

**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. 9/2000**

**In the matter of**

Approval of tariff for 220 kV S/C Budhipadar-Korba Transmission line for transmission of surplus power from Eastern region to Western region.

**And in the matter of**

Power Grid Corporation of India Ltd.	.....	<b>Petitioner</b>
Vs		
1. Madhya Pradesh State Electricity Board		
2. Bihar State Electricity Board		
3. West Bengal State Electricity Board		
4. Grid Corporation of Orissa Ltd		
5. Damodar Valley Corporation		
6. Power Dept., Gangtok		
7. Jarkhand State Electricity Board		
8. Chattisgarh State Electricity Board		
9. Gujarat State Electricity Board	.....	<b>Respondents</b>

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 Satish Agnihotri, Advocate, MPSEB
11. Shri D.K. Srivastava, EE, MPSEB
12. Shri S.P. Degwekar, Coml. Officer, MPSEB
13. Shri S.N. Chauhan, S.E(Comml), CSEB
14. Shri S.Mondal, DVC.
15. Shri T.K. Gosh, DVC.

16. Shri S.Sowmynarayanan, Consultant, TNEB
17. Shri M.Prasad, BSEB

## **ORDER**

**(Date of hearing: 19-2-2002)**

The petitioner, PGCIL has filed this petition for approval of tariff for 220 kV S/C Budhipadar-Korba Transmission line built for transmission of surplus power from Eastern region to Western region.

2. Central Electricity Authority vide its letter dated 24.7.1997 after system studies of the line had agreed to the proposal of the petitioner from operation point of view, for construction of 220 kV S/C Budhipadar-Korba line at a total cost of Rs. 28 crores. The administrative sanction for capital outlay was accorded by the Board of Directors of the petitioner company at an estimated cost of Rs.30.64 crores, including IDC of Rs.0.84 crores vide letter dated 22.10.1997. The project was to be commissioned within one year from the date of approval. Subsequently, however, the Board of Directors of the petitioner company approved the revised cost estimates of Rs.35.53 crores, including IDC of Rs.1.20 crores, (based on 2<sup>nd</sup> quarter 1999 price level) vide letter dated 10.3.2000. The scope of scheme covered the following elements of the transmission system:

- (a) Budhipadar-Korba 220 kV S/C line
- (b) Extension of 220 kV existing sub-station at Budhipadar
- (c) Extension of 220/132 kV existing sub-station at Korba

3. The transmission line was declared under commercial operation on 1.9.1999 at a total estimated project cost of Rs.33.78 crores. However, the final completion cost of the project is Rs.30.02 crores since a part of the unused material were diverted from this project to other project which had the effect of reducing the completion cost of this project. The petitioner has claimed tariff for the years 1999-2000 and 2000-01 on the completion cost of Rs.30.02 crores based on tariff norms contained in Ministry of Power notification dated 16.12.1997.

4. The replies to the petition has been filed by Madhya Pradesh State Electricity Board (Respondent No.1), Bihar State Electricity Board (Respondent No.2), West Bengal State Electricity Board (Respondent No.3), Grid Corporation of Orissa Ltd (Respondent No.4) and Damodar Valley Corporation (Respondent No.5).

5. We now propose to consider different elements of tariff in the light of comments made by the respondents.

### **CAPITAL COST**

6. The petitioner has claimed tariff based on completion cost of Rs.30.02 crores. It has been submitted on behalf of the respondents that tariff should be computed based on total cost of Rs.28 crores, approved by CEA vide its letter

dated 24.7.1997 and that the excess expenditure should be excluded for the purposes of computation of tariff. We have considered the submission made on behalf of the respondents. In our opinion, CEA's letter dated 24.7.1997 does not constitute techno-economic clearance under Section 29 of the Electricity (Supply) Act, 1948. As it is seen from CEA's letter *ibid*, the proposal of the petitioner was examined from operation point of view only, without considering any other aspects. Therefore, consideration of tariff cannot be limited to the cost of Rs.28 crores.

7. In accordance with the completion schedule decided by the Board of Directors, the transmission system was to be commissioned within one year from the date of investment approval, that is, by 22.10.1998. The transmission line was however, declared under commercial operation with effect from 1.9.1999. There is thus a delay of about one year in completion of the project. According to the respondents, the petitioner should not be entitled to IDC and IEDC on account of delayed completion of the project. The petitioner has clarified that delay in completion is mainly attributable to the delay in receipt of forest clearance for a stretch of 15 Kms in Eastern Region. It is stated that forest clearance was received in April 1999 after which the line was completed and test charged on 17.6.1999. Subsequently, however, there was theft of conductor from the line which was replaced and re-strung and the line was finally commissioned on 04.8.1999 and was declared under commercial operation with effect from 1.9.1999. We have considered the reasons for delay placed on record by the petitioner. We are satisfied that the reasons are not directly attributable to the

petitioner and delay was on account of factors beyond its control. Therefore, we direct that the petitioner shall be entitled to claim IDC and IEDC up to the date of commissioning. The petitioner is, however, directed to clarify by an affidavit that the cost of replacement of the stolen conductor is not included in the completed cost of the assets covered by this petition.

8. It is next pointed out on behalf of the respondents that the petitioner has employed debt and equity in the ratio of 78:22 though, debt-equity should be in the ratio of 80:20. It has been explained on behalf of the petitioner that for the purpose of investment approval, debt-equity ratio of 80:20 is considered. However, actual debt-equity mix is based on the phasing of investments done during the construction period. The actual debt-equity mix in the completion cost for the assets is 78:28. 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. It is 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. In view of the provision, actual debt and equity are to be allowed. We, therefore, allow the actual debt and equity employed shall be considered for computation of tariff in accordance with the notification.

### **INTEREST ON LOAN**

9. It is observed that the interest rates considered in different petitions for the same loan are different. During the hearing it was explained by the petitioner that these loans are carrying floating rate of interest and the interest prevailing on the date of commercial operation has been considered in the tariff petition. Any resetting of the interest rates during the tariff period shall have to be settled mutually between the parties. However, in the event of their inability to settle the matter, either party may approach the Commission for a decision subject to the above observations, interest as claimed in the petition has been allowed. 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.

### **DEPRECIATION**

10. It has been contended by the respondents that depreciation should be adjusted towards the 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, however, note that the petition for tariff has been filed based on norms notified by the Govt. of India on 16.12.1997. The depreciation is, therefore, chargeable from the date of commercial operation. While approving tariff, the weighted average

depreciation rate has been worked out on the basis of actual capital expenditure as per CA's certificates annexed to the petition.

### **RETURN ON EQUITY**

12. 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% of the paid up and subscribed capital. We, therefore, do not find any justification to support the respondents' contention for charging ROE @ 12%

### **INTEREST ON WORKING CAPITAL**

13. 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.

14. 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.

15. 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 years 1999-2000 and 2000-2001 allowed in tariff are 12% and 11.5% respectively instead of 12.24% claimed by the petitioner.

### **INCENTIVE**

16. 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. The petitioner shall claim incentive based on the notification dated 16.12.1997 and, therefore, its claim on that account cannot be interfered with.

### **INCOME TAX**

17. Respondent No.1 has in addition submitted that income tax should not be made pass-through and should be paid by the petitioner out of its own income. We take notice of the fact that in accordance with the notification dated 16.12.1997, tax on following income streams of the transmission utility the petitioner herein, is to be computed as expense and made pass-through:

- (i) 16% return on equity
- (ii) The extra rupee liability on account of foreign exchange variation in computing the return on equity not exceeding 16% in the currency of the subscribed capital
- (iii) The amount of grossed up Income Tax liability that is, payable and actually paid by the 'POWERGRID' under income streams at (i) and (ii) above, relating to Power Transmission activity.

18. It has been stated on behalf of Respondent No. 1 that it has filed a petition before Madhya Pradesh High Court against the provisions which have made income tax as "pass-through". It was further clarified at the hearing that no interim order has been passed by the High court. The filing of petition before the High Court should not deter us from giving effect to the provisions contained in the notification dated 16.12.1997. Needless to say, the directions contained in this order shall abide the final directions of the Madhya Pradesh High Court on this issue.

### **SHARING OF TRANSMISSION CHARGES**

19. The transmission system has been built for transfer of surplus power from Eastern region to Western region. The transmission charges are to be shared between the beneficiaries in Western region and Eastern region in accordance with the Ministry of Power's notification dated 3.3.1998, which makes the following provisions for sharing of transmission charges.

“The sharing of monthly transmission charges for the inter-regional lines including HVDC systems, utilised for power exchange between one region to other contiguous region shall be as follows:

- a) One third( $1/3^{\text{rd}}$ ) by the beneficiaries of one region
- b) One third ( $1/3^{\text{rd}}$ ) by the beneficiaries of the other region
- c) Remaining one third ( $1/3^{\text{rd}}$ ) as per use, i.e. the beneficiaries of the importing contiguous region which have received the power as per the commitment”.

20. According to Respondent No. 1, the transmission charges should be shared by the beneficiaries of both the regions in accordance with the provisions of the notification dated 3.3.1998. We take notice of the fact that Respondent No. 1 as major beneficiary in the Western Region had agreed to bear 50% of the transmission charges on account of Budhipadar-Korba 220 kV S/C transmission line in a meeting held on 17.12.1999 at WREB. With the bifurcation of erstwhile state of Madhya Pradesh and creation of the state of Chattisgarh, Chattisgarh State Electricity Board is liable to bear the transmission charges. The constituents of Eastern region have also agreed to share  $1/3^{\text{rd}}$  of the transmission charges. Another beneficiary of the transmission system is Gujarat Electricity Board. We, therefore, direct that the transmission charges shall be shared by the constituents of Eastern and Western region in the following manner:

- (i)  $1/2$  by MPEB (Respondent No.1) from the date of commercial operation of the assets, till the date of constitution of State of Chattisgarh. The liability on this account between MPSEB and

Chhattisgarh State Electricity Board (CSEB) (Respondent No.8) shall be shared in accordance with the Notification No.238 dated 12.4.2001 issued by Ministry of Power, Govt. of India. After constitution of State of Chattisgarh, ½ of the transmission charges shall be shared by MPSEB and CSEB in proportion of energy transmitted.

- (ii) 1/3<sup>rd</sup> by constituents of Eastern Region jointly (Respondent No.2 to 7),
- (iii) 1/6<sup>th</sup> by Gujarat Electricity Board (Respondent No.9)

21. On consideration of entirety of the situation, we approve the transmission charges of Rs.364.43 lakhs and Rs.625.77 lakhs for the years 1999-2000 (for seven months) and 2000-2001 respectively, the details in support of which are contained in Table appended hereinbelow.

**TABLE**

(Rs. in Lakhs)

	1999-2000*	2000-2001
Interest on Loan	168.67	289.13
Depreciation	98.06	168.11
Operation & Maintenance Expenses	26.27	46.61
Return on Equity	61.78	105.91
Interest on Working Capital	9.65	16.01
<b>Total</b>	<b>364.43</b>	<b>625.77</b>

\* For seven months

22. 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.

23. The Commission in its order dated 23.3.2000 had directed that 80% of the transmission charges claimed by the petitioner be shared by MPEB and the constituents of the Eastern region provisionally in the manner specified in the said order. Subsequently, in its order dated 21.9.2000, the Commission directed that 1/6<sup>th</sup> of the transmission charges would be paid by Gujarat Electricity Board on provisional basis. The provisional tariff allowed by the Commission earlier vide orders dated 23.3.2000 and 21.9.2000 shall be adjusted against the final transmission charges approved by us in this order.

24. The transmission tariff for Eastern region approved by us 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.

**25. 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.

### AUDITORS 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 Auditors seal and date

26. This order disposes of Petition No.9/2000.

Sd/-

**(K.N. Sinha)**  
**Member**

Sd/-

**(G.S. Rajamani)**  
**Member**

Sd/-

**(D.P. Sinha)**  
**Member**

New Delhi dated: 19<sup>th</sup> June, 2002