## CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Coram

- 1. Shri Ashok Basu, Chairman
- 2. Shri K.N.Sinha, Member

Petition No 35/2001

#### In the matter of

Approval of tariff of Talcher Super Thermal Power Station (1000 MW) for the period from 1.4.2001 to 31.3.2004.

And in the matter of

National Thermal Power Corporation Ltd.

.....Petitioner

#### V

- 1. West Bengal State Electricity Board, Kolkata
- 2. Bihar State Electricity Board, Patna
- 3. Jharkhand State Electricity Board
- 4. Grid Corporation of Orissa Ltd., Bhubaneshwar
- 5. Damodar Valley Corporation, Calcutta
- 6. Power Deptt., Govt. of Sikkim, Gangtok
- 7. Assam State Electricity Board, Guwahati
- 8. Transmission Corporation of Andhra Pradesh Ltd., Hyderabad
- 9. Tamil Nadu State Electricity Board, Chennai
- 10. Kerala State Electricity Board, Trivandrum
- 11. Karnataka Power Transmission Corporation Ltd., Bangalore
- 12. Uttar Pradesh Power Corpn. Limited, Lucknow
- 13. Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Haryana
- 14. Harvana Vidvut Prasaran Nigam Ltd., Harvana
- 15. Power Deptt, Union Territory of Chandigarh, Chandigarh
- 16. Madhya Pradesh State Electricity Board, Jabalpur
- 17. Gujarat Electricity Board, Vadodara
- 18. Electricity Department, Govt. of Pondicherry, Pondicherry

### The following were present

- 1. Shri Amit Kapur, Advocate, NTPC
- 2. Shri K.K. Garg, CM(Comml.), NTPC
- 3. Shri M.S. Chawla, AGM(Comml.), NTPC
- 4. Shri V.B. Jain, GM(Comml.), NTPC
- 5. Shri S.K. Sharma, Sr. Manager (C), NTPC
- 6. Shri Sandeep Mehta, NTPC
- 7. Shri Balaji Dubye, Sr. Law Officer, NTPC
- 8. Shri Visnu Sudharshan, Advocate, NTPC
- 9. Shri R. Mazumdar, NTPC
- 10. Ms. Ranjana Gupta, NTPC
- 11. Shri B. Arya, NTPC

- 12. Shri R.K. Balachandran, KSEB
- 13. Dr. S.C. Bhattacharya, WBSEB
- 14. Shri P.C. Saha, WBSEB
- 15. Shri K.J. Alva. KPTCL
- 16. Shri T.P.S.Bawa, SE, PSEB
- 17. Shri R.K. Mehta, Advocate, GRIDCO
- 18. Shri K.K. Panda, GRIDCO
- 19. Shri R. Mishra, GRIDCO
- 20. Shri Suman Kukret, GRIDCO
- 21. Shri S.K. Chowdhry, GRIDCO
- 22. Shri S.S. Nayak, GRIDCO
- 23. Shri Jayant Mehta, GEB
- 24. Shri D. Khandelwal, MPSEB
- 25. Shri T.K. Srivastava, UPPCL
- 26. Shri R.K. Arora, XEN, HVPNL
- 27. Shri D.D. Chopra, Advocate, UPPCL

# ORDER (DATE OF HEARING 9-9-2003)

The petitioner has sought approval of tariff for Talcher STPS for the period from 1.4.2001 to 31.3.2004 based on norms notified by the Commission.

- 2. For determination of tariff, the capital cost of the project is an essential base. In a connected matter, that is, Review Petition No.103/2002, which relates to tariff for the period prior to 1.4.2001, the petitioner has sought review of the Commission's order in another petition on the question of capital cost of Talcher STPS. The review petition is yet to be decided and a decision thereon may have its implication on the tariff for the period from 1.4.2001 to 31.3.2004. Therefore, it is unavoidable to keep the present petition pending.
- 3. We accordingly direct that the present petition be processed for hearing after a view has been taken in the Review Petition No.103/2002.

Sd/-(K.N. SINHA) MEMBER Sd/-(ASHOK BASU) CHAIRMAN

## CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Coram:

- 1. Shri Ashok Basu, Chairman
- 2. Shri K.N. Sinha, Member

Petition No.36/2003

#### In the matter of

Approval of two part tariff for Kopili Hydro Electric Project (4x50 MW) and Khandong Hydro Electric Project (2x25 MW) for the period from 1.4.2001 to 31.3.2004

North Eastern Electric Power Corporation Ltd.

.....Petitioner

#### Vs

- 19. Assam State Electricity Board, Guwahati
- 20. Meghalya State Electricity Board, Shillong
- 21. Department of Power, Govt. of Tripura, Agartala
- 22. Power & Electricity Department, Govt. of Mizoram, Aizwal
- 23. Electricity Department, Govt. of Manipur, Imphal
- 24. Deptt. of Power, Govt. of Arunachal Pradesh, Itanagar
- 25. Department of Power, Govt. of Nagaland, Kohima
- 26. North Eastern Regional Electricity Board, Shillong
- 27. North Eastern Regional Load Despatch Centre

.....Respondents

#### The following were present

- 1. Shri Parag P. Tripathi, Sr. Advocate, NEEPCO
- 2. Shri Sudhir Mishra, Advocate, NEEPCO
- 3. Shri Malcom D. Ray, ED(Comml.), NEEPCO
- 4. Shri Akhtar Hussein, Sr. Manager (E), NEEPCO
- 5. Shri B. Maharana, M(F), NEEPCO
- 6. Shri Deboni Dey, Sr. Manager (F), NEEPCO
- 7. Shri V. Vekanna, AM(F), NEEPCO
- 8. Shri Pankaj Singh, Advocate, NEEPCO
- 9. Shri M.K. Adhikary, ASEB
- 10. Shri B.K. Misra, MS, EREB
- 11. Shri H.K. Sharma, ASEB
- 12. Mrs. Rinchen O. Bhutia, Advocate, Power Department, Govt. of Sikkim

# ORDER (DATE OF HEARING : 25.8.2003)

Through this petition, the petitioner seeks fixation of tariff for Kopili Hydro Electric Project for the period from 1.4.2001 to 31.3.2004. The petitioner had earlier

filed Petition No.25/2000 for approval of tariff. After hearing, the Commission in its order dated 26.7.2002 had directed that for the period from 1.4.2001 onward, the tariff would be determined based on the terms and conditions notified by the Commission in its notification dated 26.3.2001 and the petitioner was directed to file a fresh petition for approval of tariff for the period from 1.4.2001 to 31.3.2004. The petitioner had sought approval of tariff in Petition No.25/2000 in respect of two different stations, namely, Khandong and Kopili. Therefore, the petitioner was directed to furnish the necessary details in respect of these two stations separately while filing the fresh petition. The present petition is filed in pursuance of these directions.

- 2. At the hearing of this petition on 25.8.2003 we had directed the petitioner to file information, as per details given below:
  - (a) Whether the augmentation and modernization works specified in the scope of work were completed and if so, actual expenditure incurred on the scheme, the year-wise details of additional capitalisation during different years and the reasons therefor.
  - (b) The year-wise details of arrears of pay and allowances on account of revision of pay scales for the years 1992-93 to 1996-97; the reasons for high O&M expenses for the years 1998-99 to 2001-02 and also the necessary justification where O&M expenses in other cases exceeded 20% of those relating to the previous year.
  - (c) Whether the total annual design energy of two power stations stated to be 1265 MUs has been approved by CEA.
  - (d) The year-wise details of incentive, productivity bonus, ex-gratia under the head "staff welfare expenses" paid to the employees 1995-96 to 2000-01.

- (e) Allocation and reconciliation of gross block as per books of accounts of the petitioner company, duly reconciled with their audited annual accounts for last five years.
- (f) Supporting loan-details as per Form 10 of the Commission's notification dated 26.3.2001.
- (g) Details of allocation of loans to two stations as on 31.3.2001, including date and amount of drawal of each loan and repayment schedule thereof in the form enclosed.
- (h) Details of rescheduling of Ministry of Power loan, as given in Form 10, duly supported by necessary approvals.
- (i) Cumulative depreciation up to 31.3.2001 as per books of accounts of the petitioner company, duly supported by Auditor's Certificate.
- (j) Copy of sanction letters for release of equity by the Central Government, showing date of release and total amount of equity up to 31.3.2001 as per books of accounts, duly reconciled based on the audited annual accounts.
- (k) Details of actual consumption of spares for the last five years as also the initial capitalised spares for both stations separately.
- (I) The year-wise details of expenditure incurred on balance payments or on any other account, after the date of commercial operation.
- 3. Learned senior counsel appearing for the petitioner had submitted that these details would be filed within five weeks. Time prayed for was allowed. The petitioner may file necessary details duly supported by affidavit with advance copy to the respondents. It was made clear that no further extension of time for the purpose would be allowed.

- 4. It was stated that the constituents of North-Eastern Region had agreed to implementation of ABT with effect from 1.10.2003. Accordingly, the approval of two-part tariff is essential for proper implementation of ABT.
- 5. In the absence of the necessary details called for in terms of our direction in para 2 above, it is not possible to determine final two-part tariff at this stage. Therefore, we have considered an interim arrangement on two-part tariff.
- 6. The Commission in its order dated 26.7.2002 in Petition No.25/2000 had allowed the petitioner to charge tariff at the rate of 69.8 paise/kwh on single part basis till approval of two-part tariff. We, therefore, propose to convert single part tariff of 69.8 paise/kwh into two-part tariff on provisional basis till final determination of tariff in the present petition.

### **Primay Energy Charge**

7. Primary Energy Charge is the product of Primary Saleable/Energy (ex-bus) and the Primary Energy Rate. The details of Primary Saleable Energy (ex-bus) are available with the petitioner. The Primary Energy Rate for the year 2001-2002 has been considered by taking variable charges of the Central Sector Thermal Power stations in the Eastern Region for the year 2000-2001 as the base and adding the transmission charges as applicable to the Eastern Region. The Primary Energy Rate for the year 2001-02 has been worked out as under:

#### **KOPILI & KHANDONG H.E. PROJECTS**

VARIABL	E CHAR	GES OF	THE CE EASTEI					OWER S	OITAT	NS OF			
STATION	APR.	MAY	JUNE			SEPT.		NOV	DEC		FEB	MAR.	Avg. Rate for
	P/Kwh	P/Kwh	P/Kwh	P/Kwh	P/Kwh	P/Kwh	P/Kwh	P/Kwh	P/Kwh	P/Kwh	P/Kwh	P/Kwh	the Year
FSTPP	78.16	85.92	80.65	84.99	84.75	85.59	86.50	84.72	79.11	75.91	84.84	84.84	83.00
KHSTPP	73.79	73.76	75.57	81.50	78.00	83.85	92.49	85.20	81.25	77.14	87.08	87.08	81.39
TSTPP	36.83	40.70	40.60	41.25	42.02	41.22	39.42	39.54	38.65	38.57	38.59	38.59	39.67
Average Lo	west Rate	e for the	year										
=36.83+4	10.7+40.6	6+41.25	+42.02+4	1.22+39	).42+39.	54+38.6	5+38.57	+38.59+	38.59=4	75.98/1	2= 39.67	7 p/kwh	
90% of Ave	rage lowe	est rate f	or the ve	ar	35.70								
2000-01 =						p/kwh							
To work ou	it Transn	nission	charges	of East	ern Reg	ion dur	ing 2000	-01					
a) Annual tr	ansmissi	on charg	ges of ER	(TSC) =	Rs. 269	9.9 crore	;						
b) Annual e	energy se	nt out fr	om ER=	18454.3	5 Gwh								
Transmissio	n charge	s of Eas	tern Reg	ion=(a/b	)*1000 :	= 14.62	paise/uni	t					
Primary	/ Energy												
	rate" =	paise/t	ınit)=50.3	o∠ paise	unit								

(\*)- This rate will be applicable to work out the tariff for the year 2001-02

8. Primary Energy Rate for the years 2002-03 and 2003-04 will be determined based on 90% of average of 12 months lowest variable charges of the Central sector coal based thermal stations of Eastern Region for the years 2001-02 and 2002-03 respectively. The transmission charges for Eastern Region will be added to arrive at Primary Energy Rates for these years.

### **Capacity Charge**

9. The single part tariff of Kopili & Khandong HEPs being @ 69.8 paise/kwh, the annual capacity charges would be worked out as follows:

Total fixed charges = Annual saleable design energy of the station \* Single Part

Tariff rate (p/kwh)

10. Annual Saleable Design Energy of the two stations will be worked out as follows:

	<u>Kopili</u>	<u>Khandong</u>
<ul><li>a) Annual design energy</li></ul>	= 936.21 Gwh	277.65 Gwh
b) (Auxiliary consumption		
+ Transformation Losses)	@1%= 9.36 Gwh	2.78 Gwh
c) Energy sent out	= 926.85 Gwh	274.87 Gwh
d) Free power to home state		32.98 Gwh
e) Annual Saleable design e	energy = 815.63 Gwh	241.89 Gwh

Total fixed charges= (815.63\* 69.8)/1000

(241.89\*69.8)/1000

Total fixed charges allowed = Rs. 56.93 crore Rs. 16.88 crore

Capacity charge = Total fixed charge – Primary Energy Charge

- 11. The Annual Design Energy figures for the above calculations have been considered as given in Petition No. 25/2000, that is, 1213.86 Gwh (936.21 Gwh for Kopili and 277.65 Gwh for Khandong station) because a confirmation that the revised figures of annual design energy submitted in the present petition are approved by the Central Electricity Authority is to be given by the petitioner in view of the direction reproduced at para 2 (c) above. The tariff approved by us is provisional and is subject to adjustment in the light of final determination of tariff on consideration of the information received from the petitioner.
- 12. List this petition on 23.10.2003.

Sd/-(K.N. SINHA) MEMBER

Sd/-(ASHOK BASU) CHAIRMAN

New Delhi dated the 16<sup>th</sup> September, 2003