

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No.127/2010

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: 16.9.2010

DATE OF ORDER: 13.4.2011

In the matter of

Approval of transmission tariff for LILO of Purnia-Dalkola 132 kV S/C line and extension at Purnia sub-station in Eastern 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. Bihar State Electricity Board, Patna
2. West Bengal State Electricity Board, Kolkata
3. Grid Corporation of Orissa Ltd., Bhubaneswar
4. Damodar Valley Corporation , Kolkata
5. Power Department, Govt. of Sikkim, Gangtok
6. Jharkhand State Electricity Board, Ranchi

.... Respondents

The following were present:

1. Shri U.K.Tyagi, PGCIL
2. Shri M.M. Mondal, PGCIL
3. Shri S.Raju, PGCIL
5. Shri R.B.Sharma, Advocate, BSEB

ORDER

The petition has been filed for approval of tariff of LILO of Purnia-Dalkola 132 kV S/C line and extension at Purnia sub-station (hereinafter referred to as "the transmission asset") in Eastern Region for the period from 1.4.2009 to 31.3.2014 in accordance with 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 of ROE may be allowed considering the tax rate viz, MAT, surcharge, any other cess, charges, levies etc. as per the relevant Finance Act, and accordingly consequential impact on tariff on account of truing up may be allowed to be billed and settled directly with the beneficiaries every year in the tariff block;
- (b) To approve reimbursement of petition filing fee and publication of notices in the newspaper as per the 2009 regulations;
- (c) Allow to bill and adjust impact on interest on loan due to floating rate of interest applicable during 2009-14, if any from the respondents;
- (d) Allow to bill and recover the service tax on transmission charges separately from the respondents, if the petitioner is subjected to such service tax; and
- (e) Allow to bill and reimbursement of licence fee separately from the respondents.

2. The administrative approval and expenditure sanction for the transmission asset was accorded by the Central Government in Ministry of

Power vide its letter dated 13.1.2000 at an estimated cost of ₹ 940.00 lakh, including IDC of ₹ 57.00 lakh.

3. The transmission asset was declared under commercial operation w.e.f. 1.11.2003. The annual transmission charges for the transmission asset for the period from 1.4.2004 to 31.3.2009 were decided by the Commission vide order dated 29.4.2008 in Petition No. 144/2005 at a gross block of ₹ 572.84 lakh as on 1.4.2004. The petitioner has not claimed additional capital expenditure for the transmission asset during 2004-09.

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

(₹ in lakh)					
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	30.41	30.41	30.41	30.41	30.41
Interest on Loan	18.96	16.88	14.80	12.72	10.64
Return on Equity	20.24	20.24	20.24	20.24	20.24
Interest on Working Capital	7.23	7.51	7.82	8.15	8.49
O & M Expenses	115.46	122.07	129.04	136.43	144.23
Total	192.30	197.11	202.31	207.95	214.01

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	17.32	18.31	19.36	20.46	21.63
O & M expenses	9.62	10.17	10.75	11.37	12.02
Receivables	32.05	32.85	33.72	34.66	35.67
Total	58.99	61.33	63.83	66.49	69.32
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	7.23	7.51	7.82	8.15	8.49

6. 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. Reply to the petition has been filed by Bihar State electricity Board (BSEB).

7. Respondent No. 1, BSEB in its reply affidavit dated 27.7.2010 has made following submission:

- (i) The provisions of Regulation 15(3) of the 2009 regulations in respect of ROE are very clear and unambiguous and accordingly be applied in its perspective and the request of the petitioner seeking the relaxation under Regulation 44 of the 2009 regulations is solely guided by the commercial consideration with the aim to get the expenses on this account early than actually due in accordance with the 2009 regulations;
- (ii) The date of commercial operation of the asset in question is 1.11.2003 and still within the period to claim the tax holiday under Section 80 IA of the Income Tax Act, 1961. The petitioner may be asked to submit the entire information regarding tax holiday period to the respondents and the Commission to arrive at an actual tax rate applicable;
- (iii) BSEB has requested to direct the petitioner to clarify the issue of short term landing rate of State Bank of India 1.4.2009; and
- (iv) BSEB has also opposed reimbursement of filings fees, publication expenses and licence fee.

8. The petitioner in its rejoinder dated 27.8.2010 has made following submissions:

(i) In regard to MAT, the petitioner has submitted that in view of the substantial change in the MAT rate and its impact on the cash flow, a Petition No. 38/2010 has been filed which was disposed by the Commission vide its order dated 3.8.2010 in Petition No. 38/2010 filed by the petitioner has decided 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;

(ii) In regard to tax holiday, the petitioner has submitted that the PGCIL has filed income tax return up to financial year 2008-09 but has not been able to exercise the option of tax holiday as per Section 80 IA of the Income Tax Act, 1961, as there was no taxable profit as per Income Tax Act. In the absence of taxable profit, MAT is being paid as per the provisions of Section 115JB of the Income Tax Act, 1961. The petitioner has also submitted that the benefit of tax holiday under Section 80 IA of the Income Tax Act, 1961 would be eligible to be passed on only when actual reimbursement of income tax under post-tax system of ROE as was applicable for the period 2004-09, is allowed by the Commission;

- (iii) In regard to short term price lending rate of SBI, the petitioner has submitted that SBAR of 12.25% per annum indicated in the petition is short term prime lending rate of SBI as on 1.4.2009;
- (iv) The filing fee, publication expenses and licence fee have not been represented in the O & M expenses and are an extra cost on the petitioner which need to be reimbursed.
9. We have considered the objections of BSEB and reply filed by the petitioner. In regard to tax holiday, the matter has been dealt with in our order dated 8.4.2011 in Petition No. 225/2010. The objection of BSEB with regard to tax holiday is disposed in terms of said order. ROE, MAT and floating rate of interest have been dealt with in the order strictly in accordance with the provisions of the 2009 regulations. The issues relating to service tax, reimbursement of filing fee and licence fee have been addressed with in relevant part of this order.

CAPITAL COST

10. The last proviso to clause (2) of Regulation 7 of the 2009 regulations provides as under:

"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".

11. The petitioner has claimed the capital expenditure of `572.84 lakh, which was admitted by the Commission vide order dated 29.4.2008 in Petition No. 144/2005.

12. Accordingly, gross block of `572.84 lakh as on 31.3.2009 has been considered as the capital cost for the purpose of tariff.

DEBT- EQUITY RATIO

13. Clause (2) of Regulation 12 of the 2009 regulations *inter alia* provides as under:

“(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.”

14. The petitioner has claimed tariff based on debt-equity ratio of 79.78:20.22 as admitted on 31.3.2009 vide order dated 29.4.2008 in Petition No144/2005. The same debt-equity ratio has been considered for the purpose of tariff during the period 2009-14.

RETURN ON EQUITY

15. 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."

16. 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 `20.24 lakh each year during the tariff period @ 17.481% against the equity base of `115.80 lakh. This has been found to be in order. Accordingly, the petitioner shall be entitled to return on equity @ `20.24 lakh each year during the tariff period, as claimed.

17. 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 holidays 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 regulations is under way and will address the

grievance of the petitioner with regard to the MAT rate. Accordingly, the return on equity has been computed as per the existing provision of Regulation 15 (3) of 2009 regulations as under:

(₹ in lakh)						
Details of loan	Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Equity	392.44	392.44	398.89	404.83	404.83	404.83
Addition due to Additional Capitalisation		6.45	5.94	0.00	0.00	0.00
Closing Equity		398.89	404.83	404.83	404.83	404.83
Average Equity		395.67	401.86	404.83	404.83	404.83
Return on Equity (Base Rate)		15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)		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)		69.17	70.25	70.77	70.77	70.77

INTEREST ON LOAN

18. Regulation 16 of the 2009 regulations provides as under:

"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."

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

- (i) Details of net outstanding loan as on 31.3.2009, cumulative repayment up to 31.3.2009 have been taken from the order dated 29.4.2008 in Petition No. 144/2005 for working out weighted average rate of interest. Repayment of loan has been considered as per the IBRD-I amortisation schedule. Rate of interest has been taken as per the documents annexed with petition;
- (ii) Tariff has been worked out considering normative loan and normative repayments. Depreciation allowed has been taken as normative repayment for the period 2009-14; and

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

20. The detailed calculations in support of the weighted revised average rate of interest are contained in **Annexure** attached to this order. Based on the above, the year-wise details of interest worked out are given hereunder:

(₹ in lakh)						
Details of loan	Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	457.04	457.04	457.04	457.04	457.04	457.04
Cumulative Repayment up to Previous Year		164.71	195.12	225.53	255.94	286.34
Net Loan-Opening		292.33	261.92	231.51	201.10	170.70
Addition due to Additional Capitalisation		0.00	0.00	0.00	0.00	0.00
Repayment during the year		30.41	30.41	30.41	30.41	30.41
Net Loan-Closing		261.92	231.51	201.10	170.70	140.29
Average Loan		277.13	246.72	216.31	185.90	155.49
Weighted Average Rate of Interest on Loan		6.8400%	6.8400%	6.8400%	6.8400%	6.8400%
Interest		18.96	16.88	14.80	12.72	10.64

DEPRECIATION

21. 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."

22. The depreciation has been considered on capital expenditure of ₹ 572.84 lakh as admitted by order dated 29.4.2008 in Petition No. 144/2005.

Accordingly, depreciation has been calculated as under:

		(₹ in lakh)					
Details of Depreciation		Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
As per order dated 29.4.2008		572.84	572.84	572.84	572.84	572.84	572.84
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			572.84	572.84	572.84	572.84	572.84
Average gross block			572.84	572.84	572.84	572.84	572.84
Rate of depreciation			5.3084%	5.3084%	5.3084%	5.3084%	5.3084%
Depreciable Value	90%		515.56	515.56	515.56	515.56	515.56
Elapsed Life (Beginning of the year)			5	6	7	8	9
Weighted Balance Useful life of the combine assets			21	20	19	18	17
Remaining Depreciable Value			365.09	334.68	304.27	273.86	243.45
Depreciation			30.41	30.41	30.41	30.41	30.41

OPERATION & MAINTENANCE EXPENSES

23. In accordance with clause (g) of Regulation 19 the 2009 regulations, the following norms for 132 kV S/C , Single conductor transmission line, 220 kV and 132 kV and below, bays are prescribed for O & M expenses:

	Year				
	2009-10	2010-11	2011-12	2012-13	2013-14
132 kV S/C, Single conductor transmission line	0.179	0.189	0.200	0.212	0.224
220 kV bays (₹ in lakh/ bay)	36.68	38.78	41.00	43.34	45.82
132 kV & below (₹ in lakh/ bay)	25.20	27.70	29.80	30.96	32.73

24. The petitioner has claimed O & M expenses for one ckt. km and 4 bays, 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 line (one ckt km)	0.18	0.19	0.20	0.21	0.22
220 kV bays (one bay)	36.68	38.78	41.00	43.34	45.82
132 kV bays (three bays)	78.60	83.10	87.84	92.88	98.19
Total	115.46	122.07	129.04	136.43	144.23

25. The petitioner has submitted that total impact wage hike would be more as compared to the compensation provided in the O & M norms in the 2009 regulations and the petitioner intends to approach the Commission for revision of norms if the actual employee cost works out to more than 50%. In this regard, it is clarified that any request made by the petitioner for revision of O & M norms on account of wage hike will be dealt with in accordance with law.

INTEREST ON WORKING CAPITAL

26. 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 ` 17.32 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 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. 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	17.32	18.31	19.36	20.46	21.63
O & M expenses	9.62	10.17	10.75	11.37	12.02
Receivables	32.05	32.85	33.72	34.66	35.67
Total	58.99	61.33	63.83	66.49	69.32
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	7.23	7.51	7.82	8.15	8.49

TRANSMISSION CHARGES

28. 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	30.41	30.41	30.41	30.41	30.41
Interest on Loan	18.96	16.88	14.80	12.72	10.64
Return on Equity	20.24	20.24	20.24	20.24	20.24
Interest on Working Capital	7.23	7.51	7.82	8.15	8.49
O & M Expenses	115.46	122.07	129.04	136.43	144.23
Total	192.29	197.11	202.31	207.94	214.01

Application fee and the publication expenses

29. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition for determination of transmission tariff. Regulation 42 of the 209 regulations provides as under:

“The application filing fee and the expenses incurred on publication of notices in the application for approval of tariff, may in the discretion of the Commission, be allowed to be recovered by the generating company or the transmission licensee, as the case may be, directly from the beneficiaries or the transmission customers, as the case may be.”

30. 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. The petitioner shall also be entitled for

reimbursement of publication expenses from the beneficiaries on pro rata basis.

Service Tax

31. The petitioner has prayed for reimbursement of service tax, if it is subjected to such tax in future. As the petitioner has no liability for service tax at present, the prayer is infructuous and is accordingly rejected.

Licence fee

32. The petitioner has prayed for reimbursement of licence fee as it is an extra cost on the petitioner. In this regard, it is clarified that the issue of reimbursement of licence fee is under consideration of the Commission and any decision on the issue as and when taken will be applicable to this petition.

33. 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.

34. This order disposes of Petition No.127/2010.

Sd/-

(M.Deena Dayalan)
Member

Sd/-

(V.S.Verma)
Member

Sd/-

(S.Jayaraman)
Member

Sd/-

(Dr. Pramod Deo)
Chairperson



CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

		(₹ in lakh)				
	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
1	ADB - I					
	Gross loan opening	456.39	456.39	456.39	456.39	456.39
	Cumulative Repayment up to the date of commercial operation /previous year	164.07	201.72	243.23	288.99	339.44
	Net Loan-Opening	292.32	254.67	213.16	167.40	116.95
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	37.65	41.51	45.76	50.45	55.62
	Net Loan-Closing	254.67	213.16	167.40	116.95	61.32
	Average Loan	273.49	233.91	190.28	142.17	89.13
	Rate of Interest	6.84%	6.84%	6.84%	6.84%	6.84%
	Interest	18.71	16.00	13.02	9.72	6.10
	Rep Schedule	Half Yearly installment from 01.06.2000				
	Total Loan					
	Gross loan opening	456.39	456.39	456.39	456.39	456.39
	Cumulative Repayment up to the date of commercial operation /previous year	164.07	201.72	243.23	288.99	339.44
	Net Loan-Opening	292.32	254.67	213.16	167.40	116.95
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	37.65	41.51	45.76	50.45	55.62
	Net Loan-Closing	254.67	213.16	167.40	116.95	61.32
	Average Loan	273.49	233.91	190.28	142.17	89.13
	Rate of Interest	6.8400%	6.8400%	6.8400%	6.8400%	6.8400%
	Interest	18.71	16.00	13.02	9.72	6.10