

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No.148/2010

Coram:

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

DATE OF HEARING: 7.9.2010

DATE OF ORDER: 1.12.2010

In the matter of

Approval of transmission tariff for transmission system associated with Loktak HEP in North Eastern Region for the period from 1.4.2009 to 31.3.2014.

And in the matter of

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

1. Assam State Electricity Board, Guwahati
2. Meghalaya State Electricity Board, Shillong
3. Government of Arunachal Pradesh, Itanagar
4. Power and Electricity Department, Govt. of Mizoram, Aizawl
5. Electricity Department, Govt. of Manipur, Imphal
6. Department of Power, Govt. of Nagaland, Kohima
7. Tripura State Electricity Corporation Limited, Agartala **Respondents**

The following were present:

1. Shri U.K.Tyagi, PGCIL
2. Shri M.M. Mondal, PGCIL
3. Shri V.Vamsi, PGCIL

ORDER

The petition has been filed for approval of tariff transmission system associated with Loktak HEP (the transmission system) in North Eastern Region for the period 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 made the following additional prayers:-

- (a) To invoke the provision of Regulation 44 of the 2009 regulations for relaxation of regulations 15 (3) of the 2009 regulations so that grossing up the base rate shall be considering the revised rate of MAT as per the Finance Act, 2009 for the year 2009-10 and as per the Finance Act, 2010 for the year 2010-11 and subsequent years and allow consequential impact on tariff for 2009-14 period accordingly;
- (b) To approve reimbursement of petition filing fee and publication of notices in the newspaper as per the 2009 regulations;
- (c) Allow to recover the service tax on transmission charges separately from the respondents, if the petitioner is subjected to such service tax;
- (d) Allow to bill and adjust impact on interest on loan due to change in interest rate on account of floating rate of interest applicable during 2009-14; and
- (e) Allow reimbursement of licence fee separately from the respondents.

2. The annual transmission charges for the period from 1.4.2004 to 31.3.2009 were decided by the Commission in its order dated 8.9.2009 in Petition No. 83/2006. The date of commercial operation of the transmission asset is between 1.7.1983 to 1.7.1989.

3. The petitioner has claimed the transmission charges as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	19.31	19.31	19.31	19.31	19.31
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	74.37	74.37	74.37	74.37	74.37
Interest on Working Capital	4.33	4.46	4.61	4.76	4.92
O & M Expenses	47.49	50.18	53.07	56.18	59.37
Total	145.50	148.32	151.36	154.62	157.97

4. 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	7.12	7.53	7.96	8.43	8.91
O & M expenses	3.96	4.18	4.42	4.68	4.95
Receivables	24.25	24.72	25.23	25.77	26.33
Total	35.33	36.43	37.61	38.88	40.19
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	7.12	7.53	7.96	8.43	8.91

5. No reply to the petition has been filed by any respondent. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under section 64 of the Electricity Act, 2003.

CAPITAL COST

6. As per clause (2) of Regulation 7 of the 2009 regulations, the project cost admitted by the Commission for determination of tariff prior to 1.4.2009 shall form the basis for determination of tariff.

7. The petitioner has claimed the capital expenditure of ₹850.65 lakh, which was admitted vide order dated 8.9.2009 in Petition No. 83/2006. The petitioner has not claimed any projected additional capital expenditure.

8. Accordingly, gross block of ₹850.65 lakh as on 31.3.2009 has been considered for the purpose of tariff.

DEBT- EQUITY RATIO

9. 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.”

10. The petitioner has claimed tariff based on debt-equity ratio of 49.99:50.01 as admitted as on 31.3.2009. The same debt-equity ratio has been considered for the purpose of tariff.

RETURN ON EQUITY

11. 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 = $15.50 / (1 - 0.3399) = 23.481\%$."

12. The petitioner has computed return on equity on pre-tax basis on 11.33% MAT in accordance with tax rate applicable for the year 2008-09 and claimed return on equity of ₹74.37 lakh each year during the tariff period @ 17.481% against the equity base of ₹425.43 lakh. This has been found to be in order. Accordingly, the petitioner shall be entitled to return on equity @ ₹74.37 lakh each year during the tariff period, as claimed.

13. The Commission vide its order dated 3.8.2010 in Petition No. 17/2010 has already taken a decision to amend the 2009 regulations for allowing grossing up of the base rate of return with the applicable tax rate as per the Finance Act for the relevant year and for direct settlement of tax liability of between the generating company/transmission licensee and the beneficiaries/long term transmission customers on year to year basis. The process of amendment to the 2009 regulation is under way and will address the grievance of the petitioner with regard to the MAT rate.

INTEREST ON LOAN

14. 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."

15. The entire notional loan has already been repaid during the period 2001-04, therefore, no interest on loan has been considered for the purpose of tariff.

DEPRECIATION

16. 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.”

17. The balance useful life of the asset has already been calculated as 19 years as on 31.4.2004 as per order dated 8.9.2009 in Petition No. 83/2006. As

per the Regulation 17 (4) of the 2009 regulations, useful life for transmission line and sub-station is 35 year and 25 year, respectively. For the purpose of calculation, the life of building and PLCC has been considered as 25 years. In the present petition, weighted average value of asset as on 1.4.2009 has been considered to workout the weighted average life of the transmission system including sub-station works as 33 years. Accordingly, depreciation has been calculated on the basis of capital expenditure as on 1.4.2009.

18. For the period 1.4.2009 to 31.3.2014 the depreciation works out to ₹19.31 lakh by applying rate of depreciation of 5.0241% as shown below:

(₹ in lakh)

Details of Depreciation		Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
As per last order 8.9.2009		850.65	850.65	850.65	850.65	850.65	850.65
Addition during 2009-14 due to projected Additional Capitalisation			0.00	0.00	0.00	0.00	0.00
Gross block as on 31.3.2009			850.65	850.65	850.65	850.65	850.65
Average gross block			850.65	850.65	850.65	850.65	850.65
Rate of Depreciation			5.0241%	5.0241%	5.0241%	5.0241%	5.0241%
Depreciable Value	90%		765.59	765.59	765.59	765.59	765.59
Elapsed Life			19	20	21	22	23
Balance Useful life of the asset			14	13	12	11	10
Remaining Depreciable Value			270.34	251.03	231.72	212.41	193.10
Depreciation			19.31	19.31	19.31	19.31	19.31

OPERATION & MAINTENANCE EXPENSES

19. In accordance with clause (g) of Regulation 19 the 2009 regulations, the following norms for 132 kV transmission line (single conductor) are prescribed for O & M expenses:

	Year				
	2009-10	2010-11	2011-12	2012-13	2013-14
S/C Single conductor transmission line (₹ in lakh/per ckt.km.)	0.179	0.189	0.200	0.212	0.224
132 kV and below bays (₹ in lakh per bay)	62.20	27.70	29.28	30.96	32.73

20. The petitioner has claimed O & M expenses for 118.94 Ckt.km and 1 bay, which has been allowed. Accordingly, the petitioner's entitlement to O & M expenses has been worked out as given hereunder:

(₹ in lakh)

	Year				
	2009-10	2010-11	2011-12	2012-13	2013-14
132 kV S/C (Single conductor) Transmission lines (118.94 km)	21.29	22.48	23.79	25.22	26.64
1 No. 132 kV bay	26.20	27.70	29.28	30.96	32.73
Total	47.49	50.18	53.07	56.18	59.37

21. The petitioner has submitted that transmission charges claimed for the year 2009-14 is inclusive of O & M expenses for project derived based on the norms for expenditure as specified under Regulation 19 (g) of the 2009 regulation. Accordingly, O & M expenses for the transmission assets have been considered as per Regulation 19 (g) of the 2009 regulations. The petitioner has further submitted that he 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 O & M norms for the period 2009-14, the cost associated with license fees had not been captured and the licence fee be allowed to be recovered separately from the respondents.

22. The 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

23. 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 2 months' transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis 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 works out to ₹7.12 lakh as on 1.4.2009.

(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 O&M expenses 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.

24. The 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	7.12	7.53	7.96	8.43	8.91
O & M expenses	3.96	4.18	4.42	4.68	4.95
Receivables	24.25	24.72	25.23	25.77	26.33
Total	35.33	36.43	37.61	38.88	40.18
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	4.33	4.46	4.61	4.76	4.92

TRANSMISSION CHARGES

25. The transmission charges being allowed for the transmission asset are summarised below:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	19.31	19.31	19.31	19.31	19.31
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	74.37	74.37	74.37	74.37	74.37
Interest on Working Capital	4.33	4.46	4.61	4.76	4.92
O & M Expenses	47.49	50.18	53.07	56.18	59.37
Total	145.50	148.32	151.36	154.62	157.97

Application fee and the publication expenses

26. 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.

Service Tax

28. The prayer of the petitioner for reimbursement of service tax has become infructuous as transmission service has been exempted from the ambit of the service tax.

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

30. This order disposes of Petition No. 148/2010.

sd/-
(M.DEENA DAYALAN)
MEMBER

sd/-
(V.S.VERMA)
MEMBER

sd/-
(S.JAYARAMAN)
MEMBER

sd/-
(Dr. PRAMOD DEO)
CHAIRPERSON