

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 317/2010

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

Date of Hearing: 12.7.2011

Date of Order: 29.11.2011

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 for Determination of transmission tariff for 400kV D/C Maithon RB-Maithon (PG) Transmission Line and associated Bay Extension at Maithon Sub-station under Transmission System for Start-up power to DVC and Maithon right Bank Generation projects in Eastern Region from DOCO (1.10.2010) to 31.3.2014.

And

In the matter of:

PowerGrid Corporation of India Ltd., Gurgaon**Petitioner**

Vs

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

The following were present:

1. Shri. S.S. Raju, PGCIL
2. Shri. M.M. Mondal, PGCIL
3. Shri. Rajeev Gupta, PGCIL
4. Shri. R.B. Sharma, Advocate, BSEB & JSEB



ORDER

This petition has been filed seeking approval of transmission tariff for 400kV D/C Maithon RB-Maithon (PG) Transmission Line and associated Bay Extension at Maithon Sub-station under Transmission System for Start-up power to DVC and Maithon right Bank Generation projects in Eastern Region (herein after referred to as “transmission assets”) from the date of commercial operation (1.10.2010) to 31.3.2014 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 (hereinafter referred to as “2009 regulations”).

2. The investment approval for this scheme was accorded by Board of Directors of POWERGRID vide their letter dated 29.4.2008 at an estimated cost of ₹ 29049 lakh including IDC of ₹ 1633 lakh (based on 1st Quarter, 2008 price level).

3. Date of commercial operation of the transmission assets is 1.10.2010. The instant petition covers determination of tariff based on actual expenditure incurred up to the date of commercial operation and estimated additional capital expenditure projected to be incurred from the date of commercial operation to 31.3.2014.

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

	(₹ in lakh)			
	2010-11	2011-12	2012-13	2013-14
Depreciation	141.22	325.87	333.52	333.52
Interest on Loan	165.44	361.62	340.81	310.41
Return on equity	139.82	322.64	330.24	330.24
Interest on Working Capital	12.07	26.85	27.12	26.92
O & M Expenses	65.84	139.22	147.18	155.58
Total	524.39	1176.20	1178.87	1156.67

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

	(₹ in lakh)			
	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	19.75	20.88	22.08	23.34
O & M expenses	10.97	11.60	12.27	12.97
Receivables	174.80	196.03	196.48	192.78
Total	205.52	228.51	230.83	229.09
Interest	10.06	26.85	27.12	26.92
Rate of Interest	11.75%	11.75%	11.75%	11.75%

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), Respondent No.1.

7. BSEB, Respondent No.1, vide its affidavit dated 18.7.2011 has raised the following objections:-

(a) The project has a time over-run of 5 months and cost over-run of ₹ 810.51. The reasons given for cost over-run are increase in awarded cost, increase in tension tower and increase in pile foundation, which are not justified;

(b) The petitioner's claim for grossing up the rate of return based on the tax rate of the respective years has been taken care by the Commission's order dated 3.8.2010 in Petition No.17/2010;

(c) Income Tax is in the category of Direct tax which has been charged to the category of Indirect Tax through a legal fiction enacted in the 2009 regulations by collecting the same as part of tariff and providing the post tax return on equity by grossing up the tax rate. Non-disclosure of the information will keep the beneficiaries in the dark and

therefore the petitioner be directed to submit full information regarding Income Tax;

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

(e) 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 specific provision for recovery of licence fee in the 2009 regulation; and

(f) Any further increase in employee cost due to wage revision must be taken care by the petitioner by increasing its productivity, so that the beneficiaries are not unduly burdened over and above the provisions made in 2009 regulations.

8. The petitioner has not filed any rejoinder.

9. As regards the issue of Tax Holiday, it is clarified that the Commission had considered the issue and passed an a reasoned order in order dated 8.4.2011 in Petition No. 225/2010. Other objections raised by BSEB have been discussed in the relevant paragraphs of the order.

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



CAPITAL COST

11. As regards capital cost, Regulation 7(1)(a) of the 2009 regulations provides that-

“The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan – (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the fund deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check.”

12. The details of expenditure and projected additional capital expenditure claimed by the petitioner are given hereunder:-

(₹ in lakh)

Name of the asset	Apportioned Approved Cost	Actual Expenditure incurred up to DOCO (1.10.2010)	Add-Cap Expenditure from DOCO to 31.3.2011	Projected Expenditure 2011-12	Total Expenditure
400 kv D/C Maithon RB –Maithon (PG) transmission Line and associated Bay Extension at Maithon Sub-station	5486.98	4657.85	1350.00	289.64	6297.49

Capital cost as on date of commercial operation is inclusive of initial spares of ₹ 22.26 lakh.

13. The petitioner has claimed the capital cost of ₹ 4657.85 lakh as on the date of commercial operation, i.e., 1.10.2010. The petitioner has not submitted the RCE and as such the apportioned approved cost of ₹ 4528.40 lakh has been considered for the purpose of tariff calculation after deducting IDC & IEDC for the delay of four months and limiting the initial spares.

14. The total expenditure as on 31.3.2014 is in excess of apportioned approved cost and as such the cost has been restricted to apportioned approved cost. The cost as on the date of commercial operation is within the apportioned approved cost, the additional capital expenditure for the year 2010-11 is in excess of the apportioned approved cost and hence it has been accordingly restricted and the additional capital expenditure for the year 2011-12 is disallowed.

TREATMENT OF IDC AND IEDC

15. As per the investment approval, the transmission assets were scheduled to be completed within 24 months from the first Letter of Award, i.e. 29.4.2008. Accordingly, the transmission assets are scheduled for commissioning by May, 2010. The project has been put under commercial operation on 1.10.2010 and there has been a delay in commissioning of the transmission assets by 5 months. The petitioner has submitted following reasons for delay, vide affidavit dated 18.4.2011:-

- a) The work of transmission line was awarded to the executing agency in May, 2008. After the completion of survey for the line, it was found that one additional pile foundation was required for crossing the river Barakar. Due to submergence of water in the Barakar river (the river that feeds water to the catchment area of Maithon Dam of DVC) during monsoon of 2008, the work could not be started as there was no approach to the location from either side. The boring and concreting work of pile foundation started in February 2009 after reduction in water level in river Barakar. In August 2009, after completion of 50% of pile foundation work, the work had to be stopped again due to

submergence of water, loss of approach, monsoon and slushy river bed. Further, due to high water current, movement of men, materials and piling equipments had become quite difficult. The work was held up till May 2010. Thereafter, the work recommenced and was completed by August 2010. There was a delay of approximately 14 months on this account;

b) There was delay due to shifting of tower from location no. 22/0 to location no. 24/0, at least 90 metres away from original location as it was found to be fouling with three rail track alignments meant for transportation of coal to Maithon thermal power plant. There was a delay of one month on account of this reason; and

c) Inspection by CEA was done on 4.8.2010 and the clearance was only given on 27.9.10. There was a delay of one month and 24 days on account delayed clearance by CEA.

16. The petitioner has further submitted, vide affidavit dated 18.4.2011, that all the major activities of Transmission Line except the river crossing towers were completed in time. Thus, the main reason for delay was due to construction of the river crossing towers which were delayed due to higher water level. Owing to submergence and other constraints there has been loss of time of 5 months from September 2008 to January 2009 and again 5 months from September 2009 to January 2010. The petitioner further submitted, vide affidavit dated 7.9.2011, that due to increase in water level the work could not be undertaken from September 2009 to May 2010. Thus, there was a loss of 14 months due to increased water level. Petitioner has

submitted the copies of letters from office of Manager, Reservoir Operations, DVC indicating that the river level was more than 140 metres for most of the period, whereas the required levels for carrying out the foundation work was less than 139 metres.

17. Two pile foundations were planned to be completed in 3 months during January 2009 to March 2009 but actually 3 no. of pile foundations (including one additional) were carried out in 19 months during February 2009 to August 2010. The petitioner initially submitted that only 50% the work of pile foundation was done for 7 months from February 2009 to August 2009 and the work was stopped due to higher water level in the river.

18. The petitioner was asked to submit the reasons for not completing the 3 numbers pile foundation work within the available seven months from February 2009 to August 2009, whereas pile foundation work for two towers were planned originally to be completed within 3 months. The petitioner, vide affidavit dated 7.9.2011, has submitted that the work was started in February 2009 and the piling work took time as lot of rocks/boulders were encountered during pile foundation excavation work, which had slowed down the excavation work by hydraulic rig. The pile foundation work was stopped due to submergence of water, loss of approach, monsoon and slushy river bed. Further, high water current in the water stream made movement of men, material and piling equipments difficult to reach the actual location. The reasons given by the petitioner for the delay in pile foundation work is not justified, especially when seven months were available for completion of work from February 2009 to August 2009, before the areas was submerged in water. Moreover, rise of water level in the river during monsoon months is a

known fact and the petitioner should have planned its activities accordingly to complete the pile foundation work in time. The petitioner has failed to plan properly and the reasons given by the petitioner for delay are not justified. Therefore, the delay in pile foundation work from September 2009 to August 2010 is not justified. Since, the area remained submerged from September 2009 till May 2010, which was beyond the control of the petitioner, the IDC and IEDC from May 2010 to August 2010 is allowed to be captured.

19. As mentioned in paragraph 15(b) above there was a delay of one month due to shifting of tower, but no exact period has been given for the delay. Accordingly, the delay on account of this reason is not condoned.

20. With regard to the delay due to CEA clearance, PGCIL requested for inspection vide its letter dated 4.8.2010 and inspection was carried out after more than one month on 23.9.2010. The approval was finally given on 27.9.2010. Thus, the delay of one month during September 2010 is condoned.

21. In view of above, the delay of one month, in September, 2010 is condoned and the IDC & IEDC for the period of delay of 4 months during May-August 2010 is not condoned.

22. The details of the IDC disallowed are as follows:-

Details of IDC and IEDC as per CA certificate dated 22.11.2010		
	IEDC	IDC
From date of investment approval to 31.3.2010	92.75	123.09
From 1.4.2010 to 30.9.2010	46.08	141.95
Total IDC and IEDC claimed	138.83	265.04
Details of IDC disallowed for 4 months		
From June to September 2010 (4 months)	30.72	94.63
Total disallowed IDC (for 4 months)	30.72	94.63



COST OVER-RUN

23. The total estimated completion cost claimed by the petitioner is ₹ 6297.49 lakh against the approved capital cost of ₹ 5486.98 lakh. There is a variation in cost by ₹ 810.51 lakh (14.78%).

24. The petitioner has submitted, vide its affidavit dated 18.4.2011, the following reasons for cost variation:-

(a) Actual length of the line has increased by 1.54 km. from the original length considered in FR and accordingly the cost increased;

(b) The number of tension towers increased from 40 in FR to 48. Accordingly, the actual quantity of towers increased from 1671.00 MT to 2330.226 MT leading to increase in cost of the asset; and

(c) Actual pile foundation locations are three compared to two pile locations considered in FR. The total cost of three locations was ₹ 10.674 crore whereas cost of piles considered in FR was ₹ 2.75 crore.

25. During the hearing on 12.7.2009, the learned counsel for BSEB raised issues of time and cost over-run and submitted that the reasons, like additional pile foundation, use of more number of tension towers and higher awarded cost etc., given by the petitioner does not justify the cost over-run. The petitioner was directed to submit detailed justification for time and cost over-run.

26. The petitioner, vide affidavit dated 7.9.2011, has submitted the detailed justification for time and cost over-run and also the detailed break-up of cost

over-run due to various reasons like increase in line length, increase in number of pile foundations and increase in number of tension towers. As mentioned in paragraph no.13 above, the petitioner has not submitted the RCE and hence the approved capital cost has been considered for tariff calculations. The cost over-run of ₹ 810.51 lakh (including the projected additional capital expenditure) is higher than the approved capital cost and as such it has not been considered for the purposes of tariff calculation.

TREATMENT OF INITIAL SPARES

27. Regulation 8 of the 2009 regulations provides as under:-

"Initial spares shall be capitalised as a percentage of the original project cost, subject to the following ceiling norms:

(i)	xxx	
(ii)	xxx	
(iii)	xxx	
(iv)	Transmission system	
	(a) Transmission line	0.75%
	(b) Transmission sub-station	2.75%
	(c) Series Compensation devices and HVDC Station	3.5%

Provided that where the benchmark norms for initial spares have been published as part of the benchmark norms for capital cost under first proviso to clause (2) of regulations 7, such norms shall apply to the exclusion of the norms specified herein"

28. The petitioner has claimed initial spares of ₹ 22.16 lakh, which includes ₹ 19.10 lakh towards sub-station and ₹ 3.16 lakh towards PLCC. As there is no provision for allowing initial spares pertaining to PLCC, it is considered as part of sub-station for allowing initial spares. As per Regulation 8 of the 2009 regulations, initial spares works out to ₹ 17.18 lakh and it is in excess of the specified limit by ₹ 5.08 lakh. Accordingly, the expenditure against sub-station (including PLCC) has been reduced and the additional capital expenditure 2010-11 has been restricted so that the total expenditure does not exceed the apportioned approved cost. Further, the initial spares limit has been worked

out with reference to this reduced sub-station (including PLCC) expenditure which comes out to ₹ 4.10 lakh and it has been deducted from the sub-station cost as on the date of commercial operation. Accordingly, the capital cost of ₹ 4528.40 has been considered for tariff calculations, which includes transmission portion of ₹ 4098.89 lakh, sub-station of ₹ 362.38 lakh and PLCC portion of ₹ 67.12 lakh.

(₹ in lakh)							
Particulars	Rate as per Regulation 8 of 2009 regulations	Expenditure Pertaining to Sub-station (including PLCC) up to cut-off date	Initial spares claimed	Initial spares calculated as per 2009 regulations	In excess	Sub-station cost (including PLCC) as after deduction of IDC & IEDC and restriction of cost	Excess initial spares to be deducted from expenditure as on DOCO
1	2	3	4	5= [(3)-(4)*(2)/[100%-(2)]]	6= (4)-(5)	7	8=(7)*(6)/(3)
Sub-Station (including PLCC)	2.50%	692.24	22.26	17.18	5.08	558.75	4.10

PROJECTED ADDITIONAL CAPITAL EXPENDITURE

29. As per Clause 9(1) of 2009 regulations-

“Additional Capitalisation: (1) The capital expenditure incurred or projected to be incurred, on the following counts within the 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) XXX
- (iii) XXX
- (iv) XXX
- (v) XXX”

30. As per Regulations 2009,

“cut-off date means 31st March of the year closing after 2 years of the year of commercial operation of the project, and in-case of the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31st March of the year closing after 3 years of the year of commercial operation”.

Therefore, cut-off date for the above mentioned assets is 31.3.2013.

31. The petitioner has claimed additional capital expenditure of ₹ 1350.00 lakh for 2010-11 and ₹ 289.64 lakh for 2011-12, which falls within the cut-off date.

32. As mentioned earlier, in the absence of RCE the total expenditure has been restricted to apportioned approved cost and accordingly the additional capital expenditure for the year 2010-11 is restricted to ₹ 954.48 lakh and the additional capital expenditure for the year 2011-12 has been disallowed.

DEBT- EQUITY RATIO

33. Regulation 12 of the 2009 regulations provides that,

- (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.

- (2) XXX.”

34. The details of debt-equity of asset considered for the purpose of tariff calculation as on the date of commercial operation:-

(₹ in lakh)

Particulars	Capital cost as on the date of commercial operation	
	Amount	%
Debt	3170.01	70.00
Equity	1358.39	30.00
Total	4528.40	100.00

35. Details of debt-equity ratio considered for projected additional capital expenditure (referred to as “Add-Cap” herein below) are given overleaf:-

(₹in lakh)

2010-11	Projected Add-Cap	
Particulars	Amount	%
Debt	668.14	70.00
Equity	286.35	30.00
Total	954.48	100.00

36. Details of debt-equity ratio as on 31.3.2014 are as under:-

(₹in lakh)

	Capital Cost as on 31.3.2014	
Particulars	Amount	%
Debt	3838.15	70.00
Equity	1644.73	30.00
Total	5482.88	100.00

RETURN ON EQUITY

37. 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 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:

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.

(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"

38. Return on equity has been calculated as per Regulation 15 of the 2009 regulations with pre-tax ROE of 17.481%.

39. 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, shall be settled in accordance with the provisions of Regulation 15 of 2009 regulations as amended by Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2011.

40. In view of the above, the following amount of equity has been considered for calculation of return of equity:-

	(₹ in lakh)			
	2010-11	2011-12	2012-13	2013-14
Opening Equity	1358.39	1644.73	1644.73	1644.73
Addition due to Additional Capitalisation	286.35	0.00	0.00	0.00
Closing Equity	1644.73	1644.73	1644.73	1644.73
Average Equity	1501.56	1644.73	1644.73	1644.73
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.330%	11.330%	11.330%	11.330%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	131.24	287.52	287.52	287.52

INTEREST ON LOAN

41. 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."

42. In these calculations, interest on loan has been worked out as detailed under-

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

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

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

43. Detailed calculations of the weighted revised average rate of interest have been in Annexure to this order.

44. Details of the interest on loan worked on the above basis are as under:-

	(₹ in lakh)			
	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	3170.01	3838.15	3838.15	3838.15
Cumulative Repayment upto Previous Year	0.00	132.55	422.95	713.35
Net Loan-Opening	3170.01	3705.60	3415.19	3124.79
Addition due to Additional Capitalisation	668.14	0.00	0.00	0.00
Repayment during the year	132.55	290.40	290.40	290.40
Net Loan-Closing	3705.60	3415.19	3124.79	2834.39
Average Loan	3437.80	3560.39	3269.99	2979.59
Weighted Average Rate of Interest on Loan	9.0341%	9.0341%	9.0292%	9.0209%
Interest	155.29	321.65	295.25	268.79

DEPRECIATION

45. Petitioner has claimed actual depreciation as a component of Annual Fixed Charges. However, Regulation 17 (4) of the 2009 regulations provides as under:-

"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 31th 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 asset”.

46. The date of commercial operation of the transmission assets covered in the petition is 1.10.2010. Accordingly, the same will complete 12 years beyond 2013-14. Depreciation, therefore, has been calculated annually based on Straight Line Method and at rates specified in Appendix.III to the 2009 regulations.

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

(₹ in lakh)

	2010-11	2011-12	2012-13	2013-14
Gross Block	4528.40	5482.88	5482.88	5482.88
Addition during 2009-14 due to Projected Additional Capitalisation	954.48	0.00	0.00	0.00
Gross Block	5482.88	5482.88	5482.88	5482.88
Average Gross Block	5005.64	5482.88	5482.88	5482.88
Rate of Depreciation	5.2961%	5.2965%	5.2965%	5.2965%
Depreciable Value	4505.07	4934.59	4934.59	4934.59
Remaining Depreciable Value	4505.07	4802.04	4511.64	4221.24
Depreciation	132.55	290.40	290.40	290.40

OPERATION & MAINTENANCE EXPENSES

48. 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 T/Line (₹ Lakh/ kms)	0.627	0.663	0.701	0.741	0.783
400 kV Bays (₹ Lakh/ bay.)	52.40	55.40	58.57	61.92	65.46

49. As per the above mentioned norms the allowable O&M expenses for the assets covered in the petition works out are given overleaf:-

(₹ in Lakh)



Element	2009-10	2010-11	2011-12	2012-13	2013-14
31.5 kms. 400 kV D/C twin conductor T/line	-	10.44	22.08	23.34	24.66
2 Nos. 400 kV bays (₹ Lakh/ bay)	-	55.40	117.14	123.84	130.92
Total O&M for asset	-	65.84	139.22	147.18	155.58

50. The Petitioner has stated that O&M expenditure for 2009-14 tariff block had been arrived 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 charges for tariff period 2009-14. The petitioner has submitted that it would 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%.

51. The petitioner has further submitted that in O&M norms for tariff block 2009-14, the cost associated with license fees had not been captured and the license fee may be allowed to be recovered separately from the respondents.

52. The respondent, BSEB in its reply has submitted that the request by the petitioner regarding increased O&M due to revision of employees pay scale should not be accepted as the increase in wages on account of pay revision has been taken care by increasing the O&M expenses by 50%. Any further increase in employee cost due to wage revision must be taken care by the petitioner by increasing its productivity, so that the beneficiaries are not unduly burdened over and above the 2009 regulations.

53. It is clarified that, if any, such application is filed in future, it will be dealt with in accordance with law. As regards licence fee, it is clarified that

licence fee will be dealt in accordance with order dated 25.10.2011 in Petition No.21/2011 and 22/2011.

INTEREST ON WORKING CAPITAL

54. As per the 2009 regulations the components of the working capital and the interest thereon are discussed are given as under:-

(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. This has been considered in the working capital.

(iv) Rate of interest on working capital: In these calculations, interest rate of 11.00% (SBI Base Rate 7.50% as on 1.7.2010 plus 350

bps) has been considered in accordance with the 2009 regulations, as amended vide the second amendment regulations notified in June 2011, for calculating interest on working capital.

55. Necessary computations in support of interest on working capital are appended hereunder:-

	(₹ in lakh)			
	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	19.75	20.88	22.08	23.34
O & M expenses	10.97	11.60	12.27	12.97
Receivables	165.23	176.97	173.88	170.84
Total	195.96	209.46	208.22	207.15
Rate of Interest	11.00%	11.00%	11.00%	11.00%
Interest	10.78	23.04	22.90	22.79

TRANSMISSION CHARGES

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

	(₹ in lakh)			
	2010-11	2011-12	2012-13	2013-14
Depreciation	132.55	290.40	290.40	290.40
Interest on Loan	155.29	321.65	295.25	268.79
Return on equity	131.24	287.52	287.52	287.52
Interest on Working Capital	10.78	23.04	22.90	22.79
O & M Expenses	65.84	139.22	147.18	155.58
Total	495.70	1061.83	1043.25	1025.07

FILING FEE AND THE PUBLICATION EXPENSES

57. The respondent, BSEB has submitted that the petitioner's request for reimbursement of application filing fee and the expenses incurred on publication of notices may be rejected as per the Commission's order dated 11.9.2008 in Petition No.129/2005. It is clarified that the order dated 11.9.2008 is applicable for the tariff block 2004-09. As regards the tariff period 2009-14, the Commission has allowed reimbursement of filing fee in its order

dated 11.1.2010 in Petition No. 109/2009. Accordingly, the petitioner shall be entitled to recover the filing fee and publication expenses from the beneficiaries on pro-rata basis.

LICENCE FEE

58. The respondent, BSEB has submitted that the petitioner's request for reimbursement for licence fee should be rejected as licence fee forms part of the O&M expenses and as there is no specific provision for recovery of licence fee in the 2009 regulations. It is clarified that reimbursement of licence fee the same shall be dealt with in accordance with our order dated 25.10.2011 in Petition No.21/2011 and 22/2011.

SERVICE TAX

59. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents if it is subjected to such service tax in future. 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.

60. 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.



61. This order disposes Petition No.317/2010.

Sd/

(M. Deena Dayalan)
Member

Sd/-

(S. Jayaraman)
Member

Sd/-

(Dr. Pramod Deo)
Chairperson



ANNEXURE I

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(₹in lakh)

	Details of Loan	2010-11	2011-12	2012-13	2013-14
1	Bond XXXIII				
	Gross loan opening	504.50	504.50	504.50	504.50
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	504.50	504.50	504.50	504.50
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	504.50	504.50	504.50	504.50
	Average Loan	504.50	504.50	504.50	504.50
	Rate of Interest	8.64%	8.64%	8.64%	8.64%
	Interest	43.59	43.59	43.59	43.59
	Rep Schedule	12 annual installments from 08.07.2014			
2	Bond XXIX				
	Gross loan opening	1006.00	1006.00	1006.00	1006.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	83.83
	Net Loan-Opening	1006.00	1006.00	1006.00	922.17
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	83.83	83.83
	Net Loan-Closing	1006.00	1006.00	922.17	838.33
	Average Loan	1006.00	1006.00	964.08	880.25
	Rate of Interest	9.20%	9.20%	9.20%	9.20%
	Interest	92.55	92.55	88.70	80.98
	Rep Schedule	12 annual installments from 12.03.2013			
3	Bond XXX				
	Gross loan opening	407.00	407.00	407.00	407.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	407.00	407.00	407.00	407.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	33.92
	Net Loan-Closing	407.00	407.00	407.00	373.08
	Average Loan	407.00	407.00	407.00	390.04
	Rate of Interest	8.80%	8.80%	8.80%	8.80%
	Interest	35.82	35.82	35.82	34.32
	Rep Schedule	12 annual installments from 29.09.2013			
4	Bond XXXI				
	Gross loan opening	628.13	628.13	628.13	628.13
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	628.13	628.13	628.13	628.13
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	52.34
	Net Loan-Closing	628.13	628.13	628.13	575.79



	Average Loan	628.13	628.13	628.13	601.96
	Rate of Interest	8.90%	8.90%	8.90%	8.90%
	Interest	55.90	55.90	55.90	53.57
	Rep Schedule	12 annual installments from 25.02.2014			
5	Bond XXVIII				
	Gross loan opening	715.00	715.00	715.00	715.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	59.58
	Net Loan-Opening	715.00	715.00	715.00	655.42
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	59.58	59.58
	Net Loan-Closing	715.00	715.00	655.42	595.83
	Average Loan	715.00	715.00	685.21	625.63
	Rate of Interest	9.33%	9.33%	9.33%	9.33%
	Interest	66.71	66.71	63.93	58.37
	Rep Schedule	12 annual installments from 15.12.2012			
	Total Loan				
	Gross loan opening	3260.63	3260.63	3260.63	3260.63
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	143.42
	Net Loan-Opening	3260.63	3260.63	3260.63	3117.21
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	143.42	229.68
	Net Loan-Closing	3260.63	3260.63	3117.21	2887.54
	Average Loan	3260.63	3260.63	3188.92	3002.37
	Rate of Interest	9.0341%	9.0341%	9.0292%	9.0209%
	Interest	294.57	294.57	287.93	270.84

