94	306913.46	307585.19	307585.19	307585.19

## **Debt-Equity Ratio**

- 16. Clause (1) of Regulation 20 of the 2004 regulations provides as under:
  - "(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."

17. The petitioner by its affidavit dated 18.10.2007 has stated that the deployment of loan during 2004-05 was nil and during 2005-06 was Rs.1300 lakh, considering FIFO

method and CWIP amounting to Rs. 377.44 lakh and 801.35 lakh respectively, during the years 2004-05 and 2005-06. The equity deployed for additional capital expenditure works out to more than 30% of the capital cost. Hence, in terms of sub clause (a) clause (1) of the above regulation, the debt equity ratio of 70:30 has been considered for the revision of tariff on account of additional capital expenditure. The notional equity works out as under:

		(Rs in lakh)
	2004-05	2005-06
Notional Equity	241.08	403.04

### **Return on Equity**

18. Return on equity has been worked out @14% per annum on the normative equity after accounting for additional capital expenditure as under:

(Rs in lakh)

Year	2004-05	2005-06	2006-07	2007-08	2008-09
Equity-opening	152719	152960	153363	153363	153363
Addition of equity due to additional capital expenditure	241	403	0	0	0
Equity closing	152960	153363	153363	153363	153363
Average equity	152840	153162	153363	153363	153363
Return on Equity	21398	21443	21471	21471	21471

### **Target Availability**

19. The Target availability of plant considered for the period 1.4.2004 to 31.3.2009 is 80 %.

#### Interest on loan

20. The interest on loan has been worked out as mentioned below:

- (a) The gross loan as per order dated 9.5.2006 was Rs. 152719 lakh. Addition of notional loan on account of additional capital expenditure during the years 2004-05 and 2005-06 is Rs.562.52 lakh and Rs. 940.42 lakh respectively. On account of addition of loan, gross loan during the years 2005-06 and 2006-07 and thereafter works out to Rs. 153282 lakh and Rs. 154222 lakh respectively.
- (b) Cumulative repayment of loan up to 31.3.2004, considered in order dated 25.1.2008 was Rs.133514 lakh and the same has been considered.
- (c) Actual repayment of actual loan has been used to calculate normative repayment of loan. Normative repayment has been worked out as per formula below:

- (d) The weighted average rate of interest as considered in order dated9.5.2006 has been considered.
- (e) Where normative repayment of loan is less than the depreciation of the same year, repayment has been considered to the extent of depreciation as considered in the orders dated 9.5.2006 and 27.10.2006, 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.
- 21. Interest on loan has been computed as under:

(Rs in lakh)

Year	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Opening loan	152719	153282	154222	154222	154222
Cumulative repayment of loan up to	133514	144914	154222	154222	154222
previous year					
Net loan opening	19205	8367	0	0	0
Addition of loan due to additional capital	563	940			
expenditure					
Repayment of loan during the year	11400	9308	0	0	0
Net Loan closing	8367	0	0	0	0
Average loan	13786	4184	0	0	0
Weighted Average rate of Interest on loan	4.2611%	4.1413%	4.3632%	4.9634%	5.9214%
Interest on Loan	587	173	0	0	0

#### **Depreciation**

- 22. Sub-clause (a)( of clause (ii)Regulation 21 of the 2004 regulations stipulates that for the purpose of tariff, depreciation shall be computed in the following manner, namely:
  - (i) XXX
  - (ii) XXXX
  - (iii) On repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life of the asset.
- 23. The petitioner has calculated depreciation based on the weighted average rate of depreciation as 3.73% as per order dated 9.5.2006 and the same rate has been used considered for revision of tariff on account of additional capital expenditure for the years 2004-05 and 2005-06. From the year 2006-07 onwards, the balance depreciation has been spread over the balance useful life of 12.43 years for the generating station. The depreciation is worked out as under:

(Rs in lakh)

Year	2004-05	2005-06	2006-07	2007-08	2008-09
Opening capital cost	305438.14	306241.74	307585.19	307585.19	307585.19
Additional capital expenditure	803.60	1343.45			
Closing capital cost	306241.74	307585.19	307585.19	307585.19	307585.19
Average capital cost	305839.94	306913.46	307585.19	307585.19	307585.19

Rate of depreciation	3.73%	3.73%	3.73%	3.73%	3.73%
Depreciable value @ 90%	274486	275453	276057	276057	276057
Balance depreciable value	113321	103160	92688	85231	77774
Balance useful life	14.43	13.43	12.43	11.43	10.43
Depreciation	11400	11440	7457	7457	7457

## **Advance against depreciation**

24. Advance Against Depreciation after accounting for additional capital expenditure is nil.

## **O&M Expenses**

25. O&M Expenses as considered in order dated 24.12.2008 as under has been considered.

 Years
 2004-05
 2005-06
 2006-07
 2007-08
 2008-09

 O&M Expenses
 15600
 16222
 16870
 17540
 18252

## **Interest on Working Capital**

26. 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	12392	12392	12392	12426	12392
Oil stock -2 months	504	504	504	506	504
O & M expenses	1300	1352	1406	1462	1521
Spares	4230	4484	4753	5038	5340
Receivables	25950	26005	25420	25588	25667
Total Working Capital	44376	44737	44475	45019	45424
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest on Working capital	4549	4586	4559	4614	4656

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

(Rs in lakh)

	(* 10 10)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	11400	11440	7457	7457	7457
Interest on loan	587	173	0	0	0
Return on Equity	21398	21443	21471	21471	21471
Advance Against Depreciation	0	0	0	0	0
Interest on Working capital	4549	4586	4559	4614	4656
O & M Expenses	15600	16222	16870	17540	18252
Total	53534	53863	50356	51082	51836

- 28. The difference in the amounts approved above and that of the amounts approved by order dated 24.12.2008 shall be adjusted between the parties, in three instalments.
- 29. Petition No.32/2007 is disposed of as above.

Sd/(V.S.VERMA) (S.JAYARAMAN)
MEMBER MEMBER

New Delhi dated the 23<sup>rd</sup> December 2009.

Sd/-(R. KRISHNAMOORTHY) MEMBER