

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram

1. **Shri D.P. Sinha, Member**
2. **Shri G.S. Rajamani, Member**
3. **Shri K.N.Sinha, Member**

Petition No.48/2000

In the matter of

Approval of Tariff for Malda-Bongaigaon Transmission Line .

And in the matter of

Power Grid Corporation of India Ltd. Petitioner

VS

1. Assam State Electricity Board
2. Meghalaya State Electricity Board
3. Government of Arunachal Pradesh
4. Power & Electricity Deptt., Govt of Mizoram
5. Electricity Department, Govt of Manipur
6. Deptt. of Power, Govt. of Nagaland
7. Deptt of Power, Govt. of Tripura
8. Bihar State Electricity Board
9. West Bengal State Electricity Board
10. Grid Corporation of Orissa Ltd
11. Damodar Valley Corporation, Calcutta
12. Power Deptt., Govt. of Sikkim
13. Jharkand State Electricity Board Respondents

The following were present:

1. Shri S.S. Sharma, AGM, PGCIL
2. Shri U.K. Tyagi, PGCIL
3. Shri C. Kannan, PGCIL
4. Shri K.K.S. Babu, PGCIL
5. Shri Sanjay Mehra, PGCIL

6. Shri S. Gopal, PGCIL
7. Shri A.K. Nagpal, PGCIL
8. Shri S.S. Vindal, PGCIL
9. Shri D. Sen, PGCIL
10. Shri H.K. Sharma, ASEB
11. Shri M.Prasad, BSEB.
12. Shri S.Mondal, DVC.
13. Shri T.K. Gosh, DVC.

ORDER
(DATE OF HEARING 19-2-2002)

The petitioner has filed this petition for approval of tariff for Malda-Bongaigaon transmission line, forming part of Kathalguri Transmission System.

2. Ministry of Power had initially accorded the administrative approval and expenditure sanction for the transmission system associated with Kathalguri Gas Based Power Project for an estimated cost of Rs.681.19 crores, including IDC of Rs.16.03 crores vide its letter dated 22.2.1995, with following lines/sub-stations :-

(A) TRANSMISSION LINES

- (i) 400 kV D/C Kathalguri-Miriani Line
- (ii) 400 kV D/C Mariani-Misa Line
- (iii) 400 kV D/C Misa-Balipara Line
- (iv) 400 kV D/C Balipara-Bongaigaon Line
- (v) 400 kV D/C Bongaigaon-Malda Line
- (vi) 220 kV S/C Balipapara-Tejpur Line

(B) SUB-STATIONS

- (i) New 400/220 kV sub-station of 315 MVA each at Misa, Balipara and Bongaigaon
- (ii) Extension of 400 kV sub-station of Power Grid at Malda
- (iii) Extension of 220 kV Mariani (ASEB) sub-station by two 220 kV bays and Tezpur (ASEB) substation by one 220 kV.

3. When Ministry of Power accorded its administrative approval in February 1995, the Kathalguri-Mariani line [2 (A) (I)] had already been commissioned, the remaining lines and sub-stations were to be commissioned during the year 1995-1996. This line was actually commissioned on 1-4-2000. Ministry of Power issued a fresh approval on 22.3.2001 to the revised cost estimates of the Kathalguri Transmission System for Rs.1010.10 crores, including an IDC of Rs.248.54 crores based on fourth quarter 1998 price level. The apportioned approved cost and completion cost in respect of Malda-Bongaigaon Transmission Line [2(A) (v)] which is the subject matter of the present petition, as submitted by the petitioner, are as under :

(Rs. In crores)

	Apportioned Approved Cost	Completion Cost
Capital cost	200.79	208.41
IEDC	23.46	26.34
IDC	73.18	121.60
Total	297.43	@356.35

@Includes anticipated expenditure.

4. Based on above, the petitioner has claimed tariff of Rs 7667.14 lakhs for the year 2000-2001, that is, from 1.4.2000, the date of commercial operation to 31..3.2001.

5. The Malda-Bongaigaon Transmission Line is an inter-regional transmission line and according to the petitioner transmission tariff for these assets is to be shared by the constituents of Eastern and North-Eastern region in accordance with Ministry of Power notification dated 3.3.1998.

6. It has been further submitted on behalf of the petitioner that there is no firm allocation of power between Eastern region and North-Eastern region and, therefore, the transmission charges for the assets covered under this petition should be shared by the constituents of Eastern and North-Eastern region in equal proportion, that is, in the ratio of 50:50 as provided in Ministry of Power notification dated 3.3.1998.

7. The replies to the petition have been filed on behalf of West Bengal State Electricity Board, Grid Corporation of Orissa Ltd., Damodar Valley Corporation and Bihar State Electricity Board in the Eastern region. Similarly, the replies have also been filed on behalf of the constituents of North-Eastern region.

8. In the first place, we deal with the issue raised by the constituents of North - Eastern region. The constituents of North-Eastern region have stated that so far as they are concerned, they are paying Uniform Common Pool Transmission Tariff (UCPTT), according to which, the constituents of North-Eastern region are liable to pay tariff at the rate of 35 paise per unit of energy transmitted in the region through the transmission system built by the petitioner and they are already paying these charges. Therefore, according to them, they are not liable to pay anything additional on account of

commissioning of Malda-Bongaigaon Transmission Line as no additional power is being transmitted through this line even with the commissioning of Malda-Bongaigaon Transmission Line. The petitioner, however, claimed that since investment has been made on construction of the transmission line, the additional tariff should be paid by the constituents of North-Eastern region.

9. We have already considered this issue in Petition No.40/2000 (Power Grid Corporation of India Ltd Vs Assam State Electricity Board and others), which related to approval of transmission tariff for the other components of Kathalguri Transmission System, exclusive to North-Eastern region. On consideration of the submissions made on behalf of the parties in Petition No.40/2000, the Commission had noted that there was an excess transmission capacity for which no benefit was accruing to the respondents, the constituents of North-Eastern region, and, therefore, they could not be made liable to pay the transmission charges for the excess capacity. The Commission had, therefore, directed that the constituents of North-Eastern region would continue to pay the transmission charges at the rate of 35 paise per kwh for the power transmitted in the region on the petitioner's transmission system. It was, however, observed that after finalisation of relief package for North-Eastern region under consideration of the Central Government, the difference between actual tariff and tariff of 35 paise per kwh would be provided from the relief package. In view of the directions given in order dated 1.1.2002 in Petition No.40/2000, we do not consider it necessary to pass any fresh order for tariff in the present petition so far as the constituents of North-Eastern region are concerned. The directions contained in the said order dated 1.1.2002 shall *ipso*

facto apply to the present petition as well, so far as the beneficiaries in North- Eastern region are concerned.

10. We now propose to consider different elements of tariff in the light of comments made by the respondents in the Eastern Region, who have already agreed to share 50% of the tariff on account of Malda-Bongaigaon transmission line.

CAPITAL COST

11. The petitioner has claimed tariff based on completion cost of Rs.356.35 crores. In accordance with the completion schedule decided by the Central Government, the transmission system was to be commissioned during 1995-96. The transmission line was, however, declared under commercial operation with effect from 1.4.2000. There is thus a delay of about four years in completion of the project. According to the respondents, the petitioner should not be entitled to IDC on account of delayed completion of the project. The petitioner has clarified that as per the schedule laid down by Ministry of Power the entire transmission system was to be completed by March 1996, but Malda-Bongaigaon line was actually commissioned on 1.4.2000. The delay is primarily on account of law and order situation and insurgency problems in the North-Eastern region. The petitioner has adverted to forcible abduction of its personnel and also killing of contractor's personnel as the contributory factors for delay. We have considered the explanation furnished by the petitioner in support of the delay in execution of the project. On consideration of the circumstances placed on record by the petitioner, we are satisfied that the reasons for delay are not directly attributable to the petitioner and delay is on account of special circumstances prevailing in the North-

Eastern region, over which the petitioner had no control. Therefore, we overrule the objection raised on behalf of the respondents in this regard.

12. It is next pointed out on behalf of the respondents that the petitioner has employed debt and equity in the ratio of 66:34 though, debt-equity should be in the ratio of 80:20 or in any case in the ratio of 70:30. It has been explained on behalf of the petitioner that for the purpose of investment approval, debt-equity ratio of 80:20 was considered. However, actual debt-equity mix is based on the phasing of investments done during the construction period and thus the actual debt-equity mix on completion of the project is 66:34. The submissions made by the parties on this issue have been considered. The respondents' contention is that use of excess of equity over equity of 20% has the effect of increasing ROE. As provided in Ministry of Power notification dated 16.12.1997, ROE is to be computed on the paid up and subscribed capital relating to the transmission system. We also note that the petitioner has filed an affidavit in petition No.7/1999 stating that it will attempt to maintain the debt-equity ratio of 70:30 on overall basis at corporate level. On these considerations, we allow the actual debt and equity employed for the purpose of computation of tariff.

13. The petitioner has shown an anticipated expenditure which was not incurred till 31.3.2001. The anticipated expenditure shall not be taken into account for the purpose of computation of tariff.

14. As already noted, the Transmission System associated with Kathalguri Gas Based Power Project has been approved at a total cost of Rs.1010.10 crores. The asset-wise approved cost and also the expenditure as on 31.3.2001 as furnished by the petitioner is extracted below :

(Rs. in Crores)

S.No.	Name of the Element	Apportioned Approved Cost	Estimated Completion Cost	Expenditure upto 31.3.2001 (excluding balance anticipated expenditure)
1.	400 kV D/C Misa-Balipara Line	19776.67	17764.92	17364.92
2.	400 kV D/C Balipara-Bongaigaon Line	22649.27	28941.54	26004.48
3.	220 kV S/C Balipapara-Tejpur Line	2083.57	290.64	290.64
4.	400 kV D/C Kathalguri-Miriani Line	10705.91	8219.37	8219.37
5.	400 kV D/C Mariani-Misa Line	16051.93	18171.56	18171.56
	Total	71267.35	73388.03	70050.97
6.	400 kV Malda-Bongaigaon line	29743.02	35635.25	35560.44
	Total	101010.37	109023.28	105611.41

15. It is noted that against the revised cost estimate of Rs.1010.10 crores, the estimated completion cost is Rs.1090.23 crores, against which an expenditure of Rs.1056.11 crores was incurred up to 31.3.2001. Thus, the total expenditure on the project exceeds the revised cost approved by Ministry of Power. Also, the estimated completion cost of Malda-Bongaigaon line of Rs.356.35 crores is more than apportioned cost of Rs.297.43 crores as per the revised estimated cost approved by Ministry of Power. Therefore, it has been decided that the apportioned approved cost of Rs.297.43 crores shall be considered for the purpose of determination of tariff. According, equity and various loans (including their repayments), have been proportionately reduced.

INTEREST ON LOAN

16. The details of repayments and rate of interest on Government of India loan are not available and, therefore, interest on Government of India loan has been worked on the basis of interest amount given in the petition. Further, as some of the loans considered in the petition may carry the floating rate of interest, the interest on loan may require adjustment between the petitioner and the respondents. Any re-setting of interest rates during the tariff period may be settled mutually between the parties. However, in the event of their failure to settle the matter, either party may approach the Commission for decision.

DEPRECIATION

17. It has been contended by the respondents that depreciation should be adjusted towards loan repayment. According to the petitioner, depreciation is a recognised cost element and it does not have any bearing on repayment of loan. In this context, the petitioner has relied upon the accounting principle of the Institute of Chartered Accounts of India. It is contended on behalf of the petitioner, that depreciation is charged for the purpose of replacement of assets at the end of useful life of the assets and therefore, cannot be linked with loan repayment. We are satisfied that depreciation has been claimed in accordance with the provisions of Ministry of Power notification dated 16.12.1997, which is the basis for computation of tariff. While approving tariff, the weighted average depreciation rate has been worked out proportionately, corresponding to the reduced cost of Rs.297.43 crores for the project qua the actual expenditure as per CA's Certificate annexed to the petition.

O&M EXPENSES

18. The escalation in O&M expenses and maintenance spares for working capital has been worked out on the basis of WPI and CPI (industrial workers) for the month of April of the respective year.

RETURN ON EQUITY

19. The petitioner has claimed ROE @ 16% as provided in the notification dated 16.12.1997. It has been urged on behalf of the respondents that the petitioner should be allowed ROE @ 12% of the subscribed equity. According to the respondents, ROE at enhanced rate is unreasonable since it adds to the liability. The Commission has already decided that for the period upto 31.3.2001, the transmission tariff is to be determined based on the notification dated 16.12.1997 issued by Ministry of Power. The said notification dated 16.12.1997 provides for charging of ROE @ 16%. We, therefore, do not find any justification to support the respondents' contention for charging ROE @ 12%.

INTEREST ON WORKING CAPITAL

20. According to the notification dated 16.12.1997, interest on working capital shall cover:

- (i) Operation and maintenance expenses (cash) for one month,
- (ii) Maintenance spares at normative rate of 1% of the capital cost. Cost of maintenance spares for each subsequent year shall be revised at the rate applicable for revision of expenditure on O&M of transmission system, and

- (iii) Receivables equivalent to two months' average billing calculated on normative availability level.

21. The norms for working capital as per notification dated 16.12.1997 specify that two months receivables and one month's operation and maintenance expenses shall be considered for computation of working capital. It has been contended that since two months receivables are already included in O&M expenses, inclusion of one month's O&M expenses additionally in the working capital is not justified. Similarly, it has been submitted that the norms for capital cost state that project cost shall include cost of spares for 5 years. However, maintenance spares @ 1% of the capital cost have been allowed in the working capital norms, thus impact of cost of spares has been considered twice in the transmission tariff. It has been submitted that the cost of spares also should not be included in the working capital for the first 5 years of operation as the same is already added in the project cost. In our opinion, the issues raised on behalf of the respondents need summary rejection. As we have already noted, the tariff proposals submitted by the petitioner are based on the notification dated 16.12.1997, which provides for computation of working capital by taking into account the cost of maintenance spares as also one month's O&M expenses, the proposal for tariff filed by the petitioner is in accordance with the notification dated 16.12.1997.

22. Interest on working capital has been worked out on the basis of annual average PLR of the State Bank of India. The rate of interest for the year 2000-2001 allowed in tariff is 11.5%.

INCENTIVE

23. According to the respondents, incentive should be payable when availability of the transmission line exceeds 98%, though the petitioner has claimed incentive for availability of the transmission line above 95%. The notification dated 16.12.1997 provides that in addition to transmission charges, the petitioner shall be paid incentive for availability of the system beyond 95%, the rate of incentive shall not exceed 1.0% return on equity for each percentage point of increase in availability. We are satisfied that the petitioner shall be entitled to incentive based on the notification dated 16.12.1997, for which a separate petition is to be filed by the petitioner.

24. On consideration of entirety of the situation, we approve the transmission charges of Rs.6416.44 lakhs for the year 2000-2001. The details of the tariff are contained in Table appended hereinbelow.

TABLE

Malda-Bongaigaon Transmission Line

	(Rs. in Lakhs)
	2000-2001
Interest on Loan	2558.87
Depreciation	1659.66
Operation & Maintenance Expenses	446.15
Return on Equity	1590.30
Interest on Working Capital	161.46
Total	6416.44

25. In addition to the transmission charges, the petitioner shall be entitled to other charges like foreign exchange rate variation, income tax, incentive, surcharge and other cess and taxes in accordance with the notifications issued by Ministry of Power.

26. 50% of the transmission tariff approved by us for the year 2000-2001 shall be paid by the constituents of Eastern region. The tariff applicable to Eastern region shall be included in the regional transmission tariff of that region and shall be shared by the regional beneficiaries in accordance with para 7 of notification dated 16.12.1997.

27. The Commission in its order dated 9.11.2000 had allowed the petitioner to charge provisional tariff based on the approved cost or actual expenditure as per the petition, whichever is less. The constituents of the Eastern region were directed to pay 50% of the tariff so calculated. The constituents of North Eastern region were directed to pay the balance of 50% of the provisional tariff, subject to a maximum of 35 paise per unit of the power transmitted to the states in that region. The provisional tariff allowed by the Commission earlier shall be adjusted against the final transmission charges approved by us in this order.

28.. We find that the auditors' certificate furnished along with the petition certifies the transmission tariff calculations but does not disclose whether the capital expenditure, equity, loan, rate of interest, repayment schedule, O&M charges, etc. are as per the audited accounts of the petitioner company. **The petitioner is directed to file an affidavit within four weeks of the date of this order that all the tariff calculations and auditors' certificates are based on audited accounts of the petitioner**

company or in the alternative, the petitioner may file a revised auditor's certificate, in the format given below, failing which the transmission charges approved above shall not take effect and this order will automatically lapse without any further reference to the Commission.

AUDITOR'S CERTIFICATE

We have verified the books of accounts, records and other documents of Power Grid Corporation of India Ltd and certify that the data used for transmission tariff calculations for _____ [name of the transmission system/line (s)] are in accordance with the audited books of accounts up to _____ (date) of the company. We have obtained all information and explanations which to the best of our knowledge and belief were necessary for the purpose of our examination and necessary approvals of the competent authority in respect of capital cost, foreign exchange, time and cost over-run, etc. as prescribed under law, have been obtained.

Signature with Auditor's seal and date

29. This order disposes of Petition No. 48/2000.

Sd/-

(K.N. Sinha)
Member

Sd/-

(G.S. Rajamani)
Member

Sd/-

(D.P. Sinha)
Member

New Delhi dated the 4th July 2002