

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram:

- 1. Shri Ashok Basu, Chairman**
- 2. Shri K.N. Sinha, Member**
- 3. Shri Bhanu Bhushan, Member**

Petition No. 79/2001

In the matter of

Transmission tariff for 400 kV S/C of Hissar-Bhiwani Ckt-I with associated bays at Hissar and Bhiwani substations, One no. bay at Bhiwani sub-station for termination of one circuit of 400 kV Bawana-Bhiwani line and 400 kV S/C of Hissar-Bawana line up to Bhiwani along with associated bay at Hissar under Moga-Hissar-Bhiwani Transmission System.

And in the matter of

Power Grid Corporation of India Limited

...**Petitioner**

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd, Jaipur
2. Himachal Pradesh State Electricity Board, Shimla
3. Punjab State Electricity Board, Patiala
4. Haryana Vidyut Prasaran Nigam Ltd., Panchkula
5. Power Development Department, Govt. of J&K, Jammu
6. Uttar Pradesh Power Corporation Ltd., Lucknow
7. Delhi Vidyut Board, New Delhi
8. Chief Engineer, Chandigarh Administration, Chandigarh
9. Uttranchal Power Corporation Ltd., Dehradun

... **Respondents**

ORDER

The petitioner, Power Grid Corporation of India Ltd had made the application for approval of transmission charges for (i) 400 kV S/C of Hissar-Bhiwani Ckt-I line with associated bays at Hissar and Bhiwani sub-stations, (ii) One bay at Bhiwani sub-station for termination of one circuit of 400 kV Bawana-Bhiwani line, and (iii) 400 kV S/C of Hissar-Bawana line up to Bhiwani along with associated bay at Hissar under Moga-Hissar-Bhiwani Transmission System from the date of commercial operation of

the respective asset and till 31.3.2001. The 400 kV transmission line from Hissar up to Bhiwani Ckt-II and line bay at Hissar involved one loan, called Grid Bond I loan.

2. The petitioner in support of its claim for interest on loan had indicated that there was no repayment of Grid Bond I loan taken for the transmission system, before 31.3.2002. In other words, no repayments up to 31.3.2001 were shown. However, in Petition No. 44/2002 made by the petitioner for approval of tariff in respect of the same transmission system for the period from 1.4.2001 to 31.3.2004, part payment of Grid Bond 1 loan was shown prior to 31.3.2001. Subsequently, affidavits were also filed on behalf of the petitioner showing the loan allocation details. These details also supported the fact of repayment of Grid Bond 1 loan prior to 31.3.2001. Thus, the details furnished in the affidavits filed on behalf of the petitioner are in agreement with the details of loan furnished in the main petition. Based on these details, the tariff for the period 1.4.2001 to 31.3.2004 was approved by the Commission by its order dated 25.3.2004 by considering part repayment of Grid Bond 1 loan prior to 31.3.2001. This necessitated revision of tariff earlier approved by the Commission in Petition No. 79/2001 by order dated 30.10.2002.

3. The position noted above was also noticed in petition No 48/2000. A notice dated 16.4.2004 in that petition was issued to the petitioner directing it to show cause why the tariff already approved by the Commission in that petition should not be reviewed. At the hearing the representative of the petitioner accepted that the tariff approved by the Commission in that petition needed revision. The representative of the petitioner had further submitted that the transmission charges for some other transmission lines, also involving Grid Bond I loan, the tariff for the period ending

31.3.2001 in respect of which had already been approved by the Commission, called for revision. It was stated by the representative of the petitioner that the Commission could revise the tariff in all such cases *suo motu* and without any further notice to the petitioner. Therefore, the transmission charges in respect of 400 kV transmission line from Hissar up to Bhiwani Ckt II and line bay at Hissar are being revised without a fresh show cause notice to the petitioner.

4. The transmission charges for the transmission system were approved by the Commission under its order dated 30.10.2002 after considering, among other things, the information placed on record by the petitioner in regard to Grid Bond I loan. The Commission had allowed the following transmission charges in respect of 400 kV transmission line from Hissar up to Bhiwani Ckt II and line bay at Hissar

400 KV S/C OF HISSAR-BAWANA LINE UP TO BHIWANI ALONG WITH ASSOCIATED BAY AT HISSAR

(Rs. in lakh)

	1997-98 (1.2.1998 to 31.3.1998)	1998-99	1999- 2000	2000-2001
Interest on Loan	11.74	68.11	50.23	47.09
Depreciation	7.26	43.55	43.55	43.55
O&M Charges	2.03	12.29	13.01	13.79
Return on equity	10.11	60.66	60.66	60.66
Interest on Working Capital	0.96	5.31	4.61	4.44
TOTAL	32.10	189.92	172.06	169.53

5. In addition to the transmission charges, the petitioner was to be entitled to other charges like foreign exchange rate variation, income tax, incentive, surcharge and

other cess and taxes in accordance with the notification dated 16.12.1997 issued by Ministry of Power.

6. As seen from para 4 above, the transmission charges allowed by order of 30.10.2002, comprise of five components, namely interest on loan, depreciation, O&M charges, return on equity and the interest on working capital. The discrepancy regarding repayment of Grid Bond I loan, affects interest on loan component of the transmission charges. Further, interest on loan forms part of the working capital on which interest is allowed. The correction of interest on loan component of tariff will involve further correction of interest on working capital component of the transmission charges. The other components of the transmission charges approved earlier will accordingly remain unaffected and unchanged. Therefore, through this order, we are confining our consideration to interest on loan and interest on working capital components of the transmission charges.

Interest on Loan

7. The salient features of recalculation of interest on loan are summarised below:

(a) Details of loan repaid before 31.3.2001 have been taken as per the affidavit dated 30.4.2002 filed by the petitioner in the proceedings in petition No. 44/2002 for approval of tariff for the period commencing on 1.4.2001.

(b) As per Annual Report of the petitioner, Grid Bond-I: consisted of three components, namely Series I, Series II and Series III, having different interest rates, they being 16.75%, 17% and 9%. Repayment of the first two components was due on 10th/13th March 1999. However, the break-up of rate of interest of Series I and Series II is

not made available by the petitioner. Therefore, month-wise interest up to February 1999 has been worked out by presuming that the entire amount under Series I and II carried 16.75% rate of interest.

(c) The actual rates of interest have been considered in respect of all other loans for calculation of interest on loan.

8. The interest payable in accordance with the above methodology is worked out as under:

Calculation of Interest on Loan

(Rs. In Lakh)

Details of Loan	1997-98	1998-99	1999-2000	2000-01
Actual DOCO	01.02.98			
Period from DOCO (Year)	0.17	1.00	1.00	1.00
Loan 1 - Grid Bond-II				
Opening Balance	81.00	81.00	0.00	0.00
Addition	0.00	0.00	0.00	0.00
Repayment Feb. 99	0.00	81.00	0.00	0.00
Closing Balance	81.00	0.00	0.00	0.00
Rate of Interest	14.78%	14.78%	14.78%	14.78%
Interest	2.00	10.97	0.00	0.00
Repayment schedule	repayment in Feb 99			
Loan 2 - UTI				
Opening Balance	48.00	48.00	0.00	0.00
Addition	0.00	0.00	0.00	0.00
Repayment Jan 99	0.00	48.00	0.00	0.00
Closing Balance	48.00	0.00	0.00	0.00
Rate of Interest	16.70%	16.70%	16.70%	16.70%
Interest	1.34	6.68	0	0
Repayment schedule	repayment Jan.99			
Loan 3 - GOI LOAN-I				
Opening Balance	237.00	237.00	237.00	221.20
Addition	0.00	0.00	0.00	0.00
Repayment	0.00	0.00	15.80	15.80
Closing Balance	237.00	237.00	221.20	205.40
Rate of Interest	17.00%	17.00%	17.00%	17.00%
Interest	6.72	40.29	40.29	37.60
Repayment schedule	Repayment on 31.3 2000 and 31.3.2001			
Loan 3 - GOI LOAN-2				

Opening Balance	16.00	16.00	16.00	14.93
Addition	0.00	0.00	0.00	0.00
Repayment	0.00	0.00	1.07	1.07
Closing Balance	16.00	16.00	14.93	13.87
Rate of Interest	17.00%	17.00%	17.00%	17.00%
Interest	0.45	2.72	2.59	2.41
Repayment schedule	repayment in 13.7.99& 13.7.2000			
Loan 3 - GOI LOAN-3				
Opening Balance	23.80	23.80	23.80	22.21
Addition	0.00	0.00	0.00	0.00
Repayment	0.00	0.00	1.59	1.59
Closing Balance	23.80	23.80	22.21	20.63
Rate of Interest	17.00%	17.00%	17.00%	17.00%
Interest	0.67	4.05	3.95	3.68
Repayment schedule	repayment in 20.11.99 and 20.11.2000			
Loan 4A - Grid-I (Issue-I/II)				
Opening Balance	9.71	9.71	0.00	0.00
Addition	0.00	0.00	0.00	0.00
Repayment	0.00	9.71	0.00	0.00
Closing Balance	9.71	0.00	0.00	0.00
Rate of Interest	16.75%	16.75%	16.75%	16.75%
Interest	0.27	1.49	0.00	0.00
Repayment schedule	10/13 March, 1999			
Loan 4B - Grid-I (Issue-III)				
Opening Balance	10.29	10.29	10.29	10.29
Addition	0.00	0.00	0.00	0.00
Repayment	0.00	0.00	0.00	0.00
Closing Balance	10.29	10.29	10.29	10.29
Rate of Interest	9.00%	9.00%	9.00%	9.00%
Interest	0.15	0.93	0.93	0.93
Repayment schedule	March'2002			
Loan 5 - Grid Bond-III				
Opening Balance	6.00	6.00	6.00	6.00
Addition	0.00	0.00	0.00	0.00
Repayment	0.00	0.00	0.00	0.00
Closing Balance	6.00	6.00	6.00	6.00
Rate of Interest	10.27%	10.27%	10.27%	10.27%
Interest	0.10	0.62	0.62	0.62
Repayment schedule	repayment 31.10.2001			
TOTAL				
Opening Balance	431.80	431.80	293.09	274.64
Addition	0.00	0.00	0.00	0.00
Repayment	0.00	138.71	18.45	18.45
Closing Balance	431.80	293.09	274.64	256.18
Interest	11.70	67.75	48.38	45.24

Interest on Working Capital

9. The revised calculations in support of interest on working capital are appended hereinbelow.

		(Rs in lakh)			
Calculation of Working Capital		1997-98	1998-99	1999-2000	2000-01
Operation & Maintenance Expenses	1 month's of O&M expenses	1.02	1.02	1.08	1.15
Maintenance Spares	1% of capital cost	8.11	8.20	8.68	9.20
Receivables	2 months' average billing	32.06	31.59	28.36	27.94
Total		41.19	40.81	38.12	38.29
Rate of interest		14%	13%	12%	11.5%
Interest		0.96	5.31	4.57	4.40

10. Accordingly, the revised transmission charges to which the petitioner is entitled are summarized in the table given below:

400 KV S/C OF HISSAR-BAWANA LINE UP TO BHIWANI ALONG WITH ASSOCIATED BAY AT HISSAR

		(Rs. in lakh)			
	1997-98 (1.2.1998 to 31.3.1998)	1998-99	1999-2000	2000-2001	
Interest on Loan	11.70	67.75	48.38	45.24	
Depreciation	7.26	43.55	43.55	43.55	
O&M Charges	2.03	12.29	13.01	13.79	
Return on equity	10.11	60.66	60.66	60.66	
Interest on Working Capital	0.96	5.31	4.57	4.40	
TOTAL	32.06	189.56	170.17	167.64	

11. There is no change in the transmission charges approved already in respect of other assets covered in the present petition. The revised transmission charges in respect of 400 kV transmission line from Hissar up to Bhiwani Ckt-II and line bay at Hissar shall be shared by the beneficiaries in the Northern Region in accordance with the principles contained in paragraph 18 of the Commission's order dated 30.10.2002 *ibid.*

Sd/-
(BHANU BHUSHAN)
MEMBER

Sd/-
(K.N. SINHA)
MEMBER

Sd/-
(ASHOK BASU)
CHAIRMAN

New Delhi dated the 30th July 2004