## CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Coram:

- 1. Shri A.K.Basu, Chairperson
- 2. Shri Bhanu Bhushan, Member
- 3. Shri A.H. Jung, Member

I.A.No. 2/2007 in Petition No.117/2005

#### In the matter of

Approval of transmission charges for Agra (Powergrid) – Agra (UPPCL) 400 kV D/C interconnection in Northern Region for the period from 1.4.2004 to 31.3.2009.

#### And in the matter of

Power Grid Corporation of India Limited

#### ..Petitioner

- 1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd, Jaipur
- 2. Ajmer Vidyut Vitaran Nigam Ltd., Ajmer

Vs

- 3. Jaipur Vidyut Vitaran Nigam Ltd, Jaipur
- 4. Jodhpur Vidyut Vitaran Nigam Ltd, Jodhpur
- 5. Himachal Pradesh State Electricity Board, Shimla
- 6. Punjab State Electricity Board, Patiala
- 7. Haryana Vidyut Prasaran Nigam Ltd, Panchkula
- 8. Power Development Department, Govt. of J&K, Srinagar
- 9. Uttar Pradesh Power Corporation Ltd., Lucknow
- 10. Delhi Transco Ltd, New Delhi
- 11. Chandigarh Administration, Chandigarh
- 12. Uttranchal Power Corporation Ltd, Dehradun
- 13. North Central Railway, Allahabad

.....Respondents

#### ORDER

The Commission by its order dated 7.7.2006 had allowed tariff for Agra

(Powergrid) – Agra (UPPCL) 400 kV D/C interconnection in Northern Region for the

period from 1.4.2004 to 31.3.2009.

2. The Commission in its said order dated 7.7.2006, approved the additional

capitalization of Rs. 16.98 lakh during 2004-05, but had not considered the additional

\_\_\_\_\_

C:\Documents and Settings\admin\Desktop\Signed Orders\Tariff\Transmission\Order in I.A. No. 2-07 in Pet 102-05.doc

capitalization amount for determination of tariff since by the time the petitioner had not furnished the details of loan reconciliation for the year 2004-05. The tariff for the block years 2004-09 was worked out on the basis of gross block of Rs.3194.42 lakh as on 1.4.2004. The petitioner was granted liberty to approach the Commission for revision of tariff for period 2004-09 in accordance with law based on additional capital expenditure incurred during 2004-05.

3. Through this Interlocutory application, petitioner has prayed for revision of tariff based on additional capitalization incurred during 2004-05.

# CAPITAL COST

4. The petitioner has claimed tariff based on capital cost of Rs. 3211.40 lakh after

accounting for additional capitalization of Rs. 16.98 lakh for the period from 1.4.2004

to 31.3.2005 already approved, over the capital expenditure of Rs. 3194.42 lakh

considered in the order dated 21.7.2005 in Petition No. 192/2004.

# DEBT- EQUITY RATIO

5. Clause (1) of Regulation 54 of the 2004 regulations inter alia provides that,-

"(1) In case of the existing projects, debt-equity ratio Considered by the Commission for fixation of tariff for the period ending 31.3.2004 shall be considered for determination of tariff with effect from 01.04.2004:

Provided that in cases where the tariff for the period ending 31.3.2004 has not been determined by the Commission, debt-equity ratio shall be as may be decided by the Commission:

Provided further that in case of the existing projects where additional capitalisation has been completed on or after 1.4.2004 and admitted by the Commission under Regulation 53, equity in the additional capitalisation to be considered shall be :-

(a) 30% of the additional capital expenditure admitted by the Commission, or

\_\_\_\_\_

C:\Documents and Settings\admin\Desktop\Signed Orders\Tariff\Transmission\Order in I.A. No. 2-07 in Pet 102-05.doc

- (b) equity approved by the competent authority in the financial package, for additional capitalisation, or
- (c) actual equity employed,
- whichever is the least:

Provided further that in case of additional expenditure admitted under the second proviso, the Commission may considered equity of more than 30% if the transmission licensee is able to satisfy the Commission that deployment of such equity of more than 30% was in the interest of general public.

6. The Note 1 below Regulation 53 lays down that any expenditure on account of committed liabilities within the original scope of work is to be serviced in the normative debt-equity ratio specified in Regulation 54.

7. The petitioner has claimed tariff based on debt-equity ratio of 81.52:18.98 as considered by the Commission in its order dated 21.7.2005. The petitioner has further considered the entire amount of additional capitalization against equity. The approved debt-equity ratio as indicated by the petitioner is 80:20. The additional capital expenditure of Rs. 16.98 lakh for the year 2004-05 has been segregated in the debt-equity ratio of 80:20. Accordingly, an amount of Rs. 13.58 lakh has been aggregated to loan and Rs. 3.40 lakh to equity. For the purpose of tariff, an amount of Rs.609.82 lakh has been considered as equity as on 1.4.2005. The resultant debt-equity ratio works out to 81.01:18.99. Based on this, the tariff approved under order dated 7.7.2006 is being revised.

## **RETURN ON EQUITY**

8. The petitioner has claimed return on equity of Rs. 623.40 lakh, which includes equity amounting to Rs. 16.98 lakh, on account of capital expenditure incurred from 1.4.2004 to 31.3.2005. For the reasons recorded in para 7 above equity of Rs. 586.75

C:\Documents and Settings\admin\Desktop\Signed Orders\Tariff\Transmission\Order in I.A. No. 2-07 in Pet 102-05.doc

lakh has been considered as on 1.4.2004 and from 1.4.2005 onwards, equity of Rs. 609.82 lakh has been considered each year. However, tariff for the year 1.4.2004 to 31.3.2005 has been allowed on average equity of Rs. 598.28 lakh. Accordingly, the petitioner shall be entitled to return on equity of Rs. 85.14 lakh during 2004-05 and Rs. 85.37 lakh each year during 2005-09.

## **INTEREST ON LOAN**

9. Based on the revised capital cost, the year-wise details of interest on loan worked out are given hereunder:

(Rs. in lakh)

Details of loan	Up to 31.3.2004	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on Loan						
Gross loan as per order dated 7.7.2006	2588.00					
Gross Normative Loan	2588.00	2588.00	2601.58	2601.58	2601.58	2601.58
Addition due to additional capitalization		13.58	0.00	0.00	0.00	0.00
Cumulative Repayment up to Previous Year	0.00	0.00	95.62	310.43	525.24	740.04
Net Loan-Opening		2588.00	2505.96	2291.15	2076.35	1861.54
Repayment during the year		95.62	214.81	214.81	214.81	214.81
Net Loan-Closing		2505.96	2291.15	2076.35	1861.54	1646.74
Average Loan		2546.98	2398.56	2183.75	1968.94	1754.14
Weighted Average Rate of Interest on Loan		9.7189%	9.7191%	9.7192%	9.7192%	9.7193%
Interest		247.54	233.12	212.24	191.37	170.49

#### **DEPRECIATION**

10. Depreciation works out to Rs. 95.62 lakh for the year 2004-05 on average gross block of Rs. 3202.91 lakh and Rs. 95.93 lakh on gross block of Rs. 3211.40 lakh each year by applying rate of depreciation of 2.9855% and 2.9871%, respectively as shown below:

C:\Documents and Settings\admin\Desktop\Signed Orders\Tariff\Transmission\Order in I.A.

No. 2-07 in Pet 102-05.doc

						(Rs. in lakh	ı)
Details of Depreciation		Up to 31.3.2004	2004-05	2005-06	2006-07	2007-08	2008-09
As per order dated 7.7.2006		3174.75	3194.42				
Additions during 2004-05 due to Additional Capitalisation		19.67	16.98				
Gross Block at the end of the year		3194.42	3211.40	3211.40	3211.40	3211.40	3211.40
Rate of Depreciation			2.9855%	2.9871%			
Depreciable Value	90%		2874.98	2890.26	2890.26	2890.26	2890.26
Balance Useful life of the asset			-	-	-	-	-
Remaining Depreciable Value			2803.89	2723.55	2579.83	2365.02	2150.22
Depreciation			95.62	95.93	95.93	95.93	95.93

# **ADVANCE AGAINST DEPRECIATION**

11. The petitioner's entitlement to Advance Against Depreciation has also been

reworked out and the relevant details are reproduced hereunder:

(Rs. in lakl								
Details of Advance Against	2004-05	2005-06	2006-07	2007-08	2008-09			
Depreciation								
1/10th of Gross Loan(s)	258.80	260.16	260.16	260.16	260.16			
Repayment of Loan	95.62	214.81	214.81	214.81	214.81			
Minimum of the above	95.62	214.81	214.81	214.81	214.81			
Depreciation during the year	95.62	95.93	95.93	95.93	95.93			
(A) Difference	0.00	118.88	118.88	118.88	118.88			
Cumulative Repayment of the Loan	95.62	310.43	525.24	740.04	954.85			
Cumulative Depreciation/ Advance against Depreciation	166.71	262.64	406.36	621.16	835.97			
(B) Difference	(-)71.09	47.79	118.88	118.88	118.88			
Advance Against Depreciation Minimum of (A) and (B)	0.00	47.79	118.88	118.88	118.88			

# **OPERATION & MAINTENANCE EXPENSES**

12. There is no change in O & M expenses approved under order dated 7.7.2006.

\_\_\_\_\_

 $\label{eq:C:Documents} C:\Documents and Settings\admin\Desktop\Signed Orders\Tariff\Transmission\Order in I.A. No. 2-07 in Pet 102-05.doc$ 

# **INTEREST ON WORKING CAPITAL**

13. The revised computations in support of interest on working capital consequent to increase in return on equity, interest on loan and depreciation are appended hereinbelow.

				(Rs. in lakh)					
	2004-05	2005-06	2006-07	2007-08	2008-09				
Maintenance Spares	33.18	35.17	37.28	39.51	41.88				
O & M expenses	10.49	10.91	11.35	11.80	12.28				
Receivables	94.73	101.38	110.83	108.25	105.73				
Total	138.39	147.45	159.45	159.56	159.89				
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%				
Interest	14.19	15.11	16.34	16.35	16.39				

# **TRANSMISSION CHARGES**

14. A summary sheet showing the revised basic details of capital cost and other related aspects is annexed to this order. The revised transmission charges being allowed for the transmission line in suppression of the transmission charges approved under order dated 7.7.2006 are summarised below.

				(Rs. Ir	n lakh)
	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	95.62	95.93	95.93	95.93	95.93
Interest on Loan	247.54	233.12	212.24	191.37	170.49
Return on Equity	85.14	85.37	85.37	85.37	85.37
Advance against Depreciation	0.00	47.79	118.88	118.88	118.88
Interest on Working Capital	14.19	15.11	16.34	16.35	16.39
O & M Expenses	125.88	130.93	136.20	141.58	147.30
Total	568.36	608.25	664.97	649.48	634.36

15. In all other respects the order dated 7.7.2006 shall continue to apply.

16. This order disposes of I.A.No.2/2007.

# Sd-/sd-/(A.H. JUNG)(BHANU BHUSHAN)MEMBERMEMBERNew Delhi dated the 22nd January 2007

sd-/ (ASHOK BASU) CHAIRPERSON

C:\Documents and Settings\admin\Desktop\Signed Orders\Tariff\Transmission\Order in I.A. No. 2-07 in Pet 102-05.doc

			Sun	nmary Sheet						
Nam	ne of the Company:	F	GCIL							
	Name of the Element: Agra (PGCIL)- Agra (UPPCL) 400 KV D/C Interconnection UPPCL								on of	
Actu	ual DOCO:	1	/7/200	)3						
Petit	tion No.:	1	17/20	05						
Tarif	ff setting Period:	2	2004-0	9						
										(Rs.in lakh) 3174.75
1										
2	Additional Capitalisat									19.67
3	Admitted Capital Cos									3194.42
4	Additional Capitalisat		2004-0	9						16.98
	For the year 2004-0	5							16.98	
	Total								16.98	
5	Admitted Capital Cos	st as on 01.0	4.2005	5(3+4)						3211.40
6	Means of Finance :	-			-					
		As on 01-0	)4-200		As o	on 01-04		5		
	Debt	81.02%		2588.00			01%		2601.58	
	Equity	18.98%		606.42			99%		609.82	
_	Total	100.00%		3194.42		100.0	00%		3211.40	
7	Gross Loan									
•	As on 1.4.2004	2588.00			As o	on 1.4.2	005	2601	.58	
8	Cumulative Repayme		3.2009	1						954.85
	Repaid up to 31.3.2								0.00	
	1.4.2004 to 31.3.200								95.62	
	1.4.2005 to 31.3.200	09							859.22	
9	Total		104.0						954.85	1010 71
9 10	Balance Loan to be re									1646.74
10	Depreciation recover	ed up to 31.	3.2009			<u> </u>			Tatal	954.85
	Decovered up to 21	02 2004		Dep			AA		Total	
	Recovered up to 31. 1.4.2004 to 31.3.200		_	71.09				0.00	71.09	
	1.4.2004 to 31.3.200			95.62 383.71				0.00	95.62 788.13	
	Total	09		303.71			40	94.4Z	954.85	
11	Balance Depreciation	to be recov	ored	nevand 21 2	2000 .				954.65 <b>1935.41</b>	
					2003.				3174.75	
									19.67	
	Capital cost as 1.4								3194.42	
	ACE during 2004-0								16.98	
	Capital cost as 1.4								3211.40	
	Less: Land Cost								0.00	
		3211.40								
	90% of Capital Cos	st as above							2890.26	
	Cum. Depreciation		ered ı	p to 31.3.20	)9				954.85	
	Balance Depreciati			•		-			1935.41	

\_\_\_\_\_

\_\_\_

 $<sup>\</sup>label{eq:C:Documents and Settings\admin\Desktop\Signed Orders\Tariff\Transmission\Order in I.A. No. 2-07 in Pet 102-05.doc$