

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram

1. **Shri Ashok Basu, Chairman**
2. **Shri K.N. Sinha, Member**
3. **Shri Bhanu Bhushan, Member**
4. **Shri A.H.Jung, Member**

Petition No.5/2005

In the matter of

Relief from excessive per unit charge from the hydro electric projects under NEEPCO mainly Ranganadi and Doyang in the post-ABT period, regulation over transmission constraints/contingency/natural calamities causing adverse effect on drawal/trading of power and surrendering of share of Doyang Hydro Electric Project

And In the matter of

Tripura State Electricity Corporation Limited

....Petitioner

Vs

1. North Eastern Electric Power Corporation Ltd., Shillong
2. Power Grid Corporation of India Ltd., New Delhi
3. National Hydroelectric Power Corporation Ltd., Faridabad
4. North Eastern Regional Electricity Board, Shillong
5. Assam State Electricity Board, Guwahati
6. Meghalaya State Electricity Board, Shillong
7. Department of Power, Govt. of Arunachal Pradesh, Itanagar
8. Electricity Department, Govt. of Manipur, Imphal
9. Power & Electricity Department, Govt. of Mizoram, Aizawl
10. Department of Power, Govt. of Nagaland, Kohima

....Respondents

The following were present:

1. Shri D. Ganguli, CMD, TSECL
2. Shri M. Debbam, EE, TSECL
3. Shri Ramachandran, NEEPCO
4. Shri Taruna Singh Baghel, NEEPCO
5. Shri Adhiraj Sen, NEEPCO
6. Shri Swapna Seshadri, NEEPCO
7. Shri Ranjan Mallil, NEEPCO
8. Shri K. Ganesan, NEEPCO
9. Shri S.K. Sinha, ED, PGCIL
10. Shri P.C. Pankaj, AGM, PGCIL
11. Shri U.K. Tyagi, DGM, PGCIL
12. Shri C. Kanan, CM, PGCIL

13. Shri A.K. Srivastava, NHPC
14. Shri H.M. Sharma, ASEB
15. Shri D. Das, ACE (Comm), ASEB
16. Shri R. Kapoor, ASEB

ORDER
(DATE OF HEARING : 12.7.2005)

The petitioner, Tripura State Electricity Corporation Ltd, a constituent of North-eastern Region has filed the present petition to seek relief on the following counts, namely:

- (i) From the "excessive" rise in per unit charge from Ranganadi and Doyang Hydro Electric Projects of the first respondent, North Eastern Electric Corporation Ltd (NEEPCO) in the post-ABT period from 1.11.2003 to 31.3.2004.
- (ii) For formulation of an appropriate regulation over contingency/transmission constraint/natural calamities, etc. for the constituents in the North-eastern Region.
- (iii) Declaration of maximum available capacity of 105 MW in case of Loktak Hydro Electric Project owned by third respondent, National Hydro Electric Power Corporation Ltd (NHPC), which is the installed capacity of the generating station against the presently declared maximum available capacity of 90 MW.
- (iv) For surrender of share from Doyang Hydro Electric Project.
- (v) Computation of incentive for Hydro Electric Projects in the ratio of primary schedule energy achieved and design energy of the corresponding month/period, in addition to capacity index only instead of existing formula.

2. The petition was heard on admission on 17.5.2005 when the issues at (iv) and (v) above were not admitted. The Commission vide order dated 25.5.2005 indicated the following reasons in support of non-admission of these two issues, namely:

“(iv) -So far as surrender of share from Doyang Hydro Electric Project is concerned, it bears notice that the allocation of power from a generating station is done by the Central Government. Therefore, the petitioner is at liberty to take up the matter with the Central Government for appropriate relief. It is beyond the powers and functions of the Commission under the Electricity Act, 2003 to pass any directions for surrender of share from a generating station. The direction as prayed for cannot be issued.

(v) -The petitioner has suggested a revised formula for calculation of incentive for the electricity generated from a hydro electric generating station. The methodology for computation of incentive has been notified by the Commission in terms of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff), Regulations 2004 published in the official Gazette on 29.3.2004. These regulations were finalised after previous publication and after notice to stakeholders and the repeated opportunities for hearing. No suggestions for computation of incentive on the lines now suggested were received from any quarters. As proposal made by the petitioner would require amendment of the regulations on Terms and Conditions of Tariff, the relief prayed for cannot be granted.”

3. Accordingly, for the purpose of present order, our discussion shall be limited to the remaining three issues on which the petition has been admitted.

“EXCESSIVE” RISE IN PER UNIT CHARGE

4. Availability Based Tariff (ABT) was introduced in the North-eastern Region on 1.11.2003. The petitioner has submitted that there has been abnormal increase in per unit charge by NEEPCO for Ranganadi and Doyang Hydro Electric Projects for the period 1.11.2003 to 31.3.2004, after ABT was implemented in the Region, as given below:

	Nov' 2003	Dec' 2003	Jan' 2004	Feb' 2004	Mar' 2004
Ranganadi	Rs.2.508/Unit	Rs.3.16/unit	Rs.3.78/unit	Rs14.52/unit	Rs.5.58/unit
Doyang	Rs.4.07/Unit	Rs.10.99/unit	Rs.13.95/unit	Rs 7.46/Unit	Rs.6.93/unit

5. According to the petitioner, the reasons for phenomenal increase in per unit charge are attributable to the fact that monthly fixed charges of the generating station were recovered from the beneficiaries as per allocated share, irrespective of energy generated in the months starting November 2003, when lean hydro season started. Thus, for small quantum of energy received by the beneficiaries during the period 1.11.2003 to 31.3.2004, full share of monthly fixed charge proportionate to capacity index (C.I.) achieved during this period is sought to be recovered.

Ranganadi Hydro Electric Project

6. It is submitted that the forced shut down of Ranganadi Hydro Electric Project from 11.2.2004 to 25.3.2004 on account of failure of power channel deprived the petitioner and other beneficiaries in the Region of their allocated power, but capacity charge was claimed based on C.I. The petitioner has submitted that NEEPCO should have distributed annual fixed charges for the pre-ABT and post-ABT periods in the ratio of corresponding design energy with reference to total annual design energy of the generating station and billed accordingly, as given below:

	Particulars	Periods	Particulars	Periods
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		1.4.2003 to 31.3.2004	1.4.2003 to 31.10.2003	1.11.2003 to 31.3.2004
1	AFC	Rs.202.52 crore		
2	Design Energy	1874MU	1574 MU (84%)	300 MU (16%)
3	Distribution of AFC on pro-rata w.r.t. Design Energy	Rs.202.52 crore	Rs.170.10 crore	Rs.32.40 crore
4.	Bill raised by NEEPCO in post ABT (a) Energy charge (b) Capacity Charge (c) Total bill			Rs.10.27 crore Rs.56.63 crore Rs.66.90 crore
5	Actual AFC receivable by NEEPCO in post ABT at CI value of 79.31% (79.31/85x32.40) = 30.23 crore			Rs.30.23 crore
6	Amount excess billed by NEEPCO in post ABT is (sl.no 4 – sl. no.5)			Rs.36.67 crore

7. Thus, according to the petitioner, NEEPCO has billed an excess amount of Rs. 36.67 crore for Ranganadi Hydro Electric Project during the period 1.11.2003 to 31.3.2004. At the hearing, the representative of the petitioner suggested that while computing annual primary energy charge for calculation of annual capacity charge (ACC), the energy rate during the period April 2003 to October 2003 should be taken @ Rs. 1.52/kWh instead of 51.74 paise/ kWh considered by NEEPCO.

8. The petitioner has given following details regarding energy generated during pre and post ABT periods and corresponding billing raised by the petitioner.

Month	Design energy (MU)	Generation (MU)	Energy sold (MU)	Billing amount (Rs. in crore)
Pre-ABT (April, 2003 to October, 2003)	1574 (1371.2)	748.62	658.79	100.13
Post-ABT (Nov., 2003 to March, 2004)	300 (261.4)	198.98	174.68	66.91
Total	1874 (1632.6) *	947.60	833.48	167.04

(*)- Figures in brackets shows saleable design energy

9. NEEPCO has submitted that considering the Scheduled Saleable Energy of 833.48 MU and C.I. of 79.31% for Ranganadi Hydro Electric Project during the period 1.4.2003 to 31.3.2004, NEEPCO would have recovered Rs. 192 crore (based on AFC of Rs. 202.52 crore and primary energy rate of 51.74 paise/unit), had there been ABT throughout the year. Thus, it has incurred a loss of Rs. 25 crore as a consequence of sale of electricity from Ranganadi Hydro Electric Project because of single-part tariff in the pre-ABT period from April 2003 to October 2003.

Doyang Hydro Electric Project

10. Doyang Hydro Electric Project was commissioned on 10.7.2000. The Commission vide order dated 6.10.2003 had approved two-part tariff on provisional basis applicable from 1.11.2003. This was based on GOI guidelines that tariff of Doyang Hydro Electric Project be fixed @ Rs. 2.00/kWh, with escalation @ 5% per annum. The provisional tariff was subsequently confirmed as final tariff from 10.7.2000 to 31.3.2004 vide the Commission's order (in petition No. 91/2002) dated 4.4.2005. Based on the above, the annual fixed charge of Rs.45.83 crore for the year 2003-04 were approved by the Commission.

11. The petitioner has submitted that in case of Doyang Hydro Electric Project also there was excessive rise in per unit charge in the post-ABT period, 1.11.2003 to 31.3.2004, which varied from Rs. 4.07/kWh to Rs. 13.95/kWh.

12. Neither the petitioner nor NEEPCO furnished the details regarding month-wise generation/energy sold to the beneficiaries during pre-ABT and post-ABT periods at Doyang Hydro Electric Project and also amount recovered by NEEPCO. As such,

NEEPCO was asked to submit month-wise details of energy supplied to the beneficiaries and amount recovered from them in the pre-ABT and post-ABT periods.

Details furnished by NEEPCO are reproduced hereinbelow:

Monthwise Energy bill drawn against Doyang Hydro Electric Project during 2003-04

Period	Month	NER beneficiaries		Export (Trading)		UI Energy		Free Power (MU)	Total	
		Energy (MU)	Amount (Rs. lakh)	Energy (MU)	Amount (Rs. lakh)	Energy (MU)	Amount (Rs. lakh)		Energy (MU)	Amount (Rs. lakh)
PRIOR TO ABT IMPLEMENTATION IN NER	Apr,03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	May,03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	June,03	0.81	17.82	0.00	0.00	0.00	0.00	0.11	0.92	17.82
	July 03	14.79	340.14*	0.00	0.00	0.00	0.00	2.02	16.81	340.14
	Aug, 03	0.00	0.00	18.83	354.63	8.10	91.06	4.08	31.01	445.69
	Sept,03	0.00	0.00	20.23	609.54	19.38	217.79	5.40	45.02	827.34
	Oct 03	0.00	0.00	7.66	184.32	17.01	191.15	3.36	28.04	375.47
	Total	15.60	357.96	46.72	1148.49	44.50	500.00	14.98	121.80	2006.46
SUBSEQUENT TO ABT IMPLEMENTATION IN NER	Nov, 03	10.16	340.07	0.00	0.00	0.00	0.76	1.37	11.62	340.83
	Dec, 03	3.46	385.99	0.00	0.00	0.19	4.96	0.50	4.15	390.96
	Jan, 04	2.52	337.14	0.00	0.00	0.25	6.91	0.38	3.15	344.04
	Feb, 04	3.97	299.44	0.00	0.00	0.40	2.56	0.59	4.97	302.00
	Mar, 04	5.25	366.15	0.00	0.00	0.32	2.48	0.75	6.33	368.62
	Total	25.37	1728.79	0.00	0.00	1.26	17.67	3.59	30.22	1746.45
	2003-04	40.97	2086.75	46.72	1148.49	45.75	517.67	18.57	152.01	3752.92

(*)- During pre-ABT, single part tariff rate was Rs. 2.315/ kwh.

Findings

13. The Commission approved two-part tariff for Ranganadi Hydro Electric Project (3x135 MW) vide order dated 11.4.2002 in Petition No.87/2001 on provisional basis. The provisional AFC for the year 2003-04 was Rs 202.52 crore (80%) against AFC of Rs 253.15 crore claimed by the petitioner. It was also stipulated by the Commission

that the primary energy rate would be 90% of the lowest variable cost of central thermal stations in Eastern Region plus the transmission charge in the Eastern Region. However, the provisional two-part tariff approved by the Commission could not be given effect to. Although the three generating units of Ranganadi Hydro Electric Project were declared to be in commercial operation on 12.2.2002, 12.2.2002 and 12.4.2002 respectively, they experienced serious teething problems, and had to be shut down for prolonged periods because of the following reasons :

- (i) Due to failure of HV winding of 400KV/132KV ICT , full power could not be evacuated from the project. Only limited power of the order of 60MW was transmitted on the existing 132 KV line.
- (ii) Because of shearing of bolts of runner assembly, the power station was under forced shut down since September, 2002.
- (iii) ICT became operational on 27.12.2002 but units were still under shutdown. The three generating units came back in operation subsequently on 31.5.2003, 22.9.2003 and 31.1.2003 respectively. However, the power station was again on forced outage due to failure of power channel from 11.2.2004 to 25.3.2004.

14. In such a situation, application of the provisional two-part tariff decided by the Commission by order dated 11.4.2002 became impractical, and NEEPCO agreed with the beneficiaries in a meeting held on 3.12.2002 to charge a single-part tariff of 152 paise/kWh, till full station capacity of 405 MW was demonstrated and became available again. This implied that in accordance with the agreement between NEEPCO and its beneficiaries, the single-part tariff of 152 paise/kWh was operative for Ranganadi Hydro Electric Project at least up to 22.9.2003. ABT was implemented in North-eastern Region w.e.f. 1.11.2003, as already stated.

15. The last para of 3.16 (iv) of the notification dated 26.3.2001, inter alia, lays down the methodology for computation of C.I. in case of mid-year changeover to tariff in accordance with principles contained in the said notification. The relevant extract are placed below:

“When the month of change over to tariff as per this notification is (not) the first month of a financial year, then ‘capacity index ‘ for the part of the year prior to switchover shall be “deemed capacity index” determined on the basis of actual generation plus backing down and weighted average of percentage allocated capacity share of the beneficiary shall be equal to its total drawal from station (as per regional energy accounting) expressed as percentage of total ex-bus generation. Payment of capacity charges for the period prior to switchover shall be regulated as per tariff applicable till the date of switchover and pro-rata incentive, as applicable shall be paid. Payment of Capacity Charges for the month after the switchover to tariff shall be as per the formula given above.”

16. The month-wise details of design energy in respect of Ranganadi Hydro Electric Project and Doyang Hydro Electric Project, as furnished by the petitioner are as under:

MONTHWISE DESIGN ENERGY		
MONTH	DESIGN ENERGY (Gwh)	
	Ranganadi HEP	Doyang HEP
April	63	11.52
May	253	12.79
June	243	22.90
July	301	14.28
August	276	55.80
September	264	31.97
October	174	20.01
November	79	11.52
December	63	11.90
January	49	11.90
February	54	10.75
March	55	11.90
TOTAL	1874	227.24

17. Prior to introduction of ABT in North-eastern Region on 1.11.2003, it was not really possible to apply the two-part tariff as per the Commission’s notification dated 26.3.2001, particularly for a hydro-electric generating station like Ranganadi. In fact,

through IA No.51/2003 filed in September 2003, NEEPCO applied for approval of two-part tariff afresh on the ground that ABT was to be introduced in Northeastern Region, even though the Commission had already specified the two-part tariff (with provisional AFC) for Ranganadi in April 2002 itself. In the above circumstances, it would be appropriate to extend the application of the mutually agreed single-part tariff of 152 paise/kWh up to 31.10.2003, that is, upto the date of implementation of ABT.

18. As a consequence of the above, the provisional two-part tariff granted by the Commission in its Order dated 11.4.2002 effectively came into force only from 1.11.2003. A question then arises as to how are the fixed charges for the remaining months of the year 2003-04 to be determined. Since ABT has been introduced after the monsoon months were over, provisions in the last paragraph of clause 3.16(iv) of the tariff notification dated 26.3.2001, which NEEPCO appears to have gone by, may not be really appropriate.

19. The fixed charges for the period 1.11.2003 to 31.3.2004 can be determined in three different ways. The first would be to go strictly by the provisions of the tariff notification dated 26.3.2001 reproduced above. This seems to have been done by NEEPCO, and has led to charges reflecting into very high per unit rates for certain months. The second alternative would be to apportion AFC for the year 2003-04 according to design energy for this period. In this case, the fixed charges to be recovered by NEEPCO during 1.11.2003 to 31.3.2004, on achieving normative capacity index of 85%, would be $202.52 \times 300/1874 = \text{Rs.}32.42$ crore. As per data submitted by NEEPCO, the capacity index actually achieved during 1.11.2003 to 31.3.2004 was $(99.31 + 99.20 + 80.51 + 27.82 + 15.80) \div 5 = 64.53\%$. Therefore, the

fixed charge payable to NEEPCO for this period would be $32.42 \times 64.53/85 = \text{Rs.}24.61$ crore. For actual energy sale of 174.68 MU, this would convert into an average rate of 140.9 paise/kWh. The third way of determining the fixed charges for the above period would be to multiply the mutually agreed rate of 152 paise/kWh by the saleable design energy for this period. The saleable design energy, corresponding to design energy of 300 MU is 261.36 MU, and the fixed charge to be recovered by NEEPCO, on achieving normative capacity index of 85%, would be $152 \times 261.36/1000 = \text{Rs.}39.73$ crore. Total amount to be recovered during post-ABT period (1.11.2003 to 31.3.2004) would be as follows:

Actual Generation	=	174.68 MU
Primary energy rate	=	51.74 unit
Primary energy charge	=	$[174.68 \times \frac{51.74}{0.88}] / 1000$
	=	Rs.10.27 crore
Fixed charge	=	Rs. 39.73 crore
Capacity charge	=	$39.73 - 10.27 = \text{Rs.}29.46$ crore
Disincentive	=	$29.46 \times (85-64.53)/100$
	=	Rs.6.03 crore
Total amount to be recovered in post-ABT period	=	$39.73-6.03$
	=	<u>Rs. 33.70 crore</u>

20. The first alternative is considered to be imposing too heavy a burden on the beneficiaries, particularly for the fact that the design energy for the period November, 2003 to April, 2004 was low, as seen from para 16 above. The second alternative is found to be resulting in a substantial revenue loss for NEEPCO. We, therefore, direct that the third alternative considered above be adopted for determining the capacity charge and energy charge for Ranganadi Hydro Electric Project for the 1.11.2003 to

31.3.2004 period. NEEPCO as well as the beneficiaries had agreed to the rate used in the third alternative, at least for the pre-ABT period.

21. As regards Doyang Hydro Electric Project (3x25 MW), the Commission has so far issued three (3) orders regarding tariff. In the first order dated 17.4.2003 in petition No.91/2002, based on NEEPCO's proposal (which in turn was based on Ministry of Power advice dated 22.1.2003), the Commission had approved a provisional tariff of Rs.2.00/kWh for the year 2000-01, with 5% escalation per year thereafter. In the pre-ABT period, this had to be necessarily applied on single-part basis only. The provisional rate for the year 2003-04, as per the above referred order was Rs.2.315 per kWh. In the second order dated 6.10.2003, the Commission had basically sought conversion of the above provisional single-part tariff into a provisional two-part tariff, in order to facilitate introduction of ABT in North-eastern Region from 1.11.2003. It was duly noted that details required for finalisation of tariff were awaited from NEEPCO, and it was necessary to continue with the provisional tariff. Recognizing the primacy of provisional single-part tariff for different financial years, the Commission had indicated the provisional annual fixed charges (AFC) for different years, by multiplying the provisional single-part rate by the annual saleable design energy of the generating station, i.e. 197.97 MU. In the third order made on 4.4.2005, the Commission has disposed of NEEPCO's petition, which had been pending for a very long time. In view of the continued failure of NEEPCO to furnish the details required for finalising the tariff, the Commission had no alternative but to confirm the provisional tariff specified in the previous order dated 6.10.2003, and thereby bring a finality for the period which was already past.

22. Since ABT was introduced in the middle of the financial year, after the monsoon months were over, a question, like that in case of Ranganadi Hydro Electric Project, has arisen as to what proportion of AFC for 2003-04 should have been recovered by NEEPCO in the ABT period (1.11.2003 to 31.3.2004). The last paragraph of clause 3.16(iv) of the tariff notification dated 26.3.2001 (reproduced under para 15 above), meant to cover the situation of mid-year changeover to ABT, is not really appropriate in the present case (where the per kWh rate is to have a primacy). The appropriate method in this case also would be to arrive at the fixed charge for 1.11.2003 to 31.3.2004 period by multiplication of the saleable design energy for this period by the provisional single part rate, i.e. Rs. 2.315 per kWh as in case of Ranganadi Hydro Electric Project.

23. From the data furnished by NEEPCO, it is noted that the total design energy for November-March period for Doyang Hydro Electric Project is $11.52 + 11.90 + 11.90 + 10.75 + 11.90 = 57.97$ MU. The corresponding ex-bus saleable design energy is 50.50 MU. The fixed charge for 1.11.2003 to 31.3.2004 period would then be Rs. 1169.1 lakh. The corresponding capacity charges for this period would be Rs.1169.1 lakh minus primary energy charges for these 5 months. Again, from the data furnished by NEEPCO, it is seen that C.I. for Doyang Hydro Electric Project during this period was $(98.55+97.25+82.50+72.03+84.99)\div 5 = 87.06\%$. This being more than the normative capacity index of 85%, incentive would be payable to NEEPCO @ 2.06% of the capacity charge for the 5 months. Accordingly, the total amount to be recovered during the post-ABT would be as under:

Actual generation	= 26.63 MU
Primary energy rate	= 51.74 paise/unit

Primary energy charge	= $[26.63 \times \frac{51.74}{0.88}]1000$ = Rs.1.56 crore
Fixed charge	= Rs. 11.69 crore
Capacity charge	= 11.69 – 1.56 = Rs.10.13 crore
Incentive for 2.06% higher capacity Index	= 10.13 x 2.06/100 = 0.21 crore

Amount to be recovered in post-ABT period= 11.69 +0.21 = **Rs.11.90 crore**

24. We realise that NEEPCO's revenue for the year 2003-04 would get significantly affected when billing for ABT period is revised as per our above directions. It is, however, important to note that the reason for NEEPCO not being able to recover the specified AFC during 2003-04 is low generation in the pre-ABT period. Had the generation during pre-ABT period been closer to the design energy, NEEPCO would have recovered the specified AFC. It would not be fair for NEEPCO to expect the mid-year ABT switch-over to facilitate making up of revenue loss on account of low generation in pre-ABT period.

25. We note that during 1.4.2003 to 31.10.2003 period, NEEPCO has sold 106.8 MU against saleable design energy of 147.5 MU. Even during post-ABT period, NEEPCO has sold only 26.63 MU against saleable design energy of 50.50 MU. We would also like to point out in this connection that an objective of ABT is to induce maximisation of generation and NEEPCO should reconcile to revenue recovery lower than AFC when the generation for the whole year is only 67% of the annual design energy. One of the other reasons for low generation during pre-ABT period was very low requisition by the beneficiaries of their entitlements. The requisitions would have been much higher had ABT been introduced earlier. NEEPCO has to reconcile to this situation. The revenue loss suffered by it due to shortcomings of the previous tariff scheme cannot be recouped by overcharging in ABT period.

SPECIAL RELIEF FOR TRANSMISSION CONSTRAINT/NATURAL CALAMITIES ETC.

26. The petitioner has submitted that the beneficiary constituents of North-eastern Region have been suffering from payment of high per unit charge and North-eastern Region being predominantly hydro based, the water is getting spilled during high hydro season when the North-eastern Region and North-eastern Region – Eastern Region Transmission constrains take place. Thus scope for sale of surplus power, either through bilateral trading or un-scheduled interchange becomes limited. Some of facts submitted by the petitioner are summarised below:

(i) Only 400 kV D/C transmission line between Balipara to Bongaigaon is available for connecting the North-eastern Region network with the Eastern Region and outage of any part or whole of the circuit restricts trading or UI all together.

(ii) Transmission constraints in Eastern Region as well as constraints in corridor of Eastern Region to other regions also severely affect power injection from North-eastern Region to Eastern Region.

27. At the hearing it was submitted on behalf of the petitioner that during the period from 24.5.2004 to 28.6.2004, North-eastern Region power was maximum because of high hydro season, which could not be traded or injected through UI on account of planned shut-down of Sasaram HVDC link (between ER and NR) by PGCIL. It resulted in spillage of the surplus water energy during the period of non-availability of transmission corridor. Further, during the period 11.7.2004 to 23.7.2004, failure of 400 kV Balipara – Bongaigaon transmission line on account of floods in Assam resulted in total stoppage of injection from North-eastern Region to Eastern Region.

28. The petitioner has prayed the Commission to derive a regulation to cover contingencies and natural calamities so that the beneficiary constituents should not suffer in all the cases when they have no fault/control over the contingencies.

29. On the question of planned shut down of Sasaram HVDC link during high hydro period, Executive Director, PGCIL, the second respondent, clarified that planned shut down was carried out in May-June, 2004 because these months are not considered to be high hydro period. He submitted that PGCIL would be more careful in future before taking up planned shut down of Sasaram HVDC link. PGCIL has further submitted that to export surplus power outside North-eastern Region, which is to the extent of 400-500 MW, there exists at present inter-regional lines like Bongaigaon – Siliguri 400 kV D/C line and Salakati-Birpara 200 kV D/C line with Eastern Region, having total transmission capacity of about 1000-1200 MW. Thus, there is no transmission constraint between North-eastern Region and Eastern Region for export of surplus power. According to PGCIL, the inadequacy in the transmission system experienced by States in North-eastern Region is mainly because a number of transmission links in the State sector have been out of service, due to which respective State may have faced constraints in receiving the power even though the transmission system under the Central sector is adequate and highly reliable. PGCIL has submitted that the transmission system availability has been above 99% in the past three years.

30. NEEPCO has submitted that the petitioner's plea that generator should be penalized during transmission constraints defies all logic. The transmission constraints in North-eastern Region do not exist because of the generator's fault. NEEPCO has submitted that if and when the Commission specifies any regulation for relief to North-

eastern Region States, as prayed for, the capacity charge and/or fixed charges payable to the generator should remain unaffected.

31. There does not seem to be any merit in the plea of the petitioner that any special relief is required over contingency/transmission constraint/natural calamities etc. for North-eastern Region constituents. They have been allocated power from the central generating stations for supply within the Region. It is only incidentally that they may be selling power outside the region when power is surplus to their requirement. To transmit surplus power outside the region, the respective States of the region have to strengthen their own transmission links with the links of PGCIL. The existing regulations notified by the Commission take adequate care of the situations of forced or planned outages of the transmission system owned by PGCIL. Therefore, we do not consider the need to specify separate regulation to cater to the situations catalogued by the petitioner. We are satisfied with the undertaking given on behalf of PGCIL that it will not take up any planned shut down of the transmission lines during the high hydro period to avoid any spillage of water and generation of zero cost hydro energy.

MAXIMUM AVAILABLE CAPACITY OF LOKTAK HYDRO ELECTRIC PROJECT

32. The petitioner has submitted that as stipulated under clause 45(xviii) in the Commission's notification dated 26.3.2004, the maximum available capacity of the generating station declared for the day shall be equal to installed capacity including over load capability minus auxiliary consumption and transformation losses, corrected for the reservoir level. It has been pointed out that in case of Loktak Hydro Electric Project, the maximum available capacity declared for the day on the basis of daily declaration is about 90 MW only whereas the installed capacity of the generating

station is 105 MW (3 x 35 MW). AFC and design energy of the generating station are derived based on installed capacity of 105 MW, but while making declaration of daily maximum available capacity, the generator is declaring it at a lesser value of around 90 MW. The petitioner has stated that as a result of lower declaration of maximum available capacity, C.I. value is always higher resulting in higher incentive to the generator and seeks directions to NHPC for declaration of maximum available capacity of 105 MW.

33. This issue raised by the petitioner is not consequential or incidental to other main reliefs sought in the present petition. This involves interpretation and construction of the Commission's regulations dated 26.3.2004. We do not propose to go into this question in the present proceedings. The petitioner is at liberty to make a separate application in accordance with law for redressal of its grievance on this account.

34. With the above directions, the petition stands disposed of.

Sd/-
(A.H. JUNG)
MEMBER

Sd/-
(BHANU BHUSHAN)
MEMBER

Sd/-
(K.N. SINHA)
MEMBER

Sd/-
(ASHOK BASU)
CHAIRMAN

New Delhi dated the 30th September 2005