

**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. 89/2000

In the matter of

Approval under Regulation 86 for Transmission Tariff for Panki-Mainpuri LIL0 and Associated bays at Kanpur sub-station in Northern Region.

And in the matter of

Power Grid Corporation of India Ltd.	Petitioner
Vs		
1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd		
2. Himachal Pradesh State Electricity Board\		
3. Punjab State Electricity oard		
4. Haryana Vidyut Prasaran Nigam Ltd		
5. Power Development Dept., Jammu		
6. Uttar Pradesh Power Corporation Ltd		
7. Delhi Vidyut Board		
8. Chandigarh Administration		
9. Uttaranchal Power Corporation Ltd	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 Mahendra Kumar, EE, UPPCL

11. Shri T.P.S. Bawa, PSEB
12. Shri S.C. Mehta, XEN, RRVPNL
13. Shri A.K. Jain, CE (Comml), RRVPNL
14. Shri R.K. Arora, XEN, HVPNL

**ORDER
(DATE OF HEARING 19.2.2002)**

In this petition, the petitioner has sought approval of the Commission for transmission charges in respect of Panki-Mainpuri LILO and associated bays at Kanpur sub-station in Northern Region. The petitioner had initially filed this petition on 14.9.2000. Subsequently, it filed an amended petition on 20.12.2001 to implead Uttaranchal Power Corporation Ltd. as a respondent and place on record certain additional facts. The facts stated in the amended petition are being referred to for the purpose of present order.

2. The petitioner was entrusted with the implementation of Unchahar Stage II transmission system for evacuation of central sector power in Northern Region, associated with 2 x 210 MW Feroz Gandhi Unchahar Stage II Power Project. Initially, the scheme was approved by Ministry of Power at an estimated cost of Rs.16831 lakhs, including IDC of Rs.2937 lakhs vide its letter dated 3.4.1996. Subsequently, the scope of the project was revised. The revised cost estimates were approved by Ministry of Power vide its letter dated 31.7.2001 for an amount of Rs.135.15 crores. The final scope of the work as per the Ministry of Power letter dated 31.7.2001 is as under:

TRANSMISSION LINE

- i) 220 kV D/C Unchahar (NTPC)-Kanpur –I
- ii) 220 kV D/C Unchahar (NTPC)-Kanpur-II
- iii) LILO of one ckt of 220 kV D/C Panki-Mainpuri line
- iv) LILO of one ckt of 220 kV D/C Panki-Naubasta line

SUBSTATION

- i) Extension of 400/220 kV sub-station at Kanpur (existing) with 2x315 MVA
- ii) Transformer along with associated 400 kV and 220 kV bays

3. In the present petition we are concerned with LILO of one of 220 kV D/C Panki-Mainpuri line. For other components of Unchahar Stage II transmission system, the petitioner has filed separate petitions. According to the petitioner, it has built and commenced commercial operation of LILO of one circuit of 220 kV D/C Panki-Mainpuri line with bays on 1.12.2000 at the final completion cost of Rs.664.10 lakhs against the apportioned approved cost of Rs.670.00 lakhs. Accordingly, the petitioner has claimed transmission tariff in respect of LILO of Panki-Mainpuri with associated bays as given below, based on Ministry of Power notification dated 16.12.1997.

PERIOD	ANNUAL TRANSMISSION CHARGES (RS. IN LAKHS)
2000-2001 w.e.f. 1.12.2000 (for 4 months)	37.57

4. In addition, the petitioner has prayed for other charges like foreign exchange rate variation, income tax, incentive, other cess and taxes and surcharge as payable as per the notification dated 16.12.1997 issued by Ministry of Power.

5. Replies to the amended petition have been filed on behalf of Rajasthan Rajya Vidyut Prasaran Nigam Ltd. (Respondent No.1), Haryana Vidyut Prasaran Nigam Ltd. (Respondent No.4).

6. We propose to consider the issues raised on behalf of the respondents.

7. A preliminary objection has been raised that final transmission tariff may not be approved till final disposal of FAD No.263/2001 filed by the petitioner against the Commission's order dated 14.12.2001 in IA No.48/2001 in the present petition. We take notice of the fact that the High Court in FAO No. 253/2001 filed by the petitioner has not stayed the proceedings pending before the Commission. We are of the considered view that it is in the interest of the petitioner as well as the respondents that the final tariff is determined so that there is no uncertainty in regard to payment of transmission charges for the assets forming subject matter of the present petition and being used by the respondents.

CAPITAL COST

8. The petitioner has claimed tariff based on completion cost of Rs.664.10 lakhs. It is 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 was considered. However, actual debt-equity mix is based on the phasing of investments done during the construction period. It is

further stated that equity injection for new projects is primarily from the cash internal resources as budgetary support is not forthcoming from the Central Government and that year-to-year availability of cash internal resources fluctuates due to reasons such as debt redemption and non-allocation of dues from SEBs. 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 and debt-equity in the present case is within the ceiling of 70:30. We, therefore, allow the actual debt and equity employed for the purpose of computation of tariff.

9. It has been pointed out that completion cost works out to Rs.40.00 lakhs per Km, which is abnormally high as compared to cost of Rs.24.75 lakhs per Km in respect of 220 kV D/C Palli-Chakrapur line. It has been prayed that completion cost should be considered by taking cost of Rs.24.75 lakhs per Km.

10. The petitioner has clarified that cost of completion is concerned, it has been clarified that as per the approved revised cost estimate, per Km cost works out to Rs.36.93 lakhs against the average cost of about Rs.25.0 lakhs. It has been admitted by the petitioner that actual cost of about Rs.40 lakhs per Km is higher than

cost per Km of Rs.36.93 lakhs considered in revised cost estimates but is based on actual expenditure incurred in execution of work. The reasons for higher cost in the present case, as explained by the petitioner are as under:

QUOTE

The route length of the transmission line is quite small and being a LILO line, traversing through Kanpur city passed serious ROW problems which has necessitated higher number of towers, most of which are tension towers. The average number of towers in this case is 5 against 3 in normal conditions. Further, in this case, the number of tension towers is much higher compared to normal case (the lines in plain terrain). This has resulted in substantial increase in quantity of Tower steel, Insulators, Hardware fittings and accessories, excavation, concreting and reinforcement steel and hence increase in cost of line. On account of higher number of towers per Km and civil works, the effect on cost on this account alone works out to s.7.9 lakhs per Km. (additional towers Rs.4.97 lakhs per Km and civil works Rs.2.92 lakhs per Km). The difference in the balance cost is attributable to higher quantity of steel, civil works, Insulators, hardware fittings in angle towers compared to normal suspension towers.

UNQUOTE

11. We have considered the issue in great detail. On consideration of the explanation furnished by the petitioner, we feel that the petitioner has been able to explain the reasons for additional cost of Rs.7.9 lakhs per Km from the average cost of Rs.25.00 lakhs per Km. Thus the cost of completion, in the light of explanation furnished by the petitioner, adds up to Rs.32.9 lakhs per Km. The petitioner has not and placed on record any supporting details to explain the difference in the balance cost, i.e. beyond 32.9 lakhs/Km though it has explained in general terms that the increase in cost is attributable to higher quantity of steel, civil works, insulators, hardware fittings in the angle towers compared to normal suspension tower.

Accordingly, we adopt Rs.32.9 lakhs per Km as the cost of construction for Panki-Mainpuri LILO with associated bays at Kanpur sub-station. Therefore, we direct that for the purpose of tariff, by a total cost of Rs.593.04 lakhs as per the following details:

Description	Gross Block (Rs. in lakhs)	Remark
Land	Nil	As per auditors certificate
Building and other Civil works	17.72	- do -
Sub-station	229.66	- do -
Transmission Line	329.00	Based on restricted cost/Km of Rs.32.9 lakhs and line length of 10 Km.
PLCC	16.66	As per auditors certificate
Total	593.04	

INTEREST ON LOAN

12. 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.

DEPRECIATION

13. It has been contended by the respondents that in earlier tariff notifications issued by Ministry of Power, depreciation used to be charged from the year following

the financial year in which assets had been put under commercial operations. Therefore, the same principle should be following in the present proceedings. The petitioner in its rejoinders has stated that depreciation has been worked out in accordance with Ministry of Power notification dated 16.12.1997. We have considered the rival submissions. In accordance with the notification dated 16.12.1997 issued by Ministry of Power, the transmission charges which include interest on loan, depreciation, O&M expenses, tax on income and return on equity are recoverable from the date of commercial operation of the project, though the transmission charges for the first financial year from the date of commercial operation are applied on prorata basis for completed months of use. In view of these provisions of the notification dated 16.12.1997, we are satisfied that the depreciation has been correctly charged. However, while approving tariff, the weighted average depreciation rate has been worked out on the basis of actual capital expenditure as per CA's certificate annexed to the petition.

O&M EXPENSES

14. 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.

INTEREST ON WORKING CAPITAL

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 year 2000-2001 allowed in tariff is 11.5%.

16. We approve Rs. _____ lakhs of the transmission charges in respect of Panki-Mainpuri LILO and associated bays for the period from 1.12.2000 to 31.3.2001. The approval of transmission charges from 1.4.2001 to 31.3.2004 shall be considered in the separate petition filed by the petitioner.

17. 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 from time to time and in force up to 31.3.2001.

18. The transmission charges approved by us shall be included in the regional transmission tariff of Northern Region and shall be shared by the regional beneficiaries in accordance with para 7 of notification dated 16.12.1997.

19. High Court of Delhi in its order dated 28.5.2001 in FAO No. 253/2001 had directed that the respondents would pay 90% of the tariff claimed by the appellant (the present petitioner) on provisional basis, subject to adjustment of tariff as may be finally determined by the Commission, though the appellant was given liberty to raise

the bill for the full amount calculated and claimed by it, from the date it started transmitting energy in connection with the present project. In view of the final determination of tariff by us, the provisional tariff earlier allowed by the High Court shall be adjusted against the final tariff now approved by us.

20. 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 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.**

A U D I T O R ' S C E R T I F I C A T E

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 of the company up to _____(date). 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.

Auditor's Signature with Seal and Date

21. This order disposes of petition No.89/2000.

Sd/-
(K.N. SINHA)
MEMBER

Sd/-
(G.S. RAJAMANI)
MEMBER

Sd/-
(D.P. SINHA)
MEMBER

New Delhi dated the 24th June 2002