

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No.95/2009

Coram:

1. Shri S.Jayaraman, Member
2. Shri M.Deena Dayalan, Member

DATE OF HEARING: 9.11.2010

DATE OF ORDER: 1.2.2011

In the matter of

Approval of transmission tariff for Tanakpur transmission system in Northern Region for the period from 1.4.2009 to 31.3.2014.

**And
In the matter of**

Power Grid Corporation of India Limited, Gurgaon

..Petitioner

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited, Jaipur
2. Ajmer Vidyut Vitaran Nigam Ltd., Jaipur
3. Jaipur Vidyut Vitaran Nigam Ltd, Jaipur
4. Jodhpur Vidyut Vitaran Nigam Ltd, Jaipur
5. Himachal Pradesh State Electricity Board, Shimla
6. Punjab State Electricity Board, Patiala
7. Haryana Power Purchase Centre, Panchkula
8. Power Development Department, Govt. of J&K, Jammu
9. Uttar Pradesh Power Corporation Ltd, Lucknow
10. Delhi Transco Ltd, New Delhi
11. BSES Yamuna Power Limited, New Delhi
12. BSES Rajdhani Power Ltd., New Delhi
13. North Delhi Power Ltd., New Delhi
14. Chandigarh Administration, Chandigarh
15. Uttarakhand Power Corporation Ltd, Dehradun
16. North Central Railway, Allahabad
17. New Delhi Municipal Council, New Delhi

.....Respondents

The following were present:

1. Shri U.K.Tyagi, PGCIL
2. Shri M.M. Mondal, PGCIL
3. Shri Rajiv Gupta, PGCIL
4. Shri T.P.S. Bawa, HPPC



ORDER

The petition has been filed by Powergrid Corporation of India Limited for approval of tariff in respect of Tanakpur transmission system (the transmission system) in Northern Region for the period 1.4.2009 to 31.3.2014, in accordance with 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 approve reimbursement of petition filing fee, licence fee and publication of notices in the newspaper as per the 2009 regulations; and
- (b) To consider and approve for inclusion of service tax as one of the components to be recovered in transmission charges.

2. Transmission charges up to 31.3.2009 in respect of the transmission system were initially approved by the Commission by the order dated 7.9.2005 in Petition No. 108/2004 and were subsequently revised by order dated 7.9.2005 by way of implementation of the judgment of the Hon'ble Appellate Tribunal for Electricity dated 16.5.2007 in Appeal No. 121 of 2005. The transmission system was declared under commercial operation w.e.f. 5.3.1992.



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

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	33.58	33.58	33.58	33.58	33.58
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	182.59	182.59	182.59	182.59	182.59
Interest on Working Capital	9.60	9.89	10.20	10.53	10.87
O & M Expenses	101.87	107.66	113.91	120.39	127.26
Total	327.64	333.72	340.28	347.09	354.30

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	15.28	16.15	17.09	18.06	19.09
O & M expenses	8.49	8.97	9.49	10.03	10.61
Receivables	54.61	55.62	56.71	57.85	59.05
Total	78.38	80.74	83.29	85.94	88.75
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	9.60	9.89	10.20	10.53	10.87

5. Reply to the petition has been filed by the respondent Uttar Pradesh Power Corporation Ltd. (UPPCL). 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.

6. UPPCL in its reply has made following submissions:

- (i) In Form 6 of the petition, the date of commercial operation of the transmission line has been shown as 1.4.1992. The useful life of the

transmission line as specified in the 2009 regulations is 35 years. Therefore, up to 31.3.2009, 17 years have elapsed and the balance useful life remains as 28 years. In Form 11, petitioner has spread the remaining depreciable value of ₹ 537.29 lakh over 16 years whereas it should have been spread over 18 years. Therefore, the amount of depreciation works out to ₹ 29.85 lakh instead of ₹ 33.58 lakh. As such, the petitioner should be asked to revise the same and consequential the interest on working capital amount will also go under change.

- (ii) In regard to revision of O & M expenses, once the normative parameters have been defined, the question of considering actual does not arise. In case actual are to be considered then the whole tariff needs to be based on actual and the 2009 regulations needs to be amend. The pick and choose approach should not be permitted. It has been further submitted that PGCIL has assumed that the norms of O & M expenses have been arrived at by the Commission considering certain factors. All such need no consideration, once the regulations have been framed after detailed consultations, discussions and public hearing and the sanctity of the same should be maintained.

7. We have carefully considered the objections of UPPCL. The tariff of the transmission system including treatment of depreciation and O & M expenses has been determined in this order strictly in accordance with the provisions of the 2009 regulations. In regard to service tax, reimbursement of filing fee and publication expenditure, the same have been dealt with in relevant paras of the order.

CAPITAL COST

8. As per the last proviso to clause (2) of Regulation 7 of the 2009 regulations, in case of the existing projects, 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. The petitioner has claimed the capital expenditure of ₹2089.00 lakh as on 1.4.2009, which was admitted vide order dated 7.9.2005 read with order dated 22.1.2008 in Petition No. 104/2004. The petitioner has not claimed any projected additional capital expenditure during 2009-14.

10. Accordingly, gross block of ₹2089.00 lakh as on 1.4.2009 has been considered as the capital cost for the purpose of tariff.

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. The petitioner has claimed tariff based on debt-equity ratio of 50:50 as on 31.3.2009 as admitted by the Commission vide order dated 7.9.2005 read with order dated 22.1.2008 in Petition No. 108/2004. The same debt-equity ratio has been considered for the purpose of tariff during the tariff period 2009-14.

RETURN ON EQUITY

13. Regulation 15 of the 2009 regulations provides as under:
- “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:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

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

14. 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 ₹182.59 lakh each year during the tariff period @ 17.481% against the equity base of ₹1044.50 lakh. This has been found to be in order. Accordingly, the petitioner shall be entitled to return on equity @ ₹182.59 lakh each year during the tariff period, as claimed.

15. 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

16. Regulation 16 of the 2009 regulations provides for computation of Interest on Loan as extracted overleaf.



"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.”

17. The petitioner has not claimed any Interest on Loan as the entire loan has been repaid during 2001-02. Accordingly, Interest on Loan has been taken as NIL.

DEPRECIATION

18. 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.

Provided
Provided further.....

(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.”



19. The Commission vide its order dated 31.7.2003 in Petition No. 14/2002 had assigned 24 years as the balance useful life to the transmission system as on 1.4.2001. Accordingly, the balance useful life of the transmission system as on 1.4.2009 is 16 years. Further, by virtue of the said order dated 31.7.2003, the entire loan was repaid during 2001-04 and depreciation was worked out by spreading the balance depreciable value over the remaining useful life of the assets. The same methodology has been applied in this order.

20. For the period from 1.4.2009 to 31.3.2014, the depreciation has been worked out as under:

		(₹ in lakh)					
Details of Depreciation		Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Gross block as per order dated 7.9.2005 read with order 22.1.2008		2089.00	2089.00	2089.00	2089.00	2089.00	2089.00
Addition during 2009-14 due to projected ACE			0.00	0.00	0.00	0.00	0.00
Gross block as on 31.3.2009			2089.00	2089.00	2089.00	2089.00	2089.00
Average gross block			2089.00	2089.00	2089.00	2089.00	2089.00
Rate of Depreciation			5.0980%	5.0980%	5.0980%	5.0980%	5.0980%
Depreciable Value	90%		1815.30	1815.30	1815.30	1815.30	1815.30
Elapsed Life			17.00	18.00	19.00	20.00	21.00
Weighted Balance Useful life of the asset	33		16	15	14	13	12
Remaining Depreciable Value			537.29	503.71	470.13	436.55	402.97
Depreciation			33.58	33.58	33.58	33.58	33.58

OPERATION & MAINTENANCE EXPENSES

21. In accordance with clause (g) of Regulation 19 the 2009 regulations, the following norms are specified for O & M expenses:

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
220 kV Single conductor transmission line (₹ in lakh/per ckt.km.)	0.629	0.284	0.301	0.318	0.336
220 kV bays (₹ in lakh per bay)	36.68	38.78	41.00	43.34	45.82

22. The petitioner has claimed O & M expenses for 106 ckt. kms and two bays. Accordingly, the petitioner's entitlement to O & M expenses has been worked out as hereunder:

<u>Particulars</u>	2009-10	2010-11	2011-12	2012-13	2013-14
220 kV S/C transmission line (106 ckt.km.)	28.51	30.10	31.91	33.71	35.62
220 kV bays (2 bays)	73.36	77.56	82.00	86.68	91.64
Total	101.87	107.66	113.91	120.30	127.26

23. The petitioner has submitted that O & M norms for 2009-14 tariff in the 2009 regulations has been arrived at on the basis of normalized actual O & M expenses of the petitioner 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 was also considered while calculating the O & M norms for 2009-14 period. The petitioner has submitted that it would approach the Commission for suitable revision in the norms of O & M expenses in case the impact of wage hike w.e.f. 1.1.2007 is more than 50%. With reference to the submission of the petitioner, it is clarified that if any such application is made, it will be dealt with in accordance with law.

INTEREST ON WORKING CAPITAL

24. 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 of fixed cost. 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 two 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 ₹15.28 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 one month of the respective year as component of receivables. This has been considered while computing 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 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.

25. The necessary computations in support of interest on working capital are as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	15.28	16.15	17.09	18.06	19.09
O & M expenses	8.49	8.97	9.49	10.03	10.61
Receivables	54.61	55.62	56.71	57.85	59.05
Total	78.38	80.74	83.29	85.94	88.74
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	9.60	9.89	10.20	10.53	10.87

TRANSMISSION CHARGES

26. The following transmission charges for the transmission system has been allowed:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	33.58	33.58	33.58	33.58	33.58
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	182.59	182.59	182.59	182.59	182.59
Interest on Working Capital	9.60	9.89	10.20	10.53	10.87
O & M Expenses	101.87	107.66	113.91	120.39	127.26
Total	327.64	333.72	340.28	347.09	354.30

APPLICATION FEES AND PUBLICATION EXPENSES

27. 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 on pro-rata basis.

28. The petitioner shall also be entitled for reimbursement of publication expenses on notices in connection with the present petition from the beneficiaries on pro rata basis.

29. As regards the reimbursement of licence fee, a view in the matter as and when taken will be applicable in this case.

SERVICE TAX

30. 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.

31. The transmission charges as allowed above 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.

32. This order disposes of Petition No. 95/2009.

Sd/-
(M. Deena Dayalan)
Member

Sd/-
(S.Jayaraman)
Member

