# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Coram:

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

Petition No.32/2003

### In the matter of

Revision of tariff in respect of Agartala Gas Turbine Power Project (84 MW) for the period from 1.4.2003 to 31.3.2004

#### And in the matter of

North Eastern Electric Power Corporation Ltd.

.....Petitioner

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- 1. Assam State Electricity Board, Guwahati
- 2. Meghalya State Electricity Board, Shillong
- 3. Department of Power, Govt. of Tripura, Agartala
- 4. Power & Electricity Department, Govt. of Mizoram, Aizawl
- 5. Electricity Department, Govt. of Manipur, Imphal
- 6. Department of Power, Govt. of Arunachal Pradesh, Itanagar
- 7. Department of Power, Govt. of Nagaland, Kohima
- 8. North-Eastern Regional Electricity Board, Shillong
- 9. North-Eastern Regional Load Despatch Centre, Shillong

...Respondents

#### ORDER

The petitioner, North Eastern Electric Power Corporation Ltd (NEEPCO) had filed this petition for approval of tariff in respect of Agartala Gas Turbine Power Project (4X21 MW) (hereinafter referred to as "Agartala GTPP") for the period from 1.4.2003 to 31.3.2004 based on the terms and conditions contained in the Commission's Notification dated 26.3.2001, (hereinafter referred to as the "notification dated 26.3.2001"). On completion of pleadings and after hearing the parties, final tariff in respect of the

generating station for the said period was awarded vide the Commission's order dated 9.9.2005 restricting the capital cost to Rs. 31910 lakh, traced from the original project cost approved by the Central Government. Subsequently, the petitioner filed Review Petition No 132/2005 for revision of tariff of the generating station, which was dismissed vide Order dated 6.6.2006. The summary of the annual fixed charges awarded is given hereunder:

		(Rs. in lakh)	
	Particulars	2003-2004	
1	Interest on Loan	445	
2	Interest on Working Capital	219	
3	Depreciation	1765	
4	Advance against Depreciation	0	
5	Return on Equity	2553	
6	O & M Expenses	1035	
	TOTAL	6017	

- 2. The petitioner filed Appeal No 167 of 2005 before the Appellate Tribunal for Electricity (hereinafter referred to as "the Appellate Tribunal") which was disposed vide order dated 31.10.2006. The Appellate Tribunal vide the above order had held as under:
  - (a) As the beneficiaries were not prepared to evacuate power, time over-run and consequently cost over-run shall be allowed along with claim for depreciation.
  - (b) Interest on loan capital shall be determined based on normative debt repayment formula.

3. The above judgment of the Appellate Tribunal has necessitated recalculation of the annual fixed charges for the generating station. We proceed accordingly.

## **Capital Cost**

4. Capital cost of the project as per original approval of Ministry of Power vide letter dated 9.12.1994 is Rs. 29405 lakh including IDC of Rs. 2697 lakh. However, because of the time and cost over-run in the project, the Commission while determining tariff for the period 2003-04, considered capital cost of Rs. 31910 lakh as on 1.4.2003 including FERV up to 31.3.2003, as against actual capital expenditure of Rs. 32488 lakh on that date. The capital cost of Rs.31910 lakh was considered for the purpose of tariff as on 1.4.2003 in the following manner.

(Rs. In lakh)

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S. No.	Cost Component	
1.	Project cost as per original approval including IDC	29169
	Less IDC	2697
2.	Project cost as per original approval excluding IDC &WCM	26472
3.	Allowable increase in prices up to scheduled COD	3170
4.	Allowable IDC up to scheduled COD	417
5.	Reasonable Capital cost as in May 1996 (Scheduled COD)	30059
6.	Add FERV for the period between Scheduled COD and the actual	1061
	COD	
7.	Reasonable Capital cost as on actual COD	31120
8.	Add FERV from actual COD to 31.3.2003	790
9.	Reasonable Capital cost as on 31.3.2003	31910
10.	Actual Capital Expenditure as on 31.3.2003	32488
11.	Less Net revenue from sale of infirm power up to actual COD	271
12.	Actual Capital expenditure Less Net revenue from sale of infirm	32217
	power up to actual COD	
13.	Capital cost as on 1.4.2003 for the purpose of tariff (Restricted to the	31910
	reasonable capital cost)	

5. The Commission had arrived at actual capital expenditure of Rs. 32217 lakh after excluding net revenue of Rs. 271 lakh earned by the

petitioner from sale of infirm power. However, tariff was determined based on the approved capital cost and allowable additions thereon, towards FERV and IDC. In the proceedings in the Review Petition No. 132/2005, the petitioner confirmed that the net revenue of Rs. 271 lakh earned from the sale of infirm power was already deducted at the time of capitalization as per its accounting policy. As a result, Rs. 271 lakh was not required to be deducted from the actual capital expenditure submitted by the petitioner. This clarification by the petitioner, however, did not result in any revision of tariff because tariff was determined based on the approved cost and allowable additions thereon on account of FERV and IDC and not the actual capital expenditure as on 31.3.2003.

6. In terms of the above judgment of the Appellate Tribunal, cost over-run consequent to the delay in commercial operation of the project needs to be allowed in favour of the petitioner. As per the reconciliation of accounts submitted by the petitioner, actual capital expenditure as on 31.3.2003 was Rs.32488 lakh, including FERV of Rs.790 lakh and additional capitalisation of Rs.1889 lakh for the period 1999-2003 (subsequent to the date of commercial operation) and without adjusting the net revenue of Rs. 271 lakh earned from the sale of infirm power which had already stood adjusted at the time of capitalization. Accordingly, Rs.32488 lakh is allowed as the capital expenditure as on 1.4.2003 for the purpose of tariff.

## Return on equity

7. While debt - equity ratio of 1:1 as considered in the original tariff order has been retained, consequent to the revision of capital cost, equity base has

increased to Rs. 16244 lakh. Accordingly, return on equity at the rate of 16% has been computed as Rs. 2599 lakh.

## Interest on Loan

- 8. As per the above judgment of the Appellate Tribunal, interest on loan is to be recalculated on normative basis. Accordingly, interest on loan is recalculated as under:
  - (a) Gross opening loan amount has been worked out based on normative debt equity ratio of 1:1
  - (b) Cumulative repayment of loan upto 31.3.2003 has been worked out considering the scheduled repayment based on loan details provided by the petitioner.
  - (c) Annual repayment amount for the year 2003-04 has been worked out on normative basis as per the following formula:

Actual repayment during the year X normative net loan at the beginning of the year/actual net loan at the beginning of the year

- (d) Loan drawals upto 31.3.2003 have been considered
- (e) Government of India loans having higher rate of interest were pre-paid during 2003-04 by syndicated loan having floating rate of interest on 19.3.2003. Refinancing/substitution of Government of India loan by syndicated loan having floating rate of interest has not been

considered in the calculation for the reasons detailed in paras 4 (g) and 4 (h) of our order dated 7.1.2008 in Petition No. 33/2003, wherein the same issue has been discussed elaborately.

- (f) Deutsche Bank loan is having four parts and each part carries floating rate of interest. Therefore, the base rate of interest applicable for the tariff period for each part of Deutsche Bank loan has been worked out on weighted average basis based on the petitioner's submission dated 23.6.2005. Thereafter, the weighted average interest of Deutsche Bank loan on consolidated basis applicable for the tariff period has been worked out. The interest rate considered in the present computation is base rate of interest plus 0.60% margin. However, the interest on loan would be subject to adjustment in case of any change in base interest rate during the tariff period.
- (g) Guarantee fee of Rs. 84.86 lakh in case of Deutsche Bank loan for the year 2003-04 [1.12% (approximately)] of average loan amount for the year as per the petitioner's submission dated 23.6.2005 has been allowed.
- 9. Interest on Loan has been recalculated, by applying on the normative average loan, the weighted rate of interest on average loan worked out on the basis of actual rate of interest on actual loans as per the following details:

(Rs. In lakh)

Particulars	2003-04
Gross Loan Opening	16244
Cumulative repayments of loans upto previous	
year	7522
Net loan – Opening	8722
Increase/Decrease due to FERV	0
Increase/Decrease due to additional capitalization	0
Total	8722
Repayments of Loan during the year	1381
Net loan – Closing	7341
Average Net loan	8032
Rate of interest on loan	5.81%
Interest on loan	467

## **Depreciation**

10. While the rate of depreciation has remained 5.53%, as in the original tariff order, revision of capital cost has resulted in the revision of depreciation. Accordingly depreciation at the rate of 5.53% of the revised capital cost of Rs. 32488 lakh has been worked out as Rs. 1797 lakh.

## **Interest on Working Capital**

11. Revision of return on equity, interest on loan and depreciation has resulted in the revision of interest on working capital as interest on loan is a component of 'receivables' included in the working capital. Accordingly, interest on working capital has been recalculated as under:

(Rs in lakh)

	(1.10
Particulars	2003-04
Fuel cost	407
O&M expenses (1 Month)	86
Spares	0
Receivables	1833
Total Working Capital	2326
Rate of Interest	9.50%
Total Interest on Working Capital	221

12. The annual fixed charges for the year 2003-04 revised on the basis of the above are as under:

		Rs in lakh)	
Particulars		2003-04	
Interest on Loan			467
Interest on Working Capital			221
Depreciation			1797
Advance against Depreciation			0
Return on Equity			2599
O & M Expenses			1035
	TOTAL		6118

13. The petitioner shall recover the balance amount within six months immediately following the date of this order.

Sd/= (R KRISHNAMOORTHY) MEMBER Sd/= (BHANU BHUSHAN) MEMBER

New Delhi, dated 8<sup>th</sup> January, 2007