

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 120/2005**

**Coram:**

1. Dr.Pramod Deo, Chairperson
2. Shri R.Krishnamoorthy, Member
3. Shri S.Jayaraman, Member

**DATE OF HEARING: 5.11.2009**

**DATE OF ORDER: 11.1.2010**

**In the matter of**

Approval of tariff in respect of Kahalgaon Super Thermal Power Station, Stage-I, (840 MW) for the period from 1.4.2004 to 31.3.2009.

**And in the matter of**

NTPC Ltd, New Delhi

.....**Petitioner**

Vs

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

---**Respondents**

**The following were present**

1. Shri M.G.Ramachandran, Advocate, NTPC
2. Shri V.K.Padha, NTPC
3. Shri G.K.Dua, NTPC
4. Shri D.Kar, NTPC
5. Shri Pradip Mishra, Advocate, MPPTCL
6. Shri Dilip Singh,MPPTCL

## ORDER

This petition was filed by the petitioner, NTPC for approval of tariff in respect of Kahalgaon Super Thermal Power Station, Stage-I (840 MW), (hereinafter referred to as "the generating station") for the period from 1.4.2004 to 31.3.2009 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004, (hereinafter referred to as "the 2004 regulations"). The annual fixed charges approved by the Commission by order dated 23.11.2006 is as under:

(Rs in lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on Loan	562	27	0	0	0
Interest on Working Capital	2688	2706	2682	2717	2743
Depreciation	7462	7462	4445	4445	4445
Advance against Depreciation	0	0	0	0	0
Return on Equity	14189	14189	14189	14189	14189
O & M Expenses	8736	9089	9450	9828	10223
<b>Total</b>	<b>33638</b>	<b>33473</b>	<b>30766</b>	<b>31179</b>	<b>31600</b>

2. In the order dated 23.11.2006, the tariff for the generating station was approved by the Commission based on the capital cost of Rs 202704.41 lakh (inclusive of additional capitalization of Rs. 5522.43 lakh for the period 2001-04 and FERV of Rs.1207.27 lakh for 2001-04) and with a debt-equity ratio of 50:50.

3. Aggrieved by order dated 23.11.2006, the respondent MPPTCL, (erstwhile 'MPSEB') (hereinafter referred as "respondent") filed Review Application No. 86/2007 on the issue of FERV/Extra Rupee liability during the period 2001-04 and its apportionment between debt and equity based on the judgment of the Appellate Tribunal for Electricity (Appellate Tribunal) dated 4.10.2006 in Appeal No. 135/2005 and other related appeals (TNEB-v- PGCIL & others) followed by judgment dated 22.12.2006 in

Appeal No. 161/2006 (MPSEB-v- PSEB), In the above said judgments, the Appellate Tribunal has held that FERV adjustments arising out of foreign currency loan has to be done against debt and not against equity, since in the case of the generating station, no equity was invested in foreign currency.

4. The Commission after hearing the parties, by its order dated 21.5.2008 dismissed the review application as under:

*“14. In view of the foregoing and in the absence of sufficient material on record, we are not satisfied that there exists sufficient reason to condone delay in making application for review. Accordingly, the application for condonation of delay is dismissed and as a consequence the application for review also stands dismissed as barred by limitation.”*

5. Against the order dated 21.5.2008, the respondent filed appeal before the Appellate Tribunal. By order dated 16.12.2008, the Appellate Tribunal allowed the appeal and remitted the matter to the Commission to consider the review petition on merits and dispose of the same in accordance with law after giving opportunity to both parties. Accordingly, the Commission after considering the affidavit dated 17.3.2009 filed by the respondent and the oral submissions made by the parties, by order dated 29.9.2009, allowed the application for review of order dated 23.11.2006 after condoning the delay in filing the said application. However, the Commission in its order did not consider the claim of the parties on merits based on the judgment of the Appellate Tribunal and directed that the petition be set down for hearing. Accordingly, the petition has been reopened to consider on merits, the question of capitalization of FERV, in respect of the generating station.

6. The learned counsel for the respondent submitted that the issue of capitalization of FERV raised by it in the Review Petition No.86/2007 having been allowed by order dated 29.9.2008, the tariff for the generating station should be revised, after adjustment of FERV arising out of foreign currency loan, against debt and not equity, in terms of the judgments of the Appellate Tribunal dated 4.10.2006 and 22.12.2006. Learned counsel submitted that once the Appellate Tribunal had interpreted the relevant regulations, the interpretation was uniformly applicable to all cases of similar nature. Learned counsel reiterated that the judgment of the Appellate Tribunal dated 4.10.2006 in Power Grid's case was applicable to the generating stations of NTPC as well, and prayed that the benefits should be passed on to the consumers by revising the tariff. Learned counsel submitted that by extending the judgment of the Appellate Tribunal to the generating station, there would not be any change in the debt-equity ratio in absolute terms, and the capital cost, after accounting for the exchange rate variation, could still be in the ratio of 50:50 as the loan amounts got reduced over a period of time. Learned counsel submitted that allocation of FERV to loan in terms of the judgment of the Appellate Tribunal would not reduce the petitioner's equity in any manner. Learned counsel also submitted that the reply of respondent No.4, TNEB indicated that the Commission had capitalized FERV amounting to Rs 1207.27 lakh, as against the actual FERV of Rs 539 lakh, for the period 2001-04 for purpose of tariff and this supported the review applicant's stand and sought the matter be looked into by the Commission.

7. The learned counsel for the petitioner submitted that the judgment dated 4.10.2006 was a result of an appeal by TNEB against the Commission's order relating to Power Grid and had no connection with the petitioner. Learned counsel submitted that

prior to the coming into force of the 2001 regulations, the treatment of FERV in case of the generating stations of NTPC was different from that given to Power Grid as FERV was apportioned based on the notifications issued by the Central Government which provided for capitalization of FERV on annual basis. To substantiate his claim, learned counsel pointed to Annexure-A of the affidavit dated 27.5.2009 and sought to differentiate the methodology applied to the treatment of FERV to its generating stations and the transmission assets of Power Grid. Learned counsel also pointed to the reply dated 26.11.2007 and submitted that the Commission had consciously applied the methodology for treatment of FERV to the generating stations without any deviation. Referring to the judgment of the Appellate Tribunal dated 4.10.2006, learned counsel pointed out that the Appellate Tribunal had also recognized that the equity component remained constant during the technical life of the transmission asset in case of Power Grid. Learned counsel further submitted that since payment of increased loan amount on account of FERV was made by the petitioner out of its internal resources, the same had to be added to equity, but the Commission had apportioned it on normative basis in debt-equity in the ratio of 50:50. Learned counsel also submitted that the beneficiaries including the review applicant in the past did not object to apportionment of FERV between debt and equity when the Return on Equity allowed to NTPC was @ 12% and the interest rates on loan ranged between 13.5% to 18%. Learned counsel also submitted that the methodology for capitalization of FERV and apportionment consistently followed by the Commission could not be changed at this stage and prayed that the claim of the respondent be dismissed.

8. The main issue in this petition is whether the treatment of FERV given by the Commission in its order dated 8.4.2005 in respect of the generating stations is required to be revised in the light of the judgment of the Appellate Tribunal dated 4.10.2006 in Appeal Nos. 135 to 140 of 2005. While the respondents/beneficiaries favour implementation of the judgment on the ground that it is an interpretation of Regulation 1.13 of the 2001 regulations and is equally applicable to the transmission system and generating stations, the petitioner is of the view that the interpretation already adopted by the Commission in respect of its generating station is the correct interpretation of Regulation 1.13 and should not be modified.

9. Regulation 1.13 of the 2001 regulations is provides as under:

*“Extra rupee liability towards interest payment and loan repayment actually incurred, in the relevant year shall be admissible; provided it directly arises out of foreign exchange rate variation and is not attributable to utility or its suppliers or contractors. Every utility shall follow the method as per the Accounting Standard-11 (eleven) as issued by the Institute of Chartered Accountants of India to calculate the impact of exchange rate variation on loan repayment.”*

10. Based on the provisions of Regulation 1.13 of the 2001 regulations as extracted above, the Commission has been computing the extra rupee liability arising out of FERV on account of interest payment and loan repayment as per the Accounting Standard-11 issued by the Institute of Chartered Accountant of India, and capitalised the same along with the project cost. However, for the purpose of sourcing, it was apportioned between debt equity ration for the generating stations and the transmission systems.

11. TNEB had challenged some of the tariff orders in respect of the transmission system of PGCIL in Appeal Nos. 135 to 140 of 2005, questioning the capitalisation of

FERV on accrual basis as on 1.4.2001, even in case of actual loan repayment taking place in the subsequent tariff period and the apportionment of FERV between debt and equity, on the ground that it was not permissible as per interpretation of the provision of Regulation 1.13 of the 2001 regulations. The Appellate Tribunal framed two issues, firstly whether the interpretation of Regulation 1.13 of the 2001 regulations by the Commission suffers from any illegality and secondly, whether the Commission was justified in apportioning FERV between loan and equity. The Appellate Tribunal in its judgment dated 4.10.2006 decided that the words "actually incurred" in Regulation 1.13 has been diluted in the second part of the regulation as extra rupee liability is to be decided by following the Accounting Standard-11 (eleven) which provides for capitalization on accrual basis on each 'balance sheet date'. As the Commission has adopted capitalization of FERV on accrual basis on the first date of each financial year during the tariff period, the Appellate Tribunal upheld the method of calculation of FERV adopted by the Commission. On the second issue, the Appellate Tribunal has concluded as under:

*" Once the fixed cost has been agreed to be financed in a certain ratio of debt and equity, the equity can be effected by FERV only if the equity is in foreign exchange. The provision of FERV as a pass through has been kept to ensure that any liability or gain, if any, arising on account of any variation in foreign exchange rates (whether debt or equity) is passed on to the beneficiary. In case there is no FERV liability or gain, as the case may be, there will not be any FERV adjustment. In the instant case the additional liability arising on account o FERV shall have an impact only on the debt liability and not equity capital. In this view of the matter, we hold that FERV adjustment is to be made in respect of debt liability and not in respect of the equity. Accordingly, we hold that the CERC is only to make adjustment in respect of debt liability and not in respect of the equity."*

12. The issue has been examined and the Commission is of the view that as foreign exchange utilized for the project was in the form of debt only, any additional liability or gain arising out of FERV should be adjusted against the loan liability only and should not

form part of the equity. In the present, case, the FERV of Rs. 1207 lakh calculated on normative basis shall form part of the debt and accordingly, debt equity ratio changes in the subsequent years for the purpose of calculation of depreciation, interest on loan and return of equity. The opening balance as on 1.4.2004 will get changed and tariff for the period 2004-09 is revised.

13. In view of the above, we proceed to revise the tariff for the generating station for the period 2004-09 after apportionment of FERV capitalized on normative basis for the period 2001-04, against loan instead of equity, in the approved debt-equity ratio. Consequent upon this, the debt-equity ratio works out to 50.30: 49.70 and the annual fixed charges for the generating station has been computed as discussed in subsequent paragraphs.

#### **Capital cost**

14. As stated above, the capital cost of Rs 202704 lakh as on 1.4.2004 (inclusive of additional capitalization of Rs 5522 lakh and FERV of Rs 1207 lakh has been considered.

#### **Debt-Equity**

15. In the original tariff order in respect of the generating station the Commission had considered debt-equity ratio of 50:50 .However, consequent upon apportionment of FERV against loan as stated above, the debt-equity ratio of 50.30: 49.70 has been considered for revision of tariff. Accordingly, an amount of Rs.100749 lakh has been considered as equity as on 1.4.2004, against equity of Rs 101352 lakh considered in the order dated 23.11.2006.



## Return on Equity

16. The return on equity has been worked out on equity of Rs 100749 lakh. The petitioner shall recover an amount of Rs.14105 lakh each year, during the period 2004-09, as return on equity.

## Interest on loan

17. Interest on loan is computed as under:

(Rs in lakh)						
Details	Up to 31.3.2004	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Loan Opening	97987					
Addition due to additional capitalization	2761					
Addition due to FERV	1207					
Gross Normative loan	101956	101956	101956	101956	101956	101956
Cumulative repayment of loan upto previous year		93491	100953	101956	101956	101956
Net loan opening		8465	1003	0	0	0
Repayment of loan during the year		7462	1003	0	0	0
Net loan Closing		1003	0	0	0	0
Average Loan		4734	501	0	0	0
Rate of Interest on loan		13.6180%	13.4105%	13.0959%	12.4823%	10.538%
<b>Interest on Loan</b>		<b>645</b>	<b>67</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Depreciation

18. Depreciation as considered in order dated 23.11.2006 has been considered.

## Advance Against Depreciation

19. The petitioner's entitlement to Advance Against Depreciation is 'nil'.

## O&M expenses

20. O&M expenses as considered in order dated 23.11.2006 has been considered.

## Interest on Working Capital

21. For the purpose of calculation of working capital, the operating parameters including the price of fuel components as considered in the order dated 23.11.2006 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	2004-05	2005-06	2006-07	2007-08	2008-09
Coal Stock- 1.1/2 months	7059	7059	7059	7079	7059
Oil stock -2 months	275	275	275	275	275
O & M expenses	728	757	788	819	852
Spares	2871	3043	3226	3419	3624
Receivables	15293	15259	14801	14896	14940
Total Working Capital	26226	26393	26148	26488	26750
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Total Interest on Working capital	<b>2688</b>	<b>2705</b>	<b>2680</b>	<b>2715</b>	<b>2742</b>

22. 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	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on Loan	645	67	0	0	0
Interest on Working Capital	2688	2705	2680	2715	2742
Depreciation	7462	7462	4445	4445	4445
Advance Against Depreciation	0	0	0	0	0
Return on Equity	14105	14105	14105	14105	14105
O&M Expenses	8736	9089	9450	9828	10223
<b>Total</b>	<b>33636</b>	<b>33429</b>	<b>30680</b>	<b>31093</b>	<b>31514</b>

23. The target availability of 80% considered by the Commission in the original order dated 23.11.2006 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.

24. The difference between the fixed charges approved vide order dated 23.11.2006 and those approved now, shall be adjusted by the parties in three equal monthly installments.

25. Petition No.120/2005 stands disposed of in terms of the above.

Sd/-  
**(S. JAYARAMAN)**  
**MEMBER**

Sd/-  
**(R.KRISHNAMOORTHY)**  
**MEMBER**

Sd/-  
**(DR.PRAMOD DEO)**  
**CHAIRPERSON**