

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 235/2010

**Coram: Dr. Pramod Deo, Chairperson
Shri V.S.Verma, Member
Shri M.Deena Dayalan, Member**

Date of Hearing: 25-11-2010

Date of Order: 14.12.2011

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 and Central Electricity Regulatory Commission (Terms and conditions of tariff) Regulations 2009 for transmission tariff for 400 kV S/C Jamshedpur Rourkela (Ckt II) Transmission line along with associated bays in Eastern Region, for Tariff Block 2009-14.

And

In the matter of:

Power Grid Corporation of India Limited, Gurgaon

.....**Petitioner**

Vs

1. Bihar State Electricity Board, Patna
2. West Bengal State Electricity Board, Calcutta
3. Grid Corporation of Orissa Ltd. Bhubaneswar
4. Damodar Valley Corporation, Calcutta
5. Power Department, Govt. of Sikkim, Gangtok
6. Jharkhand State Electricity Board, Ranchi

Respondents

The following was present:

1. Shri M M Mondal, PGCIL
2. Shri R Prasad, PGCIL
3. Shri Rajiv Gupta, PGCIL
4. Shri R B Sharma, Advocate, BSEB

ORDER

This petition has been filed seeking approval for determination of transmission tariff for 400 kV S/C Jamshedpur Rourkela (Ckt II) Transmission line along with



associated bays in Eastern Region, (hereinafter called “the transmission line”) for the period from 1.4.2009 to 31.3.2014 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, (hereinafter referred to as “the 2009 regulations”). The petitioner has also sought the following reliefs:

(a) Approve the reimbursement by the beneficiaries, of expenditure towards petition filing fee, and publishing of notices in newspapers in terms of regulation 42 of the 2009 regulations, and other expenditure (if any) in relation to the filing of petition.

(b) Allow the petitioner to bill and adjust impact on interest on loan due to change in interest rate on account of floating rate of interest, if any during 2009-14.

(c) Allow the petitioner to bill and recover licence fee separately from the respondents

(d) Pass such other relief as Hon’ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.

2. Investment approval for the transmission line was accorded by the Board of directors of the petitioner company under letter dated 11.10.2000 at an estimated cost of ₹ 7540.00 lakh which included IDC of ₹ 861.00 lakh. The transmission line was declared under commercial operation on 1.1.2003.

3. Transmission charges for the transmission line for the period up to 31.3.2009, were initially approved by the Commission vide order dated 4.5.2006 in Petition No.



67/2004. Subsequently, consequent to additional capitalization during 2004-05, 2005-06 and 2007-08, the transmission charges were revised vide order dated 22.7.2009 in Petition No. 61/2009. The transmission charges were further revised vide order date 26.4.2010 in Petition No. 319/2009, due to additional capital expenditure incurred during 2008-09.

4. In this petition, the petitioner has claimed the following transmission charges:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	290.95	290.95	290.95	290.95	290.95
Interest on Loan	266.66	237.52	208.31	178.95	149.86
Return on equity	180.43	180.43	180.43	180.43	180.43
Interest on Working Capital	25.57	25.55	25.56	25.60	25.68
O & M Expenses	203.74	215.34	227.71	240.75	254.49
Total	967.35	949.79	932.96	916.68	901.41

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

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	30.56	32.30	34.16	36.11	38.17
O & M expenses	16.98	17.95	18.98	20.06	21.21
Receivables	161.23	158.30	155.49	152.78	150.24
Total	208.77	208.55	208.63	208.95	209.62
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	25.57	25.55	25.56	25.60	25.68

6. None of the respondents have filed reply to the petition.

7. Having heard the representatives of the parties and examined the material on records, we proceed to dispose of the petition.

CAPITAL COST

8. Eighth proviso to clause (2) of Regulation 7 of the 2009 regulations, extracted hereunder provides that the project cost admitted by the Commission for determination of tariff prior to 1.4.2009 shall form the basis for determination of tariff.

“Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14, as may be admitted by the Commission, shall form the basis for determination of tariff.”

9. As per the orders dated 26.4.2010 in Petition No. 319/2009, the admitted capital expenditure of the transmission line was ₹ 5495.38 lakh. Accordingly, capital expenditure of ₹ 5495.38 lakh as on 1.4.2009 has been considered for tariff determination for 2009-14 period.

ADDITIONAL CAPITAL EXPENDITURE

10. The petitioner has not projected any additional capital expenditure during the period 2009-14.

DEBT- EQUITY RATIO

11. Clause (2) of Regulation 12 of the 2009 regulations *inter alia* provides that,-

“(2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the commission for determination of tariff for the period ending 31.3.2009 shall be considered.”

12. Details of debt-equity of the transmission line as on 1.4.2009 are as under:-

	Amount ₹. In lakh	Percentage
Debt	4463.25	81.22%
Equity	1032.123	18.78%
Total	5495.38	100.00%



13. Accordingly, the debt-equity ratio of 81.22:18.78 has been considered for the purpose of tariff calculation in these orders.

RETURN ON EQUITY

14. Regulation 15 of the 2009 regulations provides that,-

“15. (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.

(2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per clause (3) of this regulation:

*Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in **Appendix-II**:*

Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.

(3) The rate of return on equity shall be computed by grossing up the base rate with the normal tax rate for the year 2008-09 applicable to the concerned generating company or the transmission licensee, as the case may be:

Provided that return on equity with respect to the actual tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up separately for each year of the tariff period along with the tariff petition filed for the next tariff period.

(4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where t is the applicable tax rate in accordance with clause (3) of this regulation.

Illustration.-

(i) In case of the generating company or the transmission licensee paying Minimum Alternate Tax (MAT) @ 11.33% including surcharge and cess:

Rate of return on equity = 15.50/ (1-0.1133) = 17.481%

(ii) In case of generating company or the transmission licensee paying normal corporate tax @ 33.99% including surcharge and cess:

Rate of return on equity = $15.50 / (1 - 0.3399) = 23.481\%$.

15. The petitioner has computed Return on Equity (ROE) on pre- tax basis on 11.33% MAT in accordance with the tax rate applicable for 2008-09 and has claimed return on equity @ 17.481%. As the above claim is in accordance with the provisions of the 2009 regulations, the same has been allowed.

16. Details of return on equity calculated as above are as under:

		(₹ in lakh)				
		2009-10	2010-11	2011-12	2012-13	2013-14
Gross Notional Equity	1032.13					
Addition due to additional capital expenditure	0.00					
Opening Equity	1032.13	1032.13	1032.13	1032.13	1032.13	1032.13
Addition due to additional capital expenditure		0.00	0.00	0.00	0.00	0.00
Closing Equity		1032.13	1032.13	1032.13	1032.13	1032.13
Average Equity		1032.13	1032.13	1032.13	1032.13	1032.13
Return on Equity (Base Rate)		15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09		11.33%	11.33%	11.33%	11.33%	11.33%
Rate of Return on Equity (Pre Tax)		17.481%	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)		180.43	180.43	180.43	180.43	180.43

INTEREST ON LOAN

17. Regulation 16 of the 2009 regulations provides that,-

“16. (1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.

(3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year:

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed,.



(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered: Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan."

18. In these calculations, interest on loan has been worked out as detailed below:

(a) Gross amount of loan, repayment of installments and rate of interest and weighted average rate of interest on actual loan have been considered as per the petition.

(b) The repayment for the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that period.

(c) Notwithstanding the Moratorium period availed by the transmission licensee, the repayment of the loan shall be considered from the first year of commercial operation of the transmission line and shall be equal to the annual depreciation allowed.

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

(e) The methodology followed for the calculation of weighted average rate of interest in case of floating interest loans in Petition No. 132/2010, the same has been adopted in the instant petition. Accordingly, the interest on loan has been calculated on the basis of rate prevailing as on 1.4.2009. Any change in rate of interest subsequent to 1.4.2009 will be considered at the time of truing up.

19. Details of the interest on loan worked on the above basis is as under:

		(₹ in lakh)				
		2009-10	2010-11	2011-12	2012-13	2013-14
Gross Notional Loan	4463.25					
Addition due to additional capital expenditure	0.00					
Gross Normative Loan	4463.25	4463.25	4463.25	4463.25	4463.25	4463.25
Cumulative Repayment upto Previous Year		1591.24	1882.19	2173.14	2464.09	2755.04
Net Loan-Opening		2872.02	2581.07	2290.11	1999.16	1708.21
Addition due to additional capital expenditure		0.00	0.00	0.00	0.00	0.00
Repayment during the year		290.95	290.95	290.95	290.95	290.95
Net Loan-Closing		2581.07	2290.11	1999.16	1708.21	1417.26
Average Loan		2726.54	2435.59	2144.64	1853.69	1562.73
Weighted Average Rate of Interest on Loan		9.7802%	9.7522%	9.7128%	9.6534%	9.5898%
Interest		266.66	237.52	208.31	178.94	149.86

DEPRECIATION

20. Regulation 17 of the 2009 regulations provides for computation of depreciation in the following manner, namely:

“17. (1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.

(2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

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(3) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the assets of the generating station and transmission system:

Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.

(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.

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

21. Date of commercial operation of the transmission line is 1.1.2003. Accordingly, it will complete 12 years beyond 2013-14 and thus depreciation during the period 2009-14 has been calculated annually based on Straight Line Method and at rates specified in Appendix III.

22. Details of the depreciation worked out are as under:

		(₹ in lakh)				
		2009-10	2010-11	2011-12	2012-13	2013-14
Rate of Depreciation		5.2945%	5.2945%	5.2945%	5.2945%	5.2945%
Depreciable Value	90%	4945.84	4945.84	4945.84	4945.84	4945.84
Remaining Depreciable Value		3354.61	3063.66	2772.70	2481.75	2190.80
Depreciation		290.95	290.95	290.95	290.95	290.95

OPERATION & MAINTENANCE EXPENSES

23. Clause (g) of Regulation 19 the 2009 regulations specifies the norms for operation and maintenance expenses based on the type of sub-station and line. The petitioner has calculated the operation and maintenance expenses at ₹ 203.74 lakh, ₹ 215.34 lakh, ₹ 227.71 lakh, ₹ 240.75 lakh and ₹ 254.49 lakh for year 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively, which is in accordance with the above norms and the same are therefore allowed as such.

24. The petitioner has submitted that O & M expenditure for the year 2009-14 had been arrived at on the basis of normalized actual O & M expenses during the year 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking has also been considered while calculating the O & M charges for the tariff period 2009-14. The petitioner has further submitted that it reserves the right to approach the Commission for suitable revision in the norms for O & M expenditure in case the impact of wage hike w.e.f 1.1.2007 is more than 50%. The petitioner has further submitted that in O & M norms for the period 2009-14, the cost associated with license fees had not been captured and therefore licence fee be allowed to be recovered separately from the respondents.

25. We observe that these issues have been raised by the petitioner in other petitions also. A view is yet to be taken by the Commission on reimbursement of the

cost of wage hike and reimbursement of licence fees. The decision as and when taken will be applicable to the present case also.

INTEREST ON WORKING CAPITAL

26. As per the 2009 regulations the components of the working capital and the interest thereon are discussed hereunder:

(i) Receivables: As per Regulation 18(1)(c)(i) of the 2009 regulations, receivables will be equivalent to two months' average billing calculated on target availability level. The petitioner has claimed the receivables on the basis of 2 months' transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis of 2 months' transmission charges.

(ii) Maintenance spares: Regulation 18(1)(c)(ii) of the 2009 regulations provides for maintenance spares @ 15% per annum of the O & M expenses from 1.4.2009. The value of maintenance spares has accordingly been worked out.

(iii) O & M expenses: Regulation 18(1) (c) (iii) of the 2009 regulations provides for operation and maintenance expenses for one month as a component of working capital. The petitioner has claimed O&M expenses for 1 month of the respective year as claimed in the petition. This has been considered in the working capital.

(iv) Rate of interest on working capital: As per Regulation 18(3) of the 2009 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 1.4.2009 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 1.4.2009, which is in accordance with the 2009 regulations and has been allowed.

27. Necessary computations in support of interest on working capital are appended hereinbelow:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	30.56	32.30	34.16	36.11	38.17
O & M expenses	16.98	17.95	18.98	20.06	21.21
Receivables	161.23	158.30	155.49	152.78	150.23
Total	208.76	208.54	208.62	208.95	209.62
Rate of Interest (%)	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	25.57	25.55	25.56	25.60	25.68

TRANSMISSION CHARGES

28. The transmission charges being allowed for the transmission lines are summarized below:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	290.95	290.95	290.95	290.95	290.95
Interest on Loan	266.66	237.52	208.31	178.94	149.86
Return on equity	180.43	180.43	180.43	180.43	180.43
Interest on Working Capital	25.57	25.55	25.56	25.60	25.68
O & M Expenses	203.74	215.34	227.71	240.75	254.49
Total	967.35	949.79	932.95	916.67	901.41

Application fee and the publication expenses

29. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition. In accordance with our decision in order dated 11.1.2010 in Petition No. 109/2009, the petitioner shall be entitled to recover the filing fee from the beneficiaries. Accordingly, expenses incurred by the petitioner on application filing fees and publication of notices in connection with the present petition shall be directly recovered from the beneficiary on pro rata basis.

Service Tax

30. As regards the prayer of the petitioner with regard to Service tax, it is clarified that transmission service has been exempted from the ambit of service tax by Government of India vide its notification No. 20/2010 dated 27.2.2010 read with notification No. 45/2010 dated 20.7.2010. Accordingly, the said prayer has become infructuous .

31. The transmission charges allowed shall be recovered on monthly basis in accordance with Regulation 23 and shall be shared by the respondent in accordance with Regulation 33 of the 2009 regulations.

32. This order disposes of Petition No. 235/2010.

Sd/-

(M.Deena Dayalan)
Member

Sd/-

(V.S.Verma)
Member

Sd/-

Dr. Pramod Deo
Chairperson

