CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 97/TT/2011

Coram:

Shri Gireesh B. Pradhan, Chairperson Shri A. K. Singhal, Member Shri A.S. Bakshi, Member

Date of Order : 13.5.2015

In the matter of

Revision of transmission tariff of (i) 400 kV Parli Switching Station (New) with Bus Reactor and Bhadrawati- Parli 400 kV D/C Line Parli (POWERGRID)-Parli (MSETCL) first circuit, (ii) Combined Assets of 400 kV Parli Switching Station (New) with Bus Reactor and Bhadrawati-Parli 400 kV D/C Line, 400 kV Parli (POWERGRID)-Parli (MSETCL) 1st circuit & 400 kV Parli (POWERGRID)-Parli (MSETCL) 2nd Circuit, (iii) Combined Assets of (ii) & 400 kV D/C Wardha-Parli line along with associated bays under WRSS-II, Set A Scheme of Western Region for tariff block 2009-14 in terms of Appellate Tribunal for Electricity judgement dated 30.1.2015.

And in the matter of:

Power Grid Corporation of India Limited Soudamini, Plot No 2, Sector 29 Gurgaon – 122001

.....Petitioner

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- Madhya Pradesh Power Trading Co Ltd Shakti Bhawan, Rampur, Jabalpur – 482008
- Maharashtra State Electricity Distribution Co Ltd Prakashgad, 4th Floor, Andheri (East), Mumbai – 400052
- Gujarat Urja Vikas Nigam Ltd Sardar Patel Vidyut Bhawan, Race Course Road, Vadodra – 390007
- Electricity Department, Government of Goa Vidyut Bhawan, NER Mandvi Hotel, Panaji – 403001



- Electricity Department,
 Administration of Daman & Diu
 Daman 396210
- Electricity Department,
 Administration of Dadra Nagar Haveli
 UT Silvasa 396230
- 7. Chhattisgarh State Electricity Board PO Sundernagar, Dangania, Raipur –492013
- Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Ltd.
 3/54, Press Complex, Agra-Bombay Road
 Indore 452008

.....Respondents

ORDER

Power Grid Corporation of India Limited filed Petition No. 97/2011 for approval of transmission charges for Asset-I:400 kV Parli Switching Station (New) with Bus Reactor and Bhadrawati-Parli 400 kV D/C transmission line Parli (POWERGRID)-Parli (MSETCL) (First Circuit), Asset-II: 400 kV Parli (POWERGRID)-Parli (MSETCL) D/C transmission line (Second Circuit) and Asset-III: 400 kV Wardha – Parli D/C transmission line along with associated bays in Western Region, constructed under the Western Region System Strengthening Scheme-II (the Scheme), Set – A, for 2009-14 period in terms of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (the 2009 Tariff Regulations). Transmission tariff for the said transmission assets was allowed vide order dated 27.1.2014.

2. The Investment Approval (IA) for the Scheme was accorded by Ministry of Power vide letter dated 24.7.2006. As per the IA, the transmission assets were scheduled to be commissioned within 48 months from the date of approval, that is, by July, 2010. Assets I and II were commissioned on 1.6. 2011 and Asset III was

commissioned on 1.8.2011. Thus, there was delay in commissioning of Assets I and II by 10 months and 12 months in case of Asset III. The Commission condoned delay of 4 months out of total delay of 10 months in case of Asset-II (Bhadrawati-Parli D/C transmission line) on account of tree cutting, site clearance, foundation casting, erection of towers and rain during October, 2010. The entire time over-run of 10 months and 12 months in case of Asset-I and Asset-III respectively was condoned by the Commission in the impugned order. The observations made by the Commission in this regard in its order dated 27.1.2014 in Petition No. 97/2011 is as under:-

- "17. We have condoned delay of four months out of total delay of ten months in case of 400 kV Bhadrawati-Parli D/C transmission line and condone the entire delay for the remaining assets covered in the petition. Therefore, IDC and IEDC for the period of delay is to be disallowed and adjusted in the capital cost....."
- 3. PGCIL filed Appeal No. 87/2014 before the Hon'ble Appellate Tribunal for Electricity (APTEL) against the Commission's order dated 27.1.2014. APTEL in its judgment dated 30.1.2015 condoned the delay of 6 months out of 10 months in case of Asset-II and directed the Commission to pass consequential order. The relevant portion of APTEL's judgment is as under:-
 - "10.2 The transmission line/Asset-II of the Appellant which is in question before us namely, Bhadrawati-Parli transmission line could be charged on 31.3.2011 because due to non-availability of bays at Girwali (Parli) Sub-Station of MSETCL, the transmission system of the Appellant could not be declared under commercial operation till May'2011. The learned Central Commission has committed gross illegality and has taken erroneous view in disallowing the IDC and IEDC for the Asset-II of the Appellant for the period 1.4.2011 to May, 2011. This delay of two months namely, April & May, 2011, should have been condoned by the Central Commission in the impugned order because the transmission line of the Appellant (Asset-II) was ready in March, 2011 but could not be declared under commercial operation till May, 2011 due to non-availability of bays at Girwali (Parli) Sub-Station of MSETCL,......"
 - "11. Appeal No. 87 of 2014 is partly allowed and the impugned order, dated 27.1.2014, passed by the Central Commission in Petition No. 97 of 2011, is modified to the extent as observed above by us. We may further clarify that the learned

Central Commission shall allow IDC and IEDC for the transmission line/Asset-II of the Appellant for the period from April, 2011 to May, 2011 and pass a consequential order within two months from the date of receipt of this order."

4. Accordingly, the transmission tariff for Asset-II, 400 kV Parli (POWERGRID)-Parli (MSETCL) D/C transmission line (Second Circuit) is being revised by allowing IDC and IEDC for 6 months in the subsequent paragraphs.

IDC and IEDC

5. Details of the IDC and IEDC claimed and disallowed for "Bhadrawati-Parli 400 kV D/C Line Parli" are as follows:-

(₹ in lakh)

Detail of IDC and IEDC claimed for Asset-II (Part-B) as per Management Certificate dated 25.7.2013						
23.7.2013	IEDC	IDC				
Upto 31.3.2011	856.89	824.81				
From 1.4.2011 to DOCO	68.33	63.04				
Total IDC and IEDC Claimed	925.22	887.85				
Detail of IDC and IEDC Disallowed for four month						
From December 2010 to March 2011 (for 4 months)	61.21	58.92				
Total Disallowed IDC and IEDC (for four months)	61.21	58.92				

6. Disallowed IDC and IEDC have been deducted proportionately from the capital cost of individual components (except freehold Land cost) of "Bhadrawati-Parli 400 kV D/C Line Parli".

Revision in Annual Transmission Charges

7. In view of the foregoing discussion, the annual transmission charges from the date of commercial operation to 31.3.2014 have been revised by considering revised IDC, IEDC and consequential revision in the admissible initial spares.

Capital cost:

8. The petitioner has claimed capital cost of ₹35475.81 lakh as on the notional date of commercial operation i.e. 1.6.2011 for Combined Assets-I & II vide

Management Certificate dated 25.7.2013 filed alongwith the affidavit dated 31.7.2013 and ₹81690.02 for Combined Assets-I, II & III vide Auditor's certificate dated 7.11.2011 filed alongwith affidavit dated 1.12.2011.

9. Details of the capital cost considered for the purpose of tariff calculation as on the date of commercial operation is as follows:-

(₹ in lakh)

Particular	Combined Assets-I & II	Asset-3	Combined Assets-I, II & III
Capital Cost as on 1.6.2011/DOCO	35475.81		,
Less: IDC & IEDC Disallowed	(120.12)		
Capital Cost considered as on			35515.44+
1.6.2011	35355.69		46054.46
Capital Expenditure for June and			=
July 2011	159.75		
Capital Cost as on 1.8.2011	35515.44	46054.46	81569.90

10. The tariff for combined Assets-I & II has been computed for the year 2011-12 (pro-rata) which would be applicable from 1.6.2011 to 31.7.2011. Tariff for combined Assets-I, II & III has been computed for the 2011-14 period and it would be applicable from 1.8.2011 to 31.3.2014.

Projected Additional Capitalisation:

11. Details of proposed additional capital expenditure for the assets are as follows:-

(₹ in lakh)

Particular	Year	Work/ Equipment proposed to be added after COD up to Cut off date	Amount Capitalised or Proposed	Justification
		Freehold Land	0.00	(Balance/
		Building & Civil Works	441.61	Retention
Combined Assets-I & II*	2011-12	Transmission Line	877.86	payments and
Combined Assets-1 & II	2011-12	Sub-station	542.63	Freight &
		PLCC	0.00	Insurance
		Total	1862.10	Payments)
Combined Assets- I, II	2011-12	Freehold Land	0.00	

& III **		Building & Civil Works	683.35
		Transmission Line	5278.38
		Sub-station	1094.52
		PLCC	23.05
		Total	7079.30
		Freehold Land	0.00
		Building & Civil Works	112.53
	2012-13	Transmission Line	79.33
		Sub-station	240.30
		PLCC	5.97
		Total	438.13
		Freehold Land	3654.06
		Building & Civil Works	127.44
	2013-14	Transmission Line	22.19
	2013-14	Sub-station	86.84
		PLCC	0.00
		Total	3890.53

^{*}As per affidavit dated 31.7.2013,

12. Additional capital expenditure claimed by the petitioner falls within the cut-off date. Hence, the same has been considered for the purpose of tariff calculation.

Debt- Equity Ratio:

13. The revised opening debt-equity ratio of the instant assets considered for the purpose of tariff calculation is as follows:-

(₹ in lakh)

Approved Cost			Cost as on DO	CO	-	
Combined Asset- &						
Particulars	Amount	%	Amount	%		
Debt	32921.84	70.00	24748.98		70.00	
Equity	14109.36	30.00	10606.71		30.00	
Total	47031.20	100.00	35355.69		100.00	
	Combine	ed Asset- I, I	l & III			
Particulars	Amount	%	Amount	%		
Debt	79858.28	70.00	57099.11		70.00	
Equity	34224.98	30.00	24470.79		30.00	
Total	114083.26	100.00	81569.90		100.00	

14. The revised debt-equity as on 31.3.2014 is as follows:-

^{**}As per Affidavit dated 1.12.2011 and 31.7.2013.

(₹ in lakh)

Combined Asset- &						
As on 31.3.2014						
Particulars Amount %						
Debt	65084.68	70	0.00			
Equity 27893.18 30.00						
Total	· · · · · · · · · · · · · · · · · · ·					

15. The revised projected additional capital expenditure of the instant transmission assets are as follows:-

(₹ in lakh)

(₹ in iakn)					
Com	Combined Asset- &				
Add	Add cap for 2011-12				
Particulars	Amount	%			
Debt	1303.47	70.00			
Equity	558.63	30.00			
Total	1862.10	100.00			
Combi	ined Asset I, II &	ß III			
Add	cap for 2011-1	2			
Particulars	Amount	%			
Debt	4955.51	70.00			
Equity	2123.79	30.00			
Total	7079.30	100.00			
Add	cap for 2012-1	3			
Particulars	Amount	%			
Debt	306.69	70.00			
Equity	131.44	30.00			
Total	438.13	100.00			
Add	cap for 2013-1	4			
Particulars	Amount	%			
Debt	2723.37	70.00			
Equity	1167.16	30.00			
Total 3890.53 100					

Return on Equity:-

16. The revised return on equity for the instant transmission assets is as follows:-

Description	Equity on DOCO/ Notional DOCO	Notional equity due to ACE for the period 2011-12	Average equity considered for tariff calculations for the period 2011-12*	Notional equity due to ACE for the period 2012-13	Average equity considered for tariff calculations for the period 2012-13*	Notional equity due to ACE for the period 2013-14	Average equity considered for tariff calculations for the period 2013-14*
Combined Assets-I & II	10606.71	558.63	10886.02	-	-	-	-
Combined Assets-I, II & III	24470.79	2123.79	25532.68	131.44	26660.30	1167.16	27309.60

^{*}Average equity corresponding to ACE has been considered calculated as follows- Base rate/(1-t), where Base Rate is 15.5% and 't' is normal tax rate for the period 2008-09 applicable to PowerGrid which is under MAT i.e. 10%+ surcharge@10%+3%Education Cess.

Interest on Loan:

- 17. As the tariff is to be allowed for combined Assets-I & II only for the period from June and July 2011, repayment of Normative Loan i.e. ₹313.64 lakh for Combined Assets-I & II for the period from June and July 2011 has been considered as cumulative Repayment of Normative Loan for Combined Assets-I, II & III as on notional date of commercial operation i.e. 1.8.2011.
- 18. The petitioner has considered exchange rate of ₹45.48/\$ as on 1.6.2011 against a IBRD-IV ADDL loan of \$546.02 lakh in case of Combined Asset-I & II and the same has been clubbed with the loan of \$737.84 lakh as on 1.8.2013, date of commercial operation of Combined Asset-I, II & III, @ ₹44.54/\$. However, exchange rate as on actual the date of commercial operation of the respective asset (i.e. ₹45.48/\$ for loan of \$546.02 lakh against combined Asset-I & II and ₹44.54/\$ for loan of \$737.84 lakh against Asset-III) has been considered for the computation of weighted average rate of interest on actual loans for combined Assets-I, II & III.

19. The revised interest on loan calculated are as under:-

(₹ in lakh)

Particulars	Combined	Combined Asset-I, II & III		
	Asset-I & II			
	2011-12	2011-12	2012-13	2013-14
	(pro-rata)	(pro-rata)		
Gross Normative Loan	24748.98	57099.11	62054.62	62361.31
Cumulative Repayment upto	0.00	313.64	3283.51	7929.21
Previous Year				
Net Loan-Opening	24748.98	56785.47	58771.11	54432.10
Addition due to Additional	1303.47	4955.51	306.69	2723.37
Capitalisation				
Repayment during the year	1568.20	2969.87	4645.70	4661.21
Net Loan-Closing	24484.25	58771.11	54432.10	52494.25
Average Loan	24616.62	57778.29	56601.60	53463.18
Weighted Average Rate of	1.73%	1.73%	1.73%	1.73%
Interest on Loan				
Interest	354.89	666.38	979.21	924.91

Depreciation:

- 20. The instant transmission assets were put under commercial operation on 1.6.2011 and 1.8.2011 and accordingly will complete 12 years beyond 2013-14 and thus depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-III.
- 21. Depreciation of combined Assets-I & II i.e. ₹313.64 lakh for the period from June to July 2011 has been considered as cumulative Depreciation for the Combined Assets-I, II & III.
- 22. Details of the revised depreciation worked out are as follows:-

(₹ in lakh)

Particulars	Combined Assets-I & II	Combined Assets-I, II & III		
	2011-12 (pro-rata)	2011-12 (pro-rata)	2012-13	2013-14
Opening Gross Block	35355.69	81569.90	88649.20	89087.33
Addition during 2009-14 due to Projected Additional Capitalisation	1862.10	7079.30	438.13	3890.53
Closing Gross Block	37217.79	88649.20	89087.33	92977.86

Average Gross Block	36286.74	85109.55	88868.26	91032.59
Rate of Depreciation	5.1860%	5.2342%	5.2276%	5.1204%
Depreciable Value	32592.63	76533.15	79916.00	80219.57
Remaining Depreciable	32592.63	76219.51	76632.48	72290.35
Value				
Depreciation	1568.20	2969.87	4645.70	4661.21

Operation & Maintenance Expenses

23. There is no change in the O&M Expenses allowed vide order dated 27.1.2014.

Interest on working capital

24. The revised interest on working capital for the instant transmission assets is follows:-

(₹ in lakh) **Particulars** Combined Assets-I, II & III Combined Assets-I & II 2011-12 2012-13 2013-14 2011-12 (pro-rata) (pro-rata) 189.98 212.28 Maintenance Spares 19.90 200.84 O & M expenses 11.06 105.54 111.58 117.93 142.47 Receivables 1907.18 1982.32 2008.35 2338.56 Total 173.43 2202.70 2294.73 11.75% 11.75%

20.38

11.75%

172.55

269.63

Annual Transmission Charges

Interest

Rate of Interest

25. Annual Fixed Charged for the instant transmission assets covered have been revised considering the above aspects and as provided under the 2009 Tariff Regulations. The details are as follows:-

11.75%

274.78

(₹ in lakh)

Particulars	Combined Assets- I & II	Combined Assets-I, II & III		
	2011-12 (pro-rata)	2011-12 (pro-rata)	2012-13	2013-14
Depreciation	313.64	2969.87	4645.70	4661.21
Interest on Loan	70.98	666.38	979.21	924.91
Return on Equity	317.16	2975.58	4660.49	4773.99
Interest on Working Capital	20.38	172.55	269.63	274.78
O & M Expenses	132.68	844.35	1338.90	1415.18
Total	854.84	7628.72	11893.93	12050.08

26. Except for the above, all other terms and conditions of the order dated 27.1.2014 in Petition No. 97/TT/2011 remain unaltered.

sd/sd/sd/-

(A.S. Bakshi) Member (A.K. Singhal) Member (Gireesh B. Pradhan) Chairperson