

**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. 12/2000**

**In the matter of**

Approval of Tariff for 220 KV D/C Kayamkulam-Pallom Transmission Line.

**Petition No.85/2001**

**And in the matter of**

Approval of Tariff for 220 KV D/C Kayamkulam-Edamon Transmission Line.

**And in the matter of**

Power Grid Corporation of India Ltd. .... Petitioner

VS

Kerala State Electricity Board. .... Respondent

The following were present:

1. Shr | S.S. Sharma, AGM, PGCIL
2. Shr | U.K. Tyagi, PGCIL
3. Shr | C. Kannan,
4. Shr | PGCIL
5. Shr | K.K.S. Babu, PGCIL
6. Shr | Sanjay Mehra, PGCIL
7. Shr | S. Gopal, PGCIL
8. Shr | A.K. Nagpal, PGCIL
9. Shr | S.S. Vindal, PGCIL
10. Shr | D. Sen, PGCIL  
Shri Shri B. Ravindran, OSD, KSEB

**ORDER (DATE OF HEARING  
19-2-2002)**

In these petitions, the petitioner, PGCIL has sought approval of the Commission for the transmission charges in respect of following assets which form part of transmission system associated with Kayamkulam Combined Cycle Power Project and are being disposed of through this common order.

- (a) 220 kV D/C Kayamkulam-Pallom transmission line with associated bays
- (b) 220 kV D/C Kayamkulam-Edamon transmission line with associated bays

2. The petitioner company is entrusted with the function to undertake transmission of energy. In discharge of this function, the petitioner has set up transmission system in the entire country.

3. The petitioner and the respondent had agreed that the petitioner would execute the transmission system associated with Kayamkulam Combined Cycle Power Project with the following components:

- (a) 220 kV D/C Kayamkulam-Pallom transmission line
- (b) 220 kV D/C Kayamkulam-Edamon transmission line
- (c) 220 kV D/C switchyard at Kayamkulam
- (d) Extension of 220 kV sub-station of KSEB at Pallom and Edamon.

4. Ministry of Power accorded the investment approval for the transmission system associated with Kayamkulam Combined Cycle Power Project at an estimated cost of Rs.83.00 crores vide letter dated 6.2.1996. The transmission system was to be completed matching with the commissioning of the first unit of the generation project scheduled to be commissioned by March 1999. Subsequently, the estimated cost was revised to Rs.204.41 crores, including IDC of Rs.27.36 crores and approved by GOI vide letter dated 3.9.98. The petitioner built and commenced operation of the assets as given herein below:

- |   |            |
|---|------------|
| (a) 220 kV D/C Kayamkulam-Edamon line<br>with associated bays | 1. 11.1998 |
| (b) 220 kV D/C Kayamkulam-Pallom line<br>with associated bays | 1.12.1999  |

5. Petition No. 12/2000 was filed on 15.2.2000 and Petition No. 85/2001 was filed on 3.12.2001. Subsequently, the petitioner filed amended petition No. 12/2000 to place on record certain additional facts in regard to actual expenditure.

6. It is stated that the estimated completion cost of 220 kV D/C Kayamkulam-Pallom line with associated bays is Rs.86.09 crores against the approved apportioned cost of Rs.85.31 crores. The estimated completion cost of Rs.86.09 crores includes an anticipated expenditure of Rs.980.88 lakhs. The Kayamkulam-Edamon line with associated bays was completed at a total cost of Rs. 119.90



approved apportioned cost of Rs.119.10 crores. Thus the entire transmission system has been completed at a total cost of Rs.205.98 crores, against the sanctioned cost of Rs.204.41 crores. The petitioner has sought approval to the transmission charges, based on Ministry of Power's notification dated 16.12.1997 as under:

|   | (Rs. in lakhs)       |                   |           |
|---|----------------------|-------------------|-----------|
|   | 1998-99              | 1999-2000         | 2000-2001 |
| 220 kV D/C Kayamkulam-Pallom transmission line with associated bays | -                    | 427.62 (4 months) | 1410.66   |
| 220 kV D/C Kayamkulam-Edomon transmission line with associated bays | 878.95<br>(5 months) | 2202.68           | 2207.62   |

7. In addition, the petitioner has sought approval for other charges like foreign exchange rate variation, income tax, incentive, other cess and taxes and surcharge as per the notification issued by Ministry of Power on 16.12.1997.

8. Replies to these petitions have been filed on behalf of the respondent, KSEB. It has been submitted that the O&M charges @ 1.5% of the total of project cost is high and should be @ 0.75%, charging 1% spares for the computation of working capital is unreasonable, depreciation should be charged @ 3-4% against depreciation of 6.07% proposed in the petitions, normative availability should be fixed at 98% instead of proposed normative availability of 95%. It also stated that anticipated expenditure of 980.88 lakhs should not be considered for computation

of tariff. The respondent has also pointed out that there has been delay in execution of Kayamkulam-Pallom transmission line by the petitioner, as a consequence, the cost of construction has increased on account of higher IDC and IEDC and otherwise also, the cost of construction is higher as compared to that of similar lines constructed by the respondent itself. In petition No.85/2001, the respondent has submitted that interest @ 15.84% on working capital is very high, particularly when interest rates have subsequently been lowered. Interest @ 12.24% has been claimed in Petition No. 12/2000.

9. We have considered the submissions made on behalf of the parties. The petitioner has filed the petition for tariff based on norms notified by Ministry of Power in its notification dated 16.12.1997 in accordance with the directions of the Commission. O&M charges, spares for computation of working capital, depreciation and normative availability of 95% for recovery of full charges are based on the notification dated 16.12.1997 and are, therefore, in order. The anticipated expenditure of Rs.980.88 lakhs has been excluded for computation of tariff in Petition No. 12/2000 and Rs.76.29 crores have been considered for the purpose. In Petition No. 85/2001, the entire cost of Rs. 119.90 crores has been considered. On the question of delay raised on behalf of the respondent, we have noticed that in accordance with the investment approval accorded by Ministry of Power in its letter dated 6.2.1996, the project was to be completed matching with the commissioning of the first unit of the generation project scheduled to be commissioned by March 1999. 220 kV DC Kayamkulam-Edamon transmission

line was commissioned on 1.11.1998, before the scheduled date. Hence there is no delay in commissioning of this line. So far as 220 kV DC Kayamkulam-Pallom line is concerned, we find that there is a delay of 8 months in the commissioning. The petitioner has explained that the delay was mainly on account of serious right of way problems and injunction granted by Kerala High Court for construction of a part of line measuring 1.5 km. It has been further explained on behalf of the petitioner that delay also occurred due to non-readiness of bays at the respondent's Pallom sub-station, which was being executed by the respondent itself on behalf of the petitioner. It may be noted that at the time of commissioning of Kayamkulam Combined Cycle Power Project, 220 kV Kayamkulam-Edamon transmission line was already available and, therefore, the marginal delay in execution of 220 kV Kayamkulam-Pallom line has not affected the evacuation of power generated from the project. We are satisfied with the explanation furnished by the petitioner that delay in execution of 220 kV DC Kayamkulam-Pallom line is for the reasons beyond the control of the petitioner. As regards the submission made by the respondent that the cost of construction of 220 kV DC Kayamkulam-Pallom line is higher as compared to similar lines constructed by the respondent, we find that, apart from the bald statement in the counter reply, no material evidence has been placed on record by the respondent to substantiate its plea. Therefore, we do not propose to take any cognizance of this submission made on behalf of the respondent. On the question of interest on working capital, we are of the view that the petitioner is entitled to claim an interest on working capital based on Prime Lending Rates of State Bank of India applicable when the assets were





put into commercial operation. Accordingly, we direct that interest @ 13%, 12% and 11.5% shall be allowed on working capital in respect of 220 kV DC Kayamkulam-Edamon line for the years 1998-99, 1999-2000 and 2000-01 respectively and interest of 12% and 11.5% shall be allowed in respect of 220 kV DC Kayamkulam-Pallom line for the years 1999-2000 and 2000-2001 respectively.

10. On consideration of entirety of the situation, we approve the transmission charges as under:

|                                | (Rs. in lakhs)          |                         |           |
|--------------------------------|-------------------------|-------------------------|-----------|
|                                | 1998-99                 | 1999-2000               | 2000-2001 |
| Kayamkulam-Pallom transmission |                         |                         |           |
| Line with associated bays      | -                       | 431.38<br>(four months) | 1421.15   |
| Kayamkulam-Edamon transmission |                         |                         |           |
| Line with associated bays      | 873.13<br>(five months) | 2182.92                 | 2184.89   |

11. 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 notification issued by Ministry of Power and in force up to 31.3.2001.

12. While approving tariff, we have been guided by the following considerations:

- (a) The weighted average depreciation rate has been worked out on the basis of actual capital expenditure as per CA's certificates up to 31.3.2001 annexed to the petitions.
- (b) 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.
- (c) 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 rate prevailing on the date of commercial operation has been considered in the tariff petition. Any resetting of the interest rates during the tariff period covered by this order shall be settled mutually between the parties.

13. In its order dated 17.4.2000 in Petition No. 12/2000 (Transmission charges for Kayamkulam-Pallom line) the Commission had allowed a provisional tariff of 85% of the transmission charges claimed by the petitioner in the unamended petition. Similarly, in respect of Kayamkulam-Edamon line also, the Commission in its orders dated 22.6.1999 and 1.10.1999 in Petition No. 3/1999 had allowed the petitioner to continue billing of charges. The provisional/interim tariff allowed by the Commission earlier shall be adjusted against the final transmission charges approved by us in this order.

14. The relevant details in support of tariff allowed are given in Tables I & II given hereunder:

**TABLE - I** Kayamkulam-Pallom

Transmission Line with associated bays

| Transmission Charges           | 1998-99 | (Rs. in Lakhs)                      |                |
|--------------------------------|---------|-------------------------------------|----------------|
|                                |         | 1999-2000<br>(1.12.99 to 31.3.2000) | 2000-2001      |
| i) Interest on Loan            | -       | 210.96                              | 627.08         |
| ii) Depreciation               | -       | 149.97                              | 484.85         |
| iii) O&M expenses              | -       | 34.56                               | 113.80         |
| iv) Return on Equity           | -       | 24.15                               | 158.37         |
| v) Interest on working capital | -       | 11.74                               | 37.05          |
| <b>TOTAL</b>                   |         | <b>431.38</b>                       | <b>1421.15</b> |

**TABLE - II**

Kayamkulam Edamon Transmission Line with associated bays

| Transmission Charges           | 1998-99<br>(1.11.1998 to 31.3.1999) | (Rs. in Lakhs)    |                   |
|--------------------------------|-------------------------------------|-------------------|-------------------|
|                                |                                     | 1999-2000         | 2000-2001         |
| i) Interest on Loan            | 395.88                              | 932.17            | 908.76            |
| ii) Depreciation               | 310.80                              | 773.85            | 778.13            |
| iii) O&M expenses              | 71.83                               | 183.07            | 195.04            |
| iv) Return on Equity           | <del>68.70</del>                    | <del>233.70</del> | <del>244.26</del> |
| v) Interest on working capital | 25.92                               | 60.13             | 58.70             |
| <b>TOTAL</b>                   | <b>873.13</b>                       | <b>2182.92</b>    | <b>2184.89</b>    |

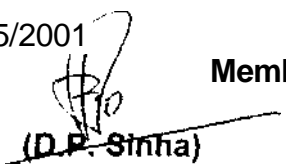
15 The entire tariff approved by us shall be borne by the respondent as the transmission system associated with Kayamkulam Combined Cycle Power Project is dedicated to Kerala state.

16. 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 two 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 auditors' 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  
17. This order dispose (G.S. Rajamani) 12/2001 and 85/2001  
(K.NrSinha) Member Member Member  
New Delhi dated: 3<sup>rd</sup> June, 2002  
  
(D.P. Sinha)