

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 18/2011

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

Date of Hearing: 19.5.2011

Date of Order: 13.12.2011

In the matter of:

Petition under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 for determination of transmission tariff for assets of (i) Bay Extension at 400/220kV Limbdi Sub-station (GETCO) & Ranchchodpura (Vadavi) (GETCO) Sub-station for 400 kV D/C Limbdi - Vadavi (WRGL) Transmission Line & Bay Extension at 400/220 kV Ranchchodpura (Vadavi) (GETCO) Sub-station & Zerda Sub-station (GETCO) for 400 kV D/C Vadavi - Zerda (WRGL) TL and (ii) Combined assets of (i) and Bay Extension at 400/220 kV Rajgarh Sub-station (PowerGrid) along with 25% FSC & Bay extension at 400/220 kV Karamsad (Kasor) (GETCO) Sub-station for 400 kV D/C Rajgarh - Kasor (WRGL) TL under WRSS-II, Set C Scheme of Western Region for tariff block 2009-14 period

And

In the matter of:

Power Grid Corporation of India Limited, Gurgaon

Petitioner

Vs

1. Madhya Pradesh Power Trading Company Ltd., Jabalpur
2. Maharashtra State Electricity Distribution Co. Ltd., Mumbai
3. Gujarat Urja Vikas Nigam Ltd., Vadodara
4. Electricity Department, Govt. of Goa, Panaji
5. Electricity Department, Admn. of Daman & Diu, Daman
6. Electricity Department, Admn. of Dadra & Nagar Haveli, Silvassa
7. Chhattisgarh State Electricity Board, Chhattisgarh
8. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Ltd., Indore

Respondents

The following were present:-

1. Shri S.S. Raju, PGCIL
2. Shri Rajeev Gupta, PGCIL
3. Shri U.K. Tyagi, PGCIL

ORDER

This petition has been filed seeking approval for determination of transmission tariff for assets of (i) Bay Extension at 400/220kV Limbdi Sub-station (GETCO) & Ranchchodpura (Vadavi) (GETCO) Sub-station for 400 kV D/C Limbdi - Vadavi (WRGL) Transmission Line & Bay Extension at 400/220 kV Ranchchodpura (Vadavi) (GETCO) Sub-station & Zerda Sub-station (GETCO) for 400 kV D/C Vadavi - Zerda (WRGL) TL and (ii) Combined assets of (i) and Bay Extension at 400/220 kV Rajgarh Sub-station (PowerGrid) along with 25% FSC & Bay extension at 400/220 kV Karamsad (Kasor) (GETCO) Sub-station for 400 kV D/C Rajgarh - Kasor (WRGL) TL under Western Region Strengthening Scheme –II (WRSS-II), Set C Scheme of Western Region (hereinafter referred to as “the transmission assets”) for the period from date of commercial operation to 31.3.2014 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, (hereinafter referred to as “the 2009 regulations”).

2. The administrative approval and expenditure sanction to the transmission project was accorded by the Ministry of Power, Government of India, vide their letter No. 12/7/2004-PG dated 24.7.2006 at an estimated cost of ₹ 522123 lakh including IDC of ₹ 38042 lakh (based on 4th quarter, 2005 price level) consisting of (i) ₹358140 lakh (including IDC of ₹ 25062 lakh) for PGCIL portion and (ii) ₹163983 lakh (including IDC of ₹ 12980 lakh) for IPTC's portion.

3. The details of the assets under WRSS-II, Set C Scheme, covered under the present petition and their respective dates of commercial operation are as under:-

S No.	Name of Assets	Date of commercial operation
1	Bay Extension at 400/220 kV Limbdi sub-station (GETCO) & Ranchchodpura (Vadavi)(GETCO) sub-station for 400 kV D/C Limbdi-Vadavi (WRGL) transmission line & Bay Extension at 400/220 kV Ranchchodpura (Vadavi)(GETCO) sub-station & Zerda sub-station (GETCO) for 400 kV D/C Vadavi-Zerda (WRGL) transmission line – Asset I	1.4.2011
2	Bay Extension at 400/220 kV Rajgarh sub-station (POWERGRID) along with 25% FSC & Bay extension at 400/220 kV Karamsad (Kasor) (WRGL) transmission line- Asset-II	1.6.2011

4. In line with the procedure defined in the Commission's Letter No. C-7/189(204)/2009-CERC dated 23.10.2009, assets of (i) Bay Extension at 400/220kV Limbdi Sub-station (GETCO) & Ranchchodpura (Vadavi) (GETCO) Sub-station for 400 kV D/C Limbdi - Vadavi (WRGL) Transmission Line & Bay Extension at 400/220 kV Ranchchodpura (Vadavi) (GETCO) Sub-station & Zerda Sub-station (GETCO) for 400 kV D/C Vadavi - Zerda (WRGL) TL and (ii) Bay Extension at 400/220 kV Rajgarh Sub-station (PowerGrid) along with 25% FSC & Bay extension at 400/220 kV Karamsad (Kasor) (GETCO) Sub-station for 400 kV D/C Rajgarh - Kasor (WRGL) Transmission Line have been clubbed for the purpose of determination of transmission charges as per details given overleaf:-

- (a) Tariff for Combined Asset-1 (date of commercial operation: 1.4.2011) has been computed for the 2009-14 period and which would be applicable for the period 1.4.2011 to 31.5.2011;
- (b) Tariff for Combined Asset-2 has been computed for the period 1.6.2011 to 31.3.2014.

5. Details of the transmission charges claimed by the petitioner are as given hereunder: -

(₹ in lakh)

Combined Asset 1	
	2011-12 (Pro-rata)
Depreciation	130.85
Interest on Loan	44.25
Return on equity	128.12
Interest on Working Capital	29.76
O & M Expenses	468.56
Total	801.54

(₹ in lakh)

Combined Asset 2			
	2011-12	2012-13	2013-14
Depreciation	282.14	423.78	452.01
Interest on Loan	84.92	117.63	113.75
Return on equity	277.86	417.88	445.92
Interest on Working Capital	47.62	63.36	66.93
O & M Expenses	683.32	866.88	916.44
Total	1375.86	1889.53	1995.05

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

(₹ in lakh)

Combined Asset 1			
	2011-12 (Pro- rata)		
Maintenance Spares	70.28		
O & M expenses	39.05		
Receivables	133.59		
Total	242.92		
Rate of Interest	12.25%		
Interest	29.76		
Combined Asset 2			
	2011-12	2012-13	2013-14
Maintenance Spares	123.00	130.03	137.47
O & M expenses	68.33	72.24	76.37
Receivables	275.17	314.92	332.51
Total	466.50	517.19	546.35
Rate of Interest	12.25%	12.25%	12.25%
Interest	47.62	63.36	66.93

7. 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. None of the respondents have filed any reply to the petition.

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

CAPITAL COST

9. As regards the capital cost, regulation 7(1) of the 2009 regulations provides as under:-

“ (1) Capital cost for a project shall include

(a) 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.”

10. Details of apportioned approved cost, cost as on date of commercial operation and estimated additional capitalization projected to be incurred for the assets covered in the petition are given hereunder:-

(₹ in lakh)

Sl No.	Asset	Apportioned approved cost	Expenditure as on anticipated DOCO (1.4.11/ 1.6.11)	Projected expenditure during 2011-12	Total estimated expenditure during 2012-13	Projected expenditure during 2013-14	Total estimated completion cost
1.	Combined Asset-1	3373.72	2017.43	850.97	230.00	55.00	3153.40
2.	Combined Asset-2	9725.76	5159.78	2396.38	824.15	245.13	8625.43

Accordingly, capital expenditure of ₹ 2017.43 lakh for Combined Asset-1 and ₹ 5159.78 lakh for Combined Asset-2 as on 1.4.2011 and 1.6.2011 respectively has been considered for tariff determination for 2009-14.

TREATMENT OF IDC AND IEDC

11. It has been mentioned in the petition that as per investment approval in WRSS Scheme-II, PGCIL is implementing substation portion (including bay extension works) for Set-B and Set-C whereas WRTGL is implementing transmission lines under Set-C. This project is being implemented by these two entities, i.e. PGCIL and WRTGL. As per the Implementation Agreement, the lines and sub-stations are to be commissioned simultaneously. The scheduled date of commercial operation of the Projects (Project-B and Project-C) was 31.3.2010. The Commission while granting the transmission licence to WRTGL allowed nine months extension for achieving the

commercial operation of the projects, i.e., up to 31.12.2010, considering the delay in signing of Power Transmission Agreement by the beneficiaries. Accordingly, amendment in Revised Commercial Operation Date (RCOD) upto 31.12.2010 was issued by PGCIL on 27.3.2009. Subsequently, in the order dated 31.12.2010 in Petition No. 296/2010, the Commission had directed WRTGL and PGCIL to mutually decide the issue of extension of RCOD in respect of the transmission lines of WRTGL and the commissioning of the sub-stations of PGCIL in terms of the relevant provisions of the Implementation Agreement keeping in view the finding of the Commission regarding the delay in commencement and completion of the project and to arrive at a mutual agreement for early completion of the project. PGCIL and WRTGL have mutually agreed to amend the provisions regarding RCOD as under:-

"Required Commercial Operation Date"-means the date by which the Project-C is required to be made ready for commercial operation under the Agreement which, unless extended in accordance with Clause 3.5 or Clause 4.4, shall be June 30, 2011.

12. The transmission system developed by WRTGL has not yet been commissioned. However, the petitioner has commissioned the Asset-1 and Asset-2 on 1.4.2011 and 1.6.2011 respectively. Though there is a delay of 9 months in the commissioning of Asset-1 and 11 months in the commissioning of Asset-2 respectively from the original date of commercial operation, the assets have been commissioned prior to the date of RCOD of 30.6.2011 which was necessitated on account of the delay in commissioning of the transmission lines of WRTGL. The delay is therefore not attributable to the petitioner and therefore, IDC and IEDC are not being disallowed. However,

liquidated damages, if any, received by the petitioner from party at default shall be passed on to the beneficiaries.

PROJECTED ADDITIONAL CAPITAL EXPENDITURE

13. As regards additional capital expenditure, Regulation 9(1) of the 2009 regulations provides as under:-

“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”*

14. Further, the 2009 regulations defines cut-off date as-

“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 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”.

Based on the above definition, cut-off date for the above mentioned assets is 31.3.2014.

15. The petitioner has claimed additional capital expenditure of ₹ 850.97 lakh, ₹ 230.00 lakh and ₹ 55.00 lakh for Combined Asset-1 and ₹ 2396.38 lakh, ₹ 824.15 lakh and ₹ 245.13 lakh for Combined Asset -2 for the years 2011-12 (date of commercial operation to 31.3.2012), 2012-13 and 2013-14 respectively. Additional capital expenditure claimed is for Final and Retention Payment. Additional capital expenditure falls within the cut-off date. Hence, the same has been considered for the purpose of tariff calculation.

DEBT-EQUITY RATIO

16. 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.

(2) XXX

17. Details of debt-equity of assets considered the purpose of tariff calculation as on date of commercial operation are given hereunder:-

Capital Cost as on date of commercial operation		
Combined Asset-1		
Particulars	(₹ in lakh)	%
Debt	1412.19	70.00
Equity	605.24	30.00
Total	2017.43	100.00

Combined Asset-2		
Particulars	(₹ in lakh)	%
Debt	3611.85	70.00
Equity	1547.93	30.00
Total	5159.78	100.00

18. Details of debt equity ratio considered for projected additional capital expenditure (referred to as “Add cap” in the tables herein below) for Asset-1 are given hereunder:-

	Normative	
	(₹ in lakh)	%
Combined Asset-1		
Add Cap for 2011-12		
Debt	595.68	70.00
Equity	255.29	30.00
Total	850.97	100.00

Add Cap for 2012-13		
Debt	161.00	70.00
Equity	69.00	30.00
Total	230.00	100.00
Add Cap for 2013-14		
Debt	38.50	70.00
Equity	16.50	30.00
Total	55.00	100.00

19. Details of debt-equity projected for Add-Cap for Asset 2 are given hereunder:-

Combined Asset-2		
Add Cap for 2011-12		
Debt	1677.47	70.00
Equity	718.91	30.00
Total	2396.38	100.00
Add Cap for 2012-13		
Debt	576.91	70.00
Equity	247.25	30.00
Total	824.15	100.00

Add Cap for 2013-14		
Debt	171.59	70.00
Equity	73.54	30.00
Total	245.13	100.00

20. Details of debt-equity ratio as on 31.3.2014 are as given hereunder:-

As on 31.3.2014		
Asset-2		
Particulars	(₹ in lakh)	%
Debt	6037.81	70.00
Equity	2587.63	30.00
Total	8625.44	100.00

21. The above stated debt – equity ratio of 70:30 for Combined Asset-1 and Combined Asset-2 have been applied for the purpose of tariff calculation in this order.

RETURN ON EQUITY

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

“15. (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.

(2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per clause (3) of this regulation:

*Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in **Appendix-II**:*

Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.

(3) The rate of return on equity shall be computed by grossing up the base rate with the 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"

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

24. 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.

25. Return on Equity for Combined Asset-1 works out to ₹ 128.12 lakh from date of commercial operation to 31.3.2012. Combined Asset-1 has been clubbed in Combined Asset-2 as on 1.6.2011. Therefore, Return on Equity for Combined Asset-1 works out to ₹ 21.35 lakh from 1.4.2011 to 31.5.2011. Return on Equity for Combined Asset-2 works out to ₹277.86 lakh from date of commercial operation, i.e. 1.6.2011 to 31.3.2012, ₹ 417.88 lakh for 2012-13 and ₹445.92 lakh for 2013-14. In view of the above, the following amount of equity has been considered for calculation of return on equity:-

(₹ in lakh)	
Combined Asset 1	
	2011-12
Opening Equity	605.24
Addition due to additional capital expenditure	255.29
Closing Equity	860.53
Average Equity	732.89
Return on Equity (Base Rate)	15.50%
Tax rate for the year 2008-09	11.33%
Rate of Return on Equity (Pre Tax)	17.481%
Return on Equity (Pre Tax)	128.12

(₹ in lakh)

Combined Asset 2			
	2011-12	2012-13	2013-14
Opening Equity	1547.93	2266.84	2514.09
Addition due to additional capital expenditure	718.91	247.25	73.54
Closing Equity	2266.84	2514.09	2587.63
Average Equity	1907.39	2390.47	2550.86
Return on Equity (Base Rate)	15.50%	15.50%	15.50%
Tax rate for the year 2008-09	11.33%	11.33%	11.33%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	277.86	417.88	445.92

INTEREST ON LOAN

26. 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."

27. In these calculations, interest on loan has been worked out as given hereunder:-

- (a) Gross amount of loan, repayment of instalments and rate of interest on actual loan have been considered as per the petition to work out the weighted average rate of interest;
- (b) Tariff is worked out considering normative loan and normative repayments. Depreciation allowed has been taken as normative repayment for the tariff period 2009-14;
- (c) For loans with floating interest rates, rates of interest as on date of commercial operation have been considered;
- (d) Repayment installments for IBRD IV loans have been calculated as per the supporting documents;
- (e) 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;
- (f) For combined Asset-2 cumulative repayment against Bond XXIV up to date of commercial operation was not considered by the petitioner. The same has been considered in the calculation for working out the Weighted Average Rate of Interest.

28. Detailed calculation of the weighted average rate of interest has been given in Annexure 1 and 2 to this order.

29. Details of the interest on loan worked on the above basis are given hereunder:-

(₹ in lakh)

Combined Asset-1	
	2011-12
Gross Normative Loan	1412.19
Cumulative Repayment upto Previous Year	0.00
Net Loan-Opening	1412.19
Addition due to additional capital expenditure	595.68
Repayment during the year	130.85
Net Loan-Closing	1877.02
Average Loan	1644.61
Weighted Average Rate of Interest on Loan	2.6907%
Interest	44.25

(₹ in lakh)

Combined Asset-2			
	2011-12	2012-13	2013-14
Gross Normative Loan	3611.85	5289.32	5866.22
Cumulative Repayment upto Previous Year	21.81	303.95	727.73
Net Loan-Opening	3590.04	4985.37	5138.49
Addition due to additional capital expenditure	1677.47	576.91	171.59
Repayment during the year	282.14	423.78	452.01
Net Loan-Closing	4985.37	5138.49	4858.07
Average Loan	4287.71	5061.93	4998.28
Weighted Average Rate of Interest on Loan	2.3238%	2.2702%	2.2209%
Interest	83.03	114.91	111.01

DEPRECIATION

30. 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.

xxxx
xxxx

(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.”

31. Depreciation has been calculated on the basis of capital expenditure as on the date of commercial operation. Cumulative depreciation of Combined Asset 1 upto the date of commercial operation of Combined Asset 2 has been considered for the purpose of calculation of tariff.

32. Details of the depreciation worked out are as given hereunder:-

(₹ in lakh)	
Combined Asset-1	
	2011-12
Opening Gross Block	2017.43
Addition during 2009-14	850.97
Closing Gross Block	2868.40
Average Gross Block	2442.92
Rate of Depreciation	5.3561%
Depreciable Value	2198.62
Remaining Depreciable Value	2198.62
Depreciation	130.85

(₹ in lakh)

Combined Asset-2			
	2011-12	2012-13	2013-14
Opening Gross Block	5159.78	7556.16	8380.31
Addition during 2009-14	2396.38	824.15	245.13
Closing Gross Block	7556.16	8380.31	8625.44
Average Gross Block	6357.97	7968.24	8502.88
Rate of Depreciation	5.3251%	5.3184%	5.3160%
Depreciable Value	5722.17	7171.41	7652.59
Remaining Depreciable Value	5700.37	6867.46	6924.86
Depreciation	282.14	423.78	452.01

OPERATION & MAINTENANCE EXPENSES

33. 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 given as under:-

Element	2009-10	2010-11	2011-12	2012-13	2013-14
400 kV bays (₹ lakh per Bay)	52.40	55.40	58.57	61.92	65.46

34. Based on the above norms, the petitioner has calculated the following operation and maintenance expenses which are allowed as per details given hereunder:-

(₹ in lakh)

Combined Asset-1	
Elements	2011-12 (pro-rata for 2 months, i.e., April-May 2011)
8 Nos. 400 kV, bays	78.09
Total	78.09

Combined Asset-2			
Elements	2011-12 (pro-rata for 10 months, i.e., June 2011-March 2012)	2012-13	2013- 14
14 Nos. 400 kV, bays	683.32	866.88	916.44
Total	683.32	866.88	916.44

35. The petitioner has submitted that O & M expenditure for the period 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 would 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%.

36. We observe that the issue regarding reimbursement of additional expenditure on account wage revision has been raised by the petitioner in other petitions also. The decision as and when taken will be applicable to the present case also.

INTEREST ON WORKING CAPITAL

37. As per the 2009 regulations the components of the working capital and the interest thereon are discussed overleaf:

(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, interest rate of 11.75% (SBI Base Rate 8.25% as on 1.7.2010 plus 350 bps) has been considered for calculating interest on working capital, in terms of Central Electricity Regulatory

Commission (Terms & Conditions of Tariff) (Second Amendment)
Regulations, 2011 dated 21.6.2011.

38. Necessary computations in support of interest on working capital are given hereunder:-

(₹ in lakh)

	2011-12 (pro-rata)
Maintenance Spares	70.28
O & M expenses	39.05
Receivables	133.38
Total	242.71
Rate of Interest	11.75%
Interest	28.52

(₹ in lakh)

Combined Asset-2			
	2011-12	2012-13	2013-14
Maintenance spares	123.00	130.03	137.47
O & M expenses	68.33	72.24	76.37
Receivables	274.39	314.02	331.58
Total	465.72	516.29	545.41
Rate of Interest	11.75	11.75	11.75
Interest	45.60	60.66	64.09

TRANSMISSION CHARGES

39. The transmission charges being allowed for the transmission assets are summarized as under:-

(₹ in lakh)

Combined Asset-1		
	2011-12	Tariff for 2 months
Depreciation	130.85	21.81
Interest on Loan	44.25	7.38
Return on equity	128.12	21.35
Interest on Working Capital	28.52	4.75
O & M Expenses	468.56	78.09
Total	800.29	133.38

(₹ in lakh)

Combined Asset-2			
	2011-12	2012-13	2013-14
Depreciation	282.14	423.78	452.01
Interest on Loan	83.03	114.91	111.01
Return on equity	277.86	417.88	445.92
Interest on Working Capital	45.60	60.66	64.09
O & M Expenses	683.32	866.88	916.44
Total	1371.95	1884.12	1989.46

OTHER ISSUES

40. 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. Accordingly, expenses incurred by the petitioner on petition filing fees and publication of notices in connection with the present petition shall be directly recovered from the beneficiary on pro rata basis.

41. 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.

42. As regards the prayer for reimbursement of licence fee, it is clarified that the same shall be dealt with in accordance with our order dated 25.10.2011 in Petition Nos. 21/2011 and 22/2011.

43. As regards the sharing of the transmission charges, we direct that prior to 1.7.2011, the transmission charges shall be shared by the respondent in accordance with Regulation 33 of the 2009 regulations. From 1.7.2011 onwards, the charges shall be shared in accordance with Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses, Regulations, 2010) and the Removal of Difficulties orders issued thereunder.

44. This order disposes of Petition No. 18/2011.

(M. DEENA DAYALAN)
MEMBER

(V.S. VERMA)
MEMBER

(DR. PRAMOD DEO)
CHAIRPERSON

ANNEXURE I

**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON
LOAN**

(₹ in lakh)

	Details of Loan	2011-12	2012-13	2013-14
1	Bond XXIV			
	Gross loan opening	187.20	187.20	187.20
	Cumulative Repayment upto DOCO/previous year	15.60	31.20	46.80
	Net Loan-Opening	171.60	156.00	140.40
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	15.60	15.60	15.60
	Net Loan-Closing	156.00	140.40	124.80
	Average Loan	163.80	148.20	132.60
	Rate of Interest	9.95%	9.95%	9.95%
	Interest	16.30	14.75	13.19
	Rep Schedule	12 annual Instalments from 26.03.2011		
2	IBRD IV			
	Gross loan opening	1224.99	1224.99	1224.99
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	1224.99	1224.99	1224.99
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	27.11
	Net Loan-Closing	1224.99	1224.99	1197.88
	Average Loan	1224.99	1224.99	1211.43
	Rate of Interest	1.72%	1.72%	1.72%
	Interest	21.07	21.07	20.84
	Rep Schedule	30 half yearly Instalments from 15.11.2013		
	Total Loan			
	Gross loan opening	1412.19	1412.19	1412.19
	Cumulative Repayment upto DOCO/previous year	15.60	31.20	46.80
	Net Loan-Opening	1396.59	1380.99	1365.39
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	15.60	15.60	42.71
	Net Loan-Closing	1380.99	1365.39	1322.68
	Average Loan	1388.79	1373.19	1344.03
	Rate of Interest	2.6907%	2.6082%	2.5320%
	Interest	37.37	35.82	34.03

ANNEXURE II

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON
LOAN

(₹ in lakh)

	Details of Loan	2011-12	2012-13	2013-14
1	Bond XXIV			
	Gross loan opening	299.70	299.70	299.70
	Cumulative Repayment upto DOCO/previous year	24.98	49.95	74.93
	Net Loan-Opening	274.73	249.75	224.78
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	24.98	24.98	24.98
	Net Loan-Closing	249.75	224.78	199.80
	Average Loan	262.24	237.26	212.29
	Rate of Interest	9.95%	9.95%	9.95%
	Interest	26.09	23.61	21.12
	Rep Schedule	12 annual Instalments from 26.03.2011		
2	IBRD IV			
	Gross loan opening	3312.01	3312.01	3312.01
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	3312.01	3312.01	3312.01
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	73.31
	Net Loan-Closing	3312.01	3312.01	3238.70
	Average Loan	3312.01	3312.01	3275.36
	Rate of Interest	1.72%	1.72%	1.72%
	Interest	56.97	56.97	56.34
	Rep Schedule	30 half yearly Instalments from 15.11.2013		
	Total Loan			
	Gross loan opening	3611.71	3611.71	3611.71
	Cumulative Repayment upto DOCO/previous year	24.98	49.95	74.93
	Net Loan-Opening	3586.74	3561.76	3536.79
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	24.98	24.98	98.28
	Net Loan-Closing	3561.76	3536.79	3438.50
	Average Loan	3574.25	3549.27	3487.64
	Rate of Interest	2.3238%	2.2702%	2.2209%
	Interest	83.06	80.57	77.46