

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 306/2009

Coram:

- 1. Dr. Pramod Deo, Chairperson**
- 2. Shri S.Jayaraman, Member**
- 3. Shri V.S.Verma, Member**

DATE OF HEARING: 16.2.2010

DATE OF ORDER: 7.4.2010

In the matter of

Revision of transmission tariff due to additional capital expenditure incurred during 2008-09 for 400 kV Bina-Nagda D/C transmission line along with associated bay equipment at Nagda and Bina in Western Region.

And in the matter of

Power Grid Corporation of India Limited, Gurgaon **..Petitioner**
Vs

1. Madhya Pradesh Power Transmission Company Ltd
2. Maharashtra State Electricity Distribution Company Ltd.,
Mumbai
3. Gujarat Urja Vikas Nigam Ltd., Baroda
4. Electricity Deptt., Government of Goa, Panaji
5. Electricity Deptt., Administration of Daman & Diu, Daman
6. Electricity Deptt., Administration of Dadra Nagar Haveli, Silvassa
7. Chhattisgarh State Electricity Board, Raipur
8. Madhya Pradesh Audyogik Kandra Vikas Nigam (Indore) Ltd,
Indore

.....Respondents

The following were present:

1. Shri U.K.Tyagi, PGCIL
2. Shri M.M.Mondal, PGCIL
3. Shri Mohd. Mohsin, PGCIL
4. Shri R.Prasad, PGCIL

ORDER

This petition has been filed for revision of transmission tariff on account of additional capital expenditure in respect of 400 kV Bina-Nagda D/C transmission line along with associated bay equipment at Nagda and Bina

(the transmission line) in Western Region during the period from 1.4.2008 to 31.3.2009, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004, (hereinafter referred to as “the 2004 regulations”). The petitioner has also prayed for reimbursement of the petition filing fee, licence fee and other expenditure in connection with the filing of the petition.

2. The investment approval for the transmission line was accorded by Board of Directors of the petitioner company vide its Memorandum dated 13.7.2004 at an estimated cost of Rs. 26693 lakh, which included IDC of Rs. 1467 lakh. Subsequently, approval for the revised cost estimate was accorded by Board of Directors vide letter dated 3.12.2007 for an estimated cost of Rs. 38780 lakh, which included IDC of Rs. 2163 lakh.

3. The transmission charges for the transmission line were approved by the Commission vide its order dated 27.5.2008 in Petition No. 168/2008 for the period 1.11.2007 to 31.3.2009 after accounting for additional capital expenditure incurred up to 31.3.2007. The summary of the revised transmission charges approve by the said order dated 27.5.2009 is extracted hereunder:

	(Rs. in lakh)	
	2007-08 (Pro rata)	2008-09
Depreciation	365.38	884.17
Interest on Loan	876.32	2064.29
Return on Equity	571.95	1384.56
Advance against Depreciation	0.00	0.00
Interest on Working Capital	58.52	141.45
O & M Expenses	122.87	307.24
Total	1995.05	4781.71

4. The relevant details of the capital expenditure of the transmission assets claimed by the petitioner are as under:

(Rs. in lakh)

Capital Expenditure as on 1.4.2008	Additional Capital Expenditure during 2008-09	Capital expenditure as on 1.4.2009
32965.50 (As per order dated 27.5.2009)	1472.40	34437.71

5. Based on the above additional capital expenditure, the petitioner has claimed the revised transmission charges for the year 2008-09 as under:

(Rs. in lakh)

	2008-09
Depreciation	903.75
Interest on Loan	2111.57
Return on Equity	1415.47
Advance against Depreciation	0.00
Interest on Working Capital	143.48
O & M Expenses	307.24
Total	4881.51

6. The details submitted by the petitioner in support of its claim for interest on working capital are given hereunder:

(Rs. in lakh)

	2008-09
Maintenance Spares	324.01
O & M expenses	24.57
Receivables	798.02
Total	1146.60
Rate of Interest	12.25%
Interest	58.52

7. MPPTCL, the first respondent herein, in its reply has submitted that the additional capital expenditure is on account of final/retention payments and service tax and entry tax. Since the issue of service tax is under consideration of the Commission, it has been prayed to disallow the excess capital expenditure claimed by the petitioner. The respondent in its rejoinder has submitted that the service tax amount claimed by the petitioner as part of the additional capital expenditure is related to contractor payments towards erection contracts and does not pertain to transmission charges. The issue of service tax on transmission charges is yet to be decided by the Hon`ble Commission and hence it has not been claimed by the petitioner. We have considered the submission of the first respondent and petitioner on this point and are of view that the service tax paid to the contractor for the service rendered by him is different from the service tax on transmission charges and therefore, the service tax paid to the contractor by the petitioner for erection contract to be allowed as part of the additional capital expenditure.

CAPITAL COST

8. The details submitted by the petitioner in support of its claim for additional capital expenditure are given hereunder:

Year	Amount (Rs. in lakh)	Nature and details of expenditure
2008-09	Transmission line = Rs. 1343.20 lakh	Final and retention payment, provision for entry and service tax
	Sub-station = Rs. 128.84 lakh	
	Total = Rs. 1472.04 lakh	

9. It is found that the additional capital expenditure claimed is in respect of committed liabilities. These are part of the deferred liabilities relating to works/services which have since materialised, and are within the original scope of work. Therefore, the additional expenditure sought to be capitalised is allowed under clauses (1) and (2) of Regulation 53 of the 2004 regulations.

TOTAL CAPITAL COST

10. Based on the above, capital cost for the purpose of tariff for the transmission line as on 31.3.2009 works out as under:

(Rs. in lakh)			
Capital expenditure as on 1.4.2008	Additional expenditure 2008-09	capital during	Capital expenditure as on 1.4.2009
32965.67		1472.40	34437.71

DEBT- EQUITY RATIO

11. The petitioner has considered the amount of additional capitalization in the debt-equity ratio of 70:30. This has been found to be in order. Accordingly, for the purpose of tariff, equity considered for the transmission assets is as under:

(Rs. in lakh)			
Equity as on 1.4.2008	Equity addition due to additional capital expenditure during 2008-09	Total considered equity as on 31.3.2009	Average equity for 2008-09
9889.70	441.61	10331.31	10110.51

RETURN ON EQUITY

12. As per clause (iii) of Regulation 56 of the 2004 regulations, return on equity shall be computed on the equity base determined in accordance with regulation 54 @ 14% per annum. Equity invested in foreign currency is to be allowed a return in the same currency and the payment on this account is made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

13. Equity as given in the table under para 11 above has been considered. The tariff for the year 2008-09 has been allowed on average equity. Accordingly, revised return on equity of Rs. 1415.47 lakh has been allowed for the year 2008-09.

INTEREST ON LOAN

14. Clause (1) of Regulation 56 of the 2004 regulations *inter alia* provides that,-

"(a) Interest on loan capital shall be computed loan wise on the loans arrived at in the manner indicated in regulation 54.

(b) The loan outstanding as on 1.4.2004 shall be worked out as the gross loan in accordance with Regulation 54 minus cumulative repayment as admitted by the Commission or any other authority having power to do so, up to 31.3.2004. The repayment for the period 2004-09 shall be worked out on a normative basis.

(c) The transmission licensee shall make every effort to re-finance the loan as long as it results in net benefit to the beneficiaries. The costs associated with such re-financing shall be borne by the beneficiaries.

(d) The changes to the loan terms and conditions shall be reflected from the date of such re-financing and benefit passed on to the beneficiaries.

(e) In case of dispute, any of the parties may approach the Commission with proper application. However, the beneficiaries shall not withhold any payment ordered by the Commission to the

transmission licensee during pendency of any dispute relating to re-financing of loan;

(f) In case any moratorium period is availed of by the transmission licensee, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.

(g) The transmission licensee shall not make any profit on account of re-financing of loan and interest on loan;

(h) The transmission licensee may, at its discretion, swap loans having floating rate of interest with loans having fixed rate of interest, or vice versa, at its own cost and gains or losses as a result of such swapping shall accrue to the transmission licensee:

Provided that the beneficiaries shall be liable to pay interest for the loans initially contracted, whether on floating or fixed rate of interest."

15. In our calculation, the interest on loan has been worked out as detailed below:

(a) Gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual loan have been considered as per order dated 27.5.2009 in Petition No. 168/2008. Bond XXVIII has been utilised for part funding of additional capital expenditure during 2008-09.

(b) Notional loan arising out of additional capitalization for the year 2008-09 has been added in loan amount as on 31.3.2008 to arrive at total notional loan. This adjusted gross loan has been considered as normative loan for tariff calculations.

(c) Tariff has been worked out considering normative loan and normative repayments. Normative repayments have been worked out by the following formula:

$$\frac{\text{Actual repayment of actual loan during the year}}{\text{Opening balance of actual loan during the year}} \times \text{Opening balance of normative loan during the year}$$

(d) Moratorium in repayment of loan has been considered with reference to normative loan and if the normative repayment of loan during the year is less than the depreciation during the year, it has been considered as moratorium and depreciation during the year has been deemed as normative repayment of loan during the year.

(e) Weighted average rate of interest on actual loan worked out as per (a) above has been applied on the average loan during the year to arrive at the interest on loan.

(f) Short term loan from ICICI was replaced by Bond XXVI w.e.f. 7.3.2008. Therefore, for the year 2007-08, weighted average rate of interest based on number of days for these loans has been considered while working out the weighted average rate of interest on actual loans.

16. Based on above, revised interest on loan for the year 2008-09 has been worked out as under:

(Rs. in lakh)	
Details	2008-09
Gross Normative Loan-Opening	23075.97
Cumulative Repayment up to Previous Year	365.38
Net Loan-Opening	22710.59

Addition due to Additional Capitalisation	1030.43
Repayment during the year	903.75
Net Loan-Closing	22837.26
Average Loan	22773.93
Weighted Average Rate of Interest on Loan	9.27%
Interest	2111.57

17. The detailed calculations in support of the weighted average rate of interest are contained in Annexure attached.

DEPRECIATION

18. Sub-clause (a) of clause (ii) of Regulation 56 of the 2004 regulations provides for computation of depreciation in the following manner, namely:

(a) The value base for the purpose of depreciation shall be the historical cost of the asset.

(b) Depreciation shall be calculated annually based on straight line method over the useful life of the asset and at the rates prescribed in Appendix II to these regulations. The residual value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the historical capital cost of the asset. Land is not a depreciable asset and its cost shall be excluded from the capital cost while computing 90% of the historical cost of the asset. The historical capital cost of the asset shall include additional capitalisation on account of Foreign Exchange Rate Variation up to 31.3.2004 already allowed by the Central Government/Commission.

(c) On repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life of the asset.

(d) Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

19. Depreciation allowed has been worked out as below:

	(Rs. in lakh)
	2008-09
Gross block as on 1 st April of the year	32965.67
Addition due to Additional Capitalisation	1472.04
Gross Block	34437.71
Rate of Depreciation	2.6816%
Depreciable Value	30331.52
Balance Useful life of the asset	-
Remaining Depreciable Value	29966.14
Depreciation	903.75

ADVANCE AGAINST DEPRECIATION

20. As per sub-clause (b) of clause (ii) of Regulation 56 of the 2004 regulations, in addition to allowable depreciation, the transmission licensee is entitled to Advance Against Depreciation, computed in the manner given hereunder:

AAD = Loan repayment amount as per regulation 56 (i) subject to a ceiling of 1/10th of loan amount as per regulation 54 minus depreciation as per schedule

21. It is provided that Advance Against Depreciation shall be permitted only if the cumulative repayment up to a particular year exceeds the cumulative depreciation up to that year. It is further provided that Advance Against Depreciation in a year shall be restricted to the extent of difference between cumulative repayment and cumulative depreciation up to that year.

22. The petitioner has not claimed Advance Against Depreciation and, thereafter, Advance Against Depreciation has not been considered.

OPERATION & MAINTENANCE EXPENSES

23. In accordance with clause (iv) of Regulation 56 the 2004 regulations, the following norms are prescribed for O & M expenses:

	Year				
	2004-05	2005-06	2006-07	2007-08	2008-09
O&M expenses (Rs in lakh per ckt-km)	0.227	0.236	0.246	0.255	0.266
O&M expenses (Rs in lakh per bay)	28.12	29.25	30.42	31.63	32.90

24. O&M expenses as taken for the tariff calculations as per order dated 27.5.2009 in Petition No. 168/2008 have been considered, since line length and number of bays remain unchanged.

INTEREST ON WORKING CAPITAL

25. The components of the working capital and the interest thereon are discussed hereunder:

(i) Maintenance spares

Regulation 56(v) (1) (b) of the 2004 regulations provides for maintenance spares @ 1% of the historical cost escalated @ 6% per annum from the date of commercial operation. The petitioner has

claimed maintenance spares after accounting for additional capital expenditure. For the purpose of computation of maintenance spares, the historical cost is being taken as the cost on the date of commercial operation. Accordingly, maintenance spares have been worked out on the historical cost and providing escalation from the date of commercial operation.

(ii) O & M expenses

Regulation 56(v)(1)(a) of the 2004 regulations provides for operation and maintenance expenses for one month as a component of working capital. O&M expenses as considered in the order dated 27.5.2009 in Petition No. 168/2008 have been considered.

(iii) Receivables

As per Regulation 56(v)(1)(c) of the 2004 regulations, receivables will be equivalent to two months average billing calculated on target availability level. Accordingly, in the tariff being allowed, receivables have been worked out on the basis of 2 months' transmission charges.

(iv) Rate of interest on working capital

As per Regulation 56(v) (2) of the 2004 regulations, rate of interest on working capital shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on 1.4.2004 or on 1st April of the year in which the project or part thereof (as the case may be) is declared under commercial operation, whichever is later. The interest on working capital is

payable on normative basis notwithstanding that the transmission licensee has not taken working capital loan from any outside agency. The petitioner has claimed interest on working capital @ 12.25% based on SBI PLR as on 1.4.2007, which is in accordance with the 2004 regulations and has been allowed.

26. The necessary computations in support of revised interest on working capital, as revised, are appended herein below:

	(Rs. in lakh)
	2008-09
Maintenance Spares	332.11
O & M expenses	25.60
Receivables	813.59
Total	1171.30
Rate of Interest	12.25%
Interest	143.48

TRANSMISSION CHARGES

27. The revised transmission charges being allowed for the transmission line for the year 2008-09 are summarised below:

	(Rs. in lakh)
	2008-09
Depreciation	903.75
Interest on Loan	2111.57
Return on Equity	1415.47
Advance against Depreciation	0.00
Interest on Working Capital	143.48
O & M Expenses	307.24
Total	4881.52

28. The petitioner shall recover from the respondent the additional transmission charges in one instalment and these charges shall be shared in accordance with the 2004 regulations.

29. The petitioner has also sought reimbursement of filing fee paid. The Commission by its separate general order dated 11.9.2008 in Petition No. 129/2005 (Suo-motu) has decided that petition filing fee shall not be reimbursed during the tariff period 2004-09 as the same has been factored in O & M norms. The decision applied in the present case also. The decision on licence fee shall be communicated separately.

30. In addition to the transmission charges, the petitioner shall be entitled to other charges like income-tax, incentive, surcharge and other cess and taxes in accordance with the 2004 regulations.

31. This order disposes of Petition No. 306/2009.

Sd/-
(V.S.VERMA)
MEMBER

sd/-
(S.JAYARAMAN)
MEMBER

sd/-
(DR.PRAMOD DEO)
CHAIRPERSON

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

		(Rs. in lakh)	
	Details of Loan	2007-08	2008-09
1	Bond-XVII		
	Gross Loan opening	171.00	171.00
	Cumulative Repayment up to the date of commercial operation/previous year	0.00	0.00
	Net Loan-Opening	171.00	171.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	171.00	171.00
	Average Loan	171.00	171.00
	Rate of Interest	7.39%	7.39%
	Interest	12.64	12.64
	Repayment Schedule	10 Annual instalments from 22.9.2009	
2	Bond-XX		
	Gross Loan opening	5004.00	5004.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	5004.00	5004.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	5004.00	5004.00
	Average Loan	5004.00	5004.00
	Rate of Interest	8.93%	8.93%
	Interest	446.86	446.86
	Repayment Schedule	12 Annual instalments from 07-9-2010	
3	Bond-XXI		
	Gross Loan opening	1982.00	1982.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	1982.00	1982.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	1982.00	1982.00
	Average Loan	1982.00	1982.00
	Rate of Interest	8.73%	8.73%
	Interest	173.03	173.03
	Repayment Schedule	12 Annual instalments from 11-10-2010	
4	Bond-XXII		

	Gross Loan opening	4080.00	4080.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	4080.00	4080.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	4080.00	4080.00
	Average Loan	4080.00	4080.00
	Rate of Interest	8.68%	8.68%
	Interest	354.14	354.14
	Repayment Schedule	12 Annual instalments from 07-12-2010	
5	Bond-XXIII		
	Gross Loan opening	4500.00	4500.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	4500.00	4500.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	4500.00	4500.00
	Average Loan	4500.00	4500.00
	Rate of Interest	9.25%	9.25%
	Interest	416.25	416.25
	Repayment Schedule	12 Annual instalments from 09-02-2011	
6	Bond- XXIV		
	Gross Loan opening	487.00	487.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	487.00	487.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	487.00	487.00
	Average Loan	487.00	487.00
	Rate of Interest	9.95%	9.95%
	Interest	48.46	48.46
	Repayment Schedule	12 Annual instalments from 26-3-2011	
7	Bond- XXV		
	Gross Loan opening	6334.00	6334.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	6334.00	6334.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	6334.00	6334.00
	Average Loan	6334.00	6334.00
	Rate of Interest	10.10%	10.10%
	Interest	639.73	639.73

	Repayment Schedule	12 Annual instalments from 12.6.2011	
8	Bond-XXVI w.e.f. 07.03.2008 in replacement of short term loan from ICICI from 01.11.2007 to 06.03.2008		
	Gross Loan opening	65.00	65.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	65.00	65.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	65.00	65.00
	Average Loan	65.00	65.00
	Rate of Interest	8.21%	9.30%
	Interest	5.34	6.05
	Repayment Schedule	12 Annual instalments from 07-3-2012 (Bond-XXVI)	
9	Bond XXVIII (Add Cap for 2008-09 Drawl on 15.12.2008)		
	Gross Loan opening	0.00	0.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	0.00	0.00
	Additions during the year	0.00	1470.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	0.00	1470.00
	Average Loan	0.00	735.00
	Rate of Interest	0.00%	9.33%
	Interest	0.00	68.58
	Repayment Schedule	12 Annual instalments from 15.12.2012	
	Total Loan		
	Gross Loan opening	22623.00	22623.00
	Cumulative Repayment up to the date of commercial operation	0.00	0.00
	Net Loan-Opening	22623.00	22623.00
	Additions during the year	0.00	1470.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	22623.00	24093.00
	Average Loan	22623.00	23358.00
	Rate of Interest	9.2669%	9.2719%
	Interest	2096.45	2165.73