

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 11/2011

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

Date of Hearing: 12.7.2011

Date of Order:23.8.2011

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 and Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations 2009 for determination of transmission tariff for LILO of 400 kV Bongaigaon-Malda transmission line at Siliguri and sub-station at Siliguri (New) in Eastern Region for tariff block 2009-14 period.

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 Distribution Company Limited, Calcutta
3. Grid Corporation of Orissa Ltd. Bhubaneswar
4. Damodar Valley corporation, Calcutta
5. Power Department, Gangtok
6. Jharkhand State Electricity Board

...Respondents

The following was present:

1. Shri M. M. Mondal, PGCIL
2. Shri S.S. Raju, PGCIL
3. Shri Rajeev Gupta, PGCIL
4. Shri. Jyothi Prasad NRLDC



ORDER

This petition has been filed seeking approval for determination of transmission tariff for the tariff period from 01.04.2009 to 31.03.2014 for LILO of 400 kV Bongaigaon-Malda transmission line at Siliguri and sub-station at Siliguri (New) (hereinafter referred to as the “transmission asset”) in Eastern Region 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) Allow the additional capitalization incurred on account of undischarged liabilities after the cutoff date under the 2009 regulations or alternatively, invoke the provision of Clause-44(Power to Relax) of CERC (Terms and Conditions of Tariff) Regulations,2009, so that additional capitalization incurred on account of undischarged liabilities after the cutoff date is considered for tariff fixation for the period 2009-14 block;

- (b) Allow grossing up of base rate of return with the applicable tax rate as per the Finance Act for the relevant year and direct settlement of tax liability between the generating company/transmission licensee and the beneficiaries/long term transmission customers on year to year basis;

- (c) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and publishing of notices in newspaper in terms of Regulation 42 CERC (Terms and Conditions of Tariff) Regulations, 2009 and



other expenditure (if any) in relation to the filing of petition;

- (d) Allow the Petitioner to bill and recover Service tax on Transmission Charges separately from the respondents, if at any time exemption from service tax is withdrawn and transmission is notified as a taxable service;
- (e) Allow the petitioner to bill and adjust impact on Interest on Loan to change in Interest rate on account of floating rate of interest applicable during 2009-14 period. if any, from the respondents; and
- (f) Allow the petitioner to bill and recover License fee separately from the respondents.

2. The petition covers the transmission tariff for LILO of 400 kV Bongaigaon-Malda transmission line at Siliguri and sub-station at Siliguri (New) in Eastern Region for tariff block 2009-14 period. The transmission asset was put under commercial operation on 1.8.2003.

3. Transmission tariff in respect of the transmission asset for the period 1.4.2004 to 31.3.2009 was initially approved vide Commission's order dated 4.5.2006 in Petition No. 112/2005 and was subsequently, revised vide Order dated 11.1.2011 in Petition No.157/2010 due to additional capitalisation during 2004-09.



4. Details of the transmission charges claimed by the petitioner are as under:-

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	227.47	227.75	227.75	227.75	227.75
Interest on loan	174.71	156.61	138.11	119.59	102.48
Return on Equity	108.02	108.46	108.46	108.46	108.46
IWC	31.54	32.37	33.25	34.20	35.26
O&M Expenses	417.90	441.83	467.12	493.80	522.04
TOTAL	959.64	967.02	974.69	983.80	995.99

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

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	62.68	66.27	70.07	74.07	78.31
O & M expenses	34.83	36.82	38.93	41.15	43.50
Receivables	159.94	161.17	162.45	163.97	166.00
Total	257.46	264.26	271.45	279.19	287.81
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	31.54	32.37	33.25	34.20	35.26

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. Reply to the petition has been filed by Bihar State Electricity Board (BSEB), respondent no. 1, vide its affidavit dated 25.3.2011. The objections raised by BSEB are as follows:-

(a) The petitioner's claim of ₹16.81 lakh toward additional capital expenditure on account of retention/balance payment during 2009-10 be rejected as capital expenditure incurred after the cut-off date is not permitted under Regulation 9(2) of the 2009 regulations. The petitioner's request to allow the additional capital expenditure by invoking the provisions of Regulation 44 (Power to Relax) of the 2009 regulations be rejected. It has



been submitted that the provisions regarding the “power to relax” should be invoked in rare cases as it would disturb the delicate equilibrium between the utility and the electricity consumers;

(b) BSEB has objected to the petitioner’s claims for grossing up the rate of return based on the tax rate as per the respective Finance Act;

(c) BSEB has also urged that the petitioner should avail the benefit of the Tax Holiday as the date of commercial operation of the asset is 1.8.2003 and is eligible to claim tax holiday under section 80-IA of the Income Tax Act, 1961;

(d) The calculation of interest on working capital should be based on the short term prime lending rate;

(e) That the petitioner’s request for reimbursement of application filing fee and the expenses incurred on publication of notices may be dealt as per the Commission’s order dated 11.9.2008 in Petition No.129/2005;

(f) The petitioner’s request for allowing the licence fee to be recovered separately from the beneficiaries should be rejected as licence fee forms part of the O&M expenses and as there is no provision for recovery of licence fee in the 2009 regulations;

(g) That the Commission has already taken care of the wage hike on account of pay revision by increasing the norms for O&M expenses by 50% and any increase in the wage hike by beyond 50% must be taken care by the petitioner by increasing its productivity.



7. The petitioner has filed its rejoinder to the reply filed by BSEB, vide its affidavit dated 7.6.11, clarifying the issues raised by the respondent. The clarifications submitted by the petitioner are as follows:-

- (a) As regards additional capital expenditure, it has been submitted that the expenditure is within the original scope of work and due to contractual exigencies and other reasons beyond the control of the petitioner, it has to make provision for release of balance/retention payment beyond 2009-10. The petitioner has also requested to invoke the provisions of power to relax provided in the 2009 regulations and allow the additional capital expenditure incurred/projected to be incurred on account of undischarged liabilities after the cut-off date.
- (b) That the issue of change in MAT rate would be addressed once the 2009 regulations are amended as per the directions of the Commission.
- (c) The issue of Tax holiday has been considered by the Commission in order dated 8.4.2011 in Petition No. 225/2010 wherein it has been clarified that the Commission had taken a conscious decision to allow the generating company or transmission licensee to retain the benefit of tax holiday availed by them, being an incentive provided by the Income Tax Act to the companies undertaking infrastructure activities.
- (d) That the State Bank India Advance Rate and the short term Prime lending rate are the same.
- (e) That the payments towards filing fee, publishing of notices in newspapers and licence fee are not included in the actual O&M expenses of last five years based on which normative O&M rates are fixed for the 2009-14 tariff block and therefore they are an extra burden and needs to be reimbursed.



(f) The compensation allowed in the 2009 regulations on account of employee cost is insufficient to meet the actual expenditure due to wage revision. The petitioner be allowed to approach the Commission with actual manpower costs on account of wage revision during the tariff block 2009-14 for claiming the tariff.

8. The objections raised by the respondents and the clarifications given by the petitioner have been considered in the relevant paragraphs of this order.

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

CAPITAL COST

10. Last proviso to Regulation 7(2) of the 2009 regulations, as amended vide Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2011, provides as under:-

“Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2009 duly trued up by excluding un-discharged liability, if any, as on 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. Capital expenditure of ₹ 4397.51 lakh as on 1.4.2009 admitted vide order dated 11.1.2011 in Petition No. 157/2010 has been considered for tariff determination for the tariff block 2009-14.



ADDITIONAL CAPITAL EXPENDITURE

12. Regulation 9 of the 2009 regulations, as amended vide Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2011, provides for additional capital expenditure as under:-

“(1) The capital expenditure incurred or projected to be incurred, on the following counts with in original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

(i) Undischarged liabilities;

(ii) Works deferred for execution;

(iii) Procurement of initial capital spares within the original scope of work, subject to the provisions of regulating 8;

(iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and

(v) Change in law;

Provided that the details of works included in the original scope of work along with estimates of expenditure, undischarged liabilities and the works deferred for execution shall be submitted along with the application for determination of the tariff.

(2) The capital expenditure incurred on the following counts after the cut-off date, in its discretion, be admitted by the Commission, subject to prudence check:

(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;

(ii) Change in law;

(iii) Deferred works relating to ash pond or ash handling system in the original scope of work;

(iv) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) including due to geological reasons after adjusting for proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation; and

(v) In case of transmission system any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement of switchyard equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of the transmission system.

(vi) In case of gas/ liquid fuel based open/ combined cycle thermal generating stations, any expenditure which has become necessary on renovation of gas turbines after 15 year of operation from its COD and the expenditure necessary due to obsolescence or non-availability of spares for successful and efficient operation of the stations.



Provided that any expenditure included in the R&M on consumables and cost of components and spares which is generally covered in the O&M expenses during the major overhaul of gas turbine shall be suitably deducted after due prudence from the R&M expenditure to be allowed.

(vii) Any capital expenditure found justified after prudence check necessitated on account of modifications required or done in fuel receipt system arising due to non-materialisation of full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station.

(viii) Any undischarged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date, after prudence check of the details of such deferred liability, total estimated cost of package, reason for such withholding of payment and release of such payments etc.”

13. The petitioner has claimed an additional expenditure of ₹ 16.81 lakh incurred during 2009-10. The petitioner, vide its affidavit dated 13.4.2011, submitted that the contract to M/s BHEL was closed ex-parte and it was awarded to M/s Sarkar Construction Company. Since, it involved short closing a contract and engaging a new entity for the remaining works, it took time and therefore, the expenditure was incurred after the cut-off date. The expenditure was within the original scope of the project and it was on account of Balance/Retention Payment. As the additional capital expenditure was towards balance and retention payments and as the work was within the original scope of work the additional capital expenditure claimed has been allowed under Regulations 9 (viii) of the 2009 regulations. The Additional capital expenditure of ₹ 16.81 lakh has been considered for tariff calculations.



DEBT-EQUITY RATIO

14. Regulation 12 of the 2009 regulations provides as under:-

“12. Debt-Equity Ratio. (1) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff:

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

Explanation.- The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

(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.

(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”

15. Details of debt-equity in respect of the transmission asset are as under:-

Admitted as on 31.3.2009		
Particulars	Amount (₹ in lakh)	%
Debt	3782.08	86.01
Equity	615.42	13.99
Total	4397.51	100.00

16. Detail of Normative Add-Cap for the year 2009-10.

Normative Additional Capital Expenditure		
2009-10	Amount (₹ in lakh)	%
Debt	11.77	70.00
Equity	5.04	30.00
Total	4397.51	100.00

17. Detail of debt- equity ratio as on 31.03.2014



As on 31.3.2014		
	Amount (₹ in lakh)	%
Debt	3793.85	85.94
Equity	620.47	14.06
Total	4414.32	100.00

Therefore, Debt-Equity ratio 86.01:13.99 has been considered for tariff calculations.

RETURN ON EQUITY

18. Subsequent to the 2nd Amendment to the 2009 regulations, Regulation 15 thereof provides as given 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 Minimum Alternate/Corporate income Tax Rate for the year 2008-09 as per the Income Tax Act, 1961 as applicable to the concerned generating company or the transmission licensee, as the case may be:

(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.

(5) The generating company or the transmission licensee as the case may be, shall recover the shortfall or refund the excess Annual Fixed Charge on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission.

Provided further that Annual Fixed Charge with respect to the 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 financial year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations”



19. In this order, Return on Equity has been calculated as per Regulation 15 of the 2009 regulations with pre-tax ROE of 17.481%.

20. Petitioner's prayer to allow grossing up the base rate of ROE based on the tax rates viz., MAT, surcharge, any other cess, charges, levies etc., as per the relevant Finance Act, has already been taken care of through the 2nd amendment to the 2009 regulations as extracted hereinabove.

21. Details of return on equity calculated are as under:-

(₹ in lakh)

Combined Asset 1					
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Equity	615.42	620.47	620.47	620.47	620.47
Addition due to additional capital expenditure	5.04	0.00	0.00	0.00	0.00
Closing Equity	620.47	620.47	620.47	620.47	620.47
Average Equity	617.95	620.47	620.47	620.47	620.47
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)	108.02	108.46	108.46	108.46	108.46

INTEREST ON LOAN

22. 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.”

23. In these calculations, interest on loan has been worked out based on Regulation 16 of the 2009 regulations as detailed below:-

(a) Net outstanding loan as on 31.3.2009, cumulative repayment up to 31.3.2009, repayment schedule for the loans, rate of interest etc. have been taken from the order dated 11.1.2011.

(b) Tariff has been worked out considering normative loan and normative repayments. Depreciation allowed has been taken as normative repayment for the tariff period 2009-14.

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



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

(e) Repayment of ADB-I loan has been calculated on the basis of the documents filed along with the petition.

24. Detailed calculation of the weighted average rate of interest has been given in Annexure to this order. Details of the interest on loan worked on the above basis are as under:-

(₹ in lakh)					
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	3782.08	3793.85	3793.85	3793.85	3793.85
Cumulative Repayment upto Previous Year	1416.63	1644.09	1871.85	2099.60	2327.35
Net Loan-Opening	2365.46	2149.75	1922.00	1694.25	1466.50
Addition due to Additional Capitalisation	11.77	0.00	0.00	0.00	0.00
Repayment during the year	227.47	227.75	227.75	227.75	227.75
Net Loan-Closing	2149.75	1922.00	1694.25	1466.50	1238.75
Average Loan	2257.60	2035.88	1808.13	1580.38	1352.63
Weighted Average Rate of Interest on Loan	7.7385%	7.6927%	7.6382%	7.5671%	7.5760%
Interest	174.70	156.61	138.11	119.59	102.47

25. 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.”

26. The depreciation has been worked out on the basis of capital expenditure as on 1.4.2009 and projected additional capital expenditure thereafter. Depreciation has been calculated based on Straight Line Method and at rates specified in Appendix-III of the 2009 regulations.

27. Details of the depreciation worked out are as under:-

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Gross Block	4397.51	4414.32	4414.32	4414.32	4414.32
Addition due to projected additional capitalization	16.81	0.00	0.00	0.00	0.00
Closing Gross Block	4414.32	4414.32	4414.32	4414.32	4414.32
Average Gross Block	4405.95	4414.32	4414.32	4414.32	4414.32
Rate of Depreciation	5.1628%	5.1594%	5.1594%	5.1594%	5.1594%
Depreciable Value (90%)	3907.95	3915.51	3915.51	3915.51	3915.51
Remaining Depreciable Value	2570.04	2350.14	2122.39	1894.64	1666.89
Depreciation	227.47	227.75	227.75	227.75	227.75

OPERATION AND MAINTENANCE EXPENSES

28. Clause (g) of Regulation 19 of the 2009 regulations prescribes the norms for operation and maintenance expenses based on the type of sub-station and line. Norms prescribed in respect of the elements covered in the instant petition are as under:-

Element	2009-10	2010-11	2011-12	2012-13	2013-14
400 kV D/C twin conductor Transmission line (₹ Lakh/ km.)	0.627	0.663	0.701	0.741	0.783
200 kV D/C, single conductor T/Line (₹ Lakh/ km)	0.269	0.284	0.301	0.318	0.336
400 kV Bays (₹ Lakh/ bay.)	52.40	55.40	58.57	61.92	65.46
200 kV Bays (₹ Lakh/ bay.)	36.68	38.78	41.00	43.34	45.82

29. Based on the above norms, the petitioner has calculated the following operation and maintenance expenses which are allowed as under:-

Element	2009-10	2010-11	2011-12	2012-13	2013-14
5 km., 400 kV D/C (twin conductor Transmission line (₹ Lakh/ km.)	3.14	3.32	3.51	3.71	3.92
3 km., 400 kV D/C (single conductor) Transmission line (₹ Lakh/ km.)	0.81	0.85	0.90	0.95	1.01
3 Nos. 400 kV bays (₹ Lakh/ bay)	157.20	166.20	175.71	185.76	196.38
7 Nos. 400 kV bays (₹ Lakh/ bay)	256.76	271.46	287.00	303.38	320.74
Total O&M for assets	417.90	441.83	467.12	493.80	522.04

30. 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 period 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, with effect from 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.

INTEREST ON WORKING CAPITAL

31. 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' of fixed cost. 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:** In these calculations, State Bank of India Prime Lending Rate as on 1.4.2009 (i.e.12.25%) has been considered for the transmission asset, in accordance with the 2009 regulations.

32. Interest on working capital has been computed as under:-

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	62.29	66.27	70.07	74.07	78.31
O & M expenses	34.83	36.82	38.93	41.15	43.50
Receivables (2 months)	159.94	161.17	162.45	163.97	166.00
Total	257.45	264.27	271.44	279.19	287.81
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	31.54	32.37	33.25	34.20	35.26

TRANSMISSION CHARGES

33. The transmission charges being allowed for the transmission asset are summarized below:-

	(₹ in lakh)				
Depreciation	227.47	227.75	227.75	227.75	227.75
Interest on Loan	174.70	156.61	138.11	119.59	102.47
Return on Equity	108.02	108.46	108.46	108.46	108.46
Interest on Working Capital	31.54	32.37	33.25	34.20	35.26
O & M Expenses	417.90	441.83	467.12	493.80	522.04
Total	959.64	967.03	974.69	983.80	995.99

OTHER ISSUES

34. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition. In accordance with the Commission's 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. The petitioner shall also be entitled for reimbursement of expenses in connection with publication of notices of the present petition from the beneficiaries on pro rata basis.



35. The petitioner has made a specific prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if the exemption granted to it is withdrawn and transmission of power is made a taxable service. We consider the prayer pre-mature. The petitioner is at liberty to approach the Commission for any relief at the appropriate time as per law.

36. As regards the prayer for reimbursement of licence fee, it is clarified that the matter is under consideration of the Commission and any decision taken will apply to this case as well.

37. The transmission charges allowed shall be recovered on monthly basis in accordance with Regulation 23 and shared by the beneficiaries in accordance with Regulation 33 of the 2009 regulations upto 30.6.2011. With effect from 1.7.2011, the billing, collection and disbursement of the transmission charges shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses, Regulations, 2010) and the Removal of Difficulties orders issued thereunder.

38. This order disposes of Petition No. 11/2011.

Sd/-
(M Deena Dayalan)
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	Bond- IX					
	Gross loan opening	376.00	376.00	376.00	376.00	376.00
	Cumulative Repayment upto DOCO/previous year	225.60	263.20	300.80	338.40	376.00
	Net Loan-Opening	150.40	112.80	75.20	37.60	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	37.60	37.60	37.60	37.60	0.00
	Net Loan-Closing	112.80	75.20	37.60	0.00	0.00
	Average Loan	131.60	94.00	56.40	18.80	0.00
	Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
	Interest	16.12	11.52	6.91	2.30	0.00
	Rep Schedule	10 Annual instalments from 22-8-2003				
2	Bond- X					
	Gross loan opening	343.00	343.00	343.00	343.00	343.00
	Cumulative Repayment upto DOCO/previous year	142.92	171.50	200.08	228.67	257.25
	Net Loan-Opening	200.08	171.50	142.92	114.33	85.75
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	28.58	28.58	28.58	28.58	28.58
	Net Loan-Closing	171.50	142.92	114.33	85.75	57.17
	Average Loan	185.79	157.21	128.63	100.04	71.46
	Rate of Interest	10.90%	10.90%	10.90%	10.90%	10.90%
	Interest	20.25	17.14	14.02	10.90	7.79
	Rep Schedule	12 Annual instalments from 21-06-2004				
3	Bond- XI Option 1					
	Gross loan opening	83.00	83.00	83.00	83.00	83.00
	Cumulative Repayment upto DOCO/previous year	27.67	34.58	41.50	48.42	55.33
	Net Loan-Opening	55.33	48.42	41.50	34.58	27.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	6.92	6.92	6.92	6.92	6.92
	Net Loan-Closing	48.42	41.50	34.58	27.67	20.75
	Average Loan	51.88	44.96	38.04	31.13	24.21
	Rate of Interest	9.80%	9.80%	9.80%	9.80%	9.80%
	Interest	5.08	4.41	3.73	3.05	2.37
	Rep Schedule	12 Annual instalments from 07.12.2005				
4	Bond- XII					
	Gross loan opening	6.00	6.00	6.00	6.00	6.00



	Cumulative Repayment upto DOCO/previous year	2.00	2.50	3.00	3.50	4.00
	Net Loan-Opening	4.00	3.50	3.00	2.50	2.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.50	0.50	0.50	0.50	0.50
	Net Loan-Closing	3.50	3.00	2.50	2.00	1.50
	Average Loan	3.75	3.25	2.75	2.25	1.75
	Rate of Interest	9.70%	9.70%	9.70%	9.70%	9.70%
	Interest	0.36	0.32	0.27	0.22	0.17
	Rep Schedule	12 annual instalments from 28-03-2006				
5	OBC					
	Gross loan opening	38.00	38.00	38.00	38.00	38.00
	Cumulative Repayment upto DOCO/previous year	15.83	19.00	22.17	25.33	28.50
	Net Loan-Opening	22.17	19.00	15.83	12.67	9.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	3.17	3.17	3.17	3.17	3.17
	Net Loan-Closing	19.00	15.83	12.67	9.50	6.33
	Average Loan	20.58	17.42	14.25	11.08	7.92
	Rate of Interest	9.60%	9.60%	9.60%	9.60%	9.60%
	Interest	1.98	1.67	1.37	1.06	0.76
	Rep Schedule	12 annual instalments from 22-3-2005				
6	PNB-II					
	Gross loan opening	46.00	46.00	46.00	46.00	46.00
	Cumulative Repayment upto DOCO/previous year	19.17	23.00	26.83	30.67	34.50
	Net Loan-Opening	26.83	23.00	19.17	15.33	11.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	3.83	3.83	3.83	3.83	3.83
	Net Loan-Closing	23.00	19.17	15.33	11.50	7.67
	Average Loan	24.92	21.08	17.25	13.42	9.58
	Rate of Interest	9.35%	9.35%	9.35%	9.35%	9.35%
	Interest	2.33	1.97	1.61	1.25	0.90
	Rep Schedule	12 annual instalments from 08.03.2005				
7	ADB-I					
	Gross loan opening	2806.15	2806.15	2806.15	2806.15	2806.15
	Cumulative Repayment upto DOCO/previous year	1091.70	1312.51	1555.95	1824.34	2120.25
	Net Loan-Opening	1714.45	1493.65	1250.20	981.81	685.91
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	220.81	243.44	268.39	295.90	326.23
	Net Loan-Closing	1493.65	1250.20	981.81	685.91	359.67
	Average Loan	1604.05	1371.92	1116.01	833.86	522.79



	Rate of Interest	6.84%	6.84%	6.84%	6.84%	6.84%
	Interest	109.72	93.84	76.33	57.04	35.76
	Rep Schedule	32 Half yearly instalments from 01.06.2000				
8	Bond- XVIII					
	Gross loan opening	22.53	22.53	22.53	22.53	22.53
	Cumulative Repayment upto DOCO/previous year	0.00	1.88	3.76	5.63	7.51
	Net Loan-Opening	22.53	20.65	18.78	16.90	15.02
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	1.88	1.88	1.88	1.88	1.88
	Net Loan-Closing	20.65	18.78	16.90	15.02	13.14
	Average Loan	21.59	19.71	17.84	15.96	14.08
	Rate of Interest	8.15%	8.15%	8.15%	8.15%	8.15%
	Interest	1.76	1.61	1.45	1.30	1.15
	Rep Schedule	12 Annual Instalments from 09.03.2010				
9	Bond- XXII					
	Gross loan opening	62.13	62.13	62.13	62.13	62.13
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	5.18	10.36	15.53
	Net Loan-Opening	62.13	62.13	56.95	51.78	46.60
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	5.18	5.18	5.18	5.18
	Net Loan-Closing	62.13	56.95	51.78	46.60	41.42
	Average Loan	62.13	59.54	54.36	49.19	44.01
	Rate of Interest	8.68%	8.68%	8.68%	8.68%	8.68%
	Interest	5.39	5.17	4.72	4.27	3.82
	Rep Schedule	12 annual instalments from 07.12.2010				
	Total Loan					
	Gross loan opening	3782.81	3782.81	3782.81	3782.81	3782.81
	Cumulative Repayment upto DOCO/previous year	1524.88	1828.17	2159.26	2515.31	2898.87
	Net Loan-Opening	2257.93	1954.64	1623.55	1267.50	883.94
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	303.28	331.10	356.05	383.56	376.29
	Net Loan-Closing	1954.64	1623.55	1267.50	883.94	507.65
	Average Loan	2106.29	1789.10	1445.52	1075.72	695.80
	Rate of Interest	7.7385%	7.6927%	7.6382%	7.5671%	7.5760%
	Interest	163.00	137.63	110.41	81.40	52.71

