

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 325/2010

**Coram: Shri S. Jayaraman, Member
Shri V.S.Verma, Member
Shri M. Deena Dayalan, Member**

Date of Hearing: 7.6.2011

Date of Order:10.8.2011

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999, and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009, for determination of transmission tariff for One circuit of 132 kV D/C SEWA-II-Hiranagar line along with associated bays at Hiranagar Sub-station and one Circuit of 132 kV D/C SEWA-II-Mahanpur line along with associated bays at Mahanpur and Second circuit of 132 kV D/C SEWA-II-Hiranagar line along with associated bays at Hiranagar Sub-station of Transmission System associated with SEWA-II HEP (part) in Northern Region for tariff block 2009-14 period.

And

In the matter of:

Power Grid Corporation of India Limited, Gurgaon

...Petitioner

Vs

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

..... Respondents



The following was present:

1. Shri M. M. Mondal, PGCIL
2. Shri S.S. Raju, PGCIL
3. Shri R. R. Patel, PGCIL

ORDER

This petition has been filed seeking approval for determination of transmission tariff for one circuit of 132 kV D/C SEWA-II-Hiranagar line along with associated bays at Hiranagar Sub-station and one Circuit of 132 kV D/C SEWA-II-Mahanpur line along with associated bays at Mahanpur (hereinafter referred to as "Asset – 1") and Second circuit of 132 kV D/C SEWA-II-Hiranagar line along with associated bays at Hiranagar Sub-station (hereinafter referred to as "Asset – 2") (both the assets collectively referred to hereinafter as "the transmission assets") of Transmission System associated with SEWA-II HEP (part) in Northern Region (hereinafter referred to as "the transmission system") for the 2009-14 period, 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 grossing up the base rate of return with the applicable tax rate as per the relevant Finance Act and direct settlement of tax liability with the long term transmission customers on year to year basis;
- (b) Allow, in respect of the assets being combined to calculate the transmission charges, to recover full depreciation (90% of the Gross Block) of the assets during its useful life (25 years for Sub-station and 35 years for Transmission Line) reckoning from its actual date of



commercial operation and also permit the petitioner to treat the recovery of depreciation after achieving the useful life by an asset (to be reckoned from the actual date of commercial operation);

(c) Approve the reimbursement, by the beneficiaries, of the expenditure, towards petition filing fee, and publishing of notices in newspapers in terms of Regulation 42 of the 2009 regulations, and other expenditure (if any) in relation to the filing of petition;

(d) Allow the petitioner to bill and adjust impact on loan due to change in interest rate on account of floating rate of interest applicable during the tariff period, if any, from the respondents;

(e) Allow the petitioner to bill and recover Service Tax on Transmission charges separately from the respondents, if the petitioner is subjected to such service tax;

(f) Allow the petitioner to bill and recover license fee separately from the respondents;

2. Administrative approval and expenditure sanction for the transmission system was accorded by the Board of Directors of the petitioner vide Memorandum No. C/CP/Sewa-II dated 18.7.2005 at an estimated cost of ` 9847 lakh including Interest During Construction of ₹ 473 lakh based on 4th quarter 2004 price level. Apportioned approved cost of the two assets comprising the transmission assets and their actual dates of commercial operation are given overleaf:-

(₹ in lakh)			
Asset.	Details of the asset	Apportioned approved cost	Actual date of commercial operation
1	One circuit of 132 kV D/C SEWA-II-Hiranagar line along with associated bays at Harinagar Sub-station and one Circuit of 132 kV D/C SEWA-II-Mahanpur line along with associated bays at Mahanpur. (Asset - 1)	7225.50	1.9.2009
2	Second circuit of 132 kV D/C SEWA-II-Hiranagar line along with associated bays at Harinagar Sub-station (Asset – 2)	718.64	1.7.2010
Total		7944.14	

3. Transmission tariff in respect of Asset – 1 for the period from the date of its commercial operation to 31.3.2014 has been approved by the Commission by its order dated 15.2.2011 in Petition No. 73/2010. In this petition, we are approving the transmission tariff for the combined assets for the period from 1.7.2010 to 31.3.2014. Accordingly, the tariff being approved in this order will supersede the tariff awarded in Petition No.73/2010 for the period from 1.7.2010 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	248.87	342.38	342.87	342.98
Interest on Loan	291.25	372.99	340.43	307.58
Return on equity	247.65	340.77	341.26	341.36
Interest on Working Capital	19.74	26.74	26.43	26.12
O & M Expenses	83.47	117.71	124.46	131.56
Total	890.98	1200.59	1175.45	1149.60

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

(₹ in lakh)				
	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	16.69	17.66	18.67	19.73
O & M expenses	9.27	9.81	10.37	10.96
Receivables	198.00	200.10	195.91	191.60
Total	223.96	227.57	224.95	222.29
Rate of Interest	11.75%	11.75%	11.75%	11.75%
Interest	19.74	26.74	26.43	26.12

6. None of the respondents has filed reply to the petition.

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

CAPITAL COST

8. As regards the capital cost, clause 7 (1) of the 2009 regulations provides as under;-

“Capital Cost. (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 funds deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;

(b) capitalised initial spares subject to the ceiling rates specified in regulation 8; and

(c) additional capital expenditure determined under regulation 9:

Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost.”

9. The details of apportioned approved cost as on date of commercial operation and additional capitalization projected to be incurred for the assets covered in the instant petition are given overleaf:-

(₹ in lakh)

Asset	Apportioned approved cost	Actual Exp. incurred up to DOCO	Projected Exp. during 2009-10	Projected Exp. during 2010-11	Projected Exp. during 2011-12	Projected Exp. during 2012-13	Total estimated expenditure
1	7225.50	4901.68	425.24	369.80	-	-	5696.72
2	718.64	774.92	-	19.07	14.46	4.00	812.45
Total	7944.14	5676.60	425.24	388.87	14.46	4.00	6509.17

TIME OVER-RUN

10. As per the Investment Approval, the transmission assets are required to be completed within 27 months from the date of award of tower package. Reckoning from the date of award of tower package, i.e., 7.2.2006, the transmission assets were to be commissioned by May, 2008. However, Asset 1 and 2 were commissioned on 1.9.2009 and 1.7.2010 respectively, which has resulted in a time over-run of 16 months and 26 months. The Commission in its order dated 15.2.2011 in Petition no.73/2010 had condoned the time over-run in respect of Asset 1 and had observed as under:-

“We have examined the submission of the petitioner and objection of the respondents with regard to time over run. On perusal of documents submitted by the petitioner, it is noted that the delay of 11 months from May 2008 to March 2009 was on account of agitation ROW problem and forest clearance which appear to be justified for the detailed reasons given by the petitioner. Moreover, it is noticed that the petitioner in its letter dated 6.8.2009 informed the Northern Regional Power Committee and the beneficiaries that the transmission lines were test checked on 31.3.2009 but could not be charged due to delay in completion of SEWA-II Hydro Electric Project. It was also mentioned by the petitioner that on request of Jammu and Kashmir, the transmission lines were charged on 5.8.2009 and was declared under commercial operation w.e.f. 1.9.2009. Therefore, we find that the delay of five months is not justified as the petitioner has not built in the sufficient safeguard in the Implementation Agreement to take care of the delay in the commissioning of the generating station. Accordingly, IEDC and IDC have not been allowed from 1.4.2009 till 31.8.2009 which amount to ₹ 177.32 lakh, ₹ 11.78 lakh and ₹ 0.41 lakh in respect of transmission line, sub-station and PLCC respectively.”

11. Accordingly, time over-run of 11 months was condoned in respect of Asset 1. The same logic holds good for Asset 2 for the period from May, 2008



to March, 2009 and accordingly, the time over-run of 11 months in respect of Asset 2 is condoned. The petitioner is responsible for the delay in commissioning of Asset 2 from April, 2009 to June, 2010. The petitioner has submitted that though both lines were ready for commissioning by 31.3.2009, they could only be charged with the commissioning of SEWA II Generation of NHPC with effect from 30.6.2010. The petitioner has further clarified that as per the Implementation Agreement between NHPC and the petitioner, in case of the default the defaulting party would be required to pay IDC upto a period of six months from the zero date which was fixed on 1.6.2008. During the hearing on 7.6.2011, the representative of the petitioner submitted that this zero date slipped by both the parties. The petitioner has approached the NHPC for revising the zero date but no response has been received. We are of the view that the petitioner has not built in requisite safeguard in its Implementation Agreement to address the delay on account of the slippage in commissioning of the generation project and the beneficiaries cannot be made to pay for the failure of the petitioner to put in place a robust commercial arrangement to take care of the time over-run. Accordingly, IDC and IEDC charges of ₹ 56.50 lakh, ₹ 12.06 lakh and ₹ 0.09 lakh pertaining to Transmission Line, Sub-station and PLCC respectively are not allowed.

12. The projected additional capital expenditure for 2009-10 period (from 1.9.2009 to 31.3.2010) has been allowed by the Commission in Petition No. 73/2010. The details of break-up of the additional capital expenditure for the period 1.4.2010 to 20.6.2010 are not available and only the projected figures are available. Capital cost of Asset 1 as on 31.3.2010 and capital cost of

Asset 2 as on DOCO (after deducting IDC and IEDC for delayed period) has been clubbed for the purpose of tariff calculation. It is however clarified that the capital cost will be reviewed at the time of truing up.

13. The details of capital cost considered as on Notional DOCO for the purpose of tariff calculation is as follows:-

(₹ in lakh)				
Asset	Capital cost claimed as on DOCO	IDC and IEDC deducted	Additional capital expenditure during 2009-10	Capital expenditure as on Notional DOCO
1	4901.68	189.51	425.24	5137.41
2	774.92	68.65	-	706.27
Total	5676.60	258.16	425.24	5843.68*

* Capital cost of ₹ 5843.68 lakh has been considered as on Notional DOCO for the purpose of tariff calculation for Combined Assets 1 & 2.

ADDITIONAL CAPITAL EXPENDITURE

14. With regard to additional capital expenditure, clause 9(1) of the 2009 regulations provides as given under:-

“9. 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) *Works deferred for execution;*

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

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

(v) *Change in law:*

15. The 2009 regulations further defines cut-off date as under:-

“cut-off date means 31st march of the year closing after 2 years of the year of commercial operation of the project, and incase 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”.

16. As per the above definition, cut-off date of the transmission assets is 31.3.2013 because their notional date of commercial operation is 1.7.2010.

17. Breakup of the petitioner's claim towards additional capital expenditure is given as under:-

Year	Work/Equipment proposed to be added after COD upto cut off date / beyond cutoff date	Amount capitalized and proposed to be capitalized (₹ in lakh)	Justification as per purpose
2010-11	TR line	332.57	Balance & retention payments
	Substation	43.60	
	PLCC	2.31	
	Lease Hold Land	10.39	
	Subtotal	388.87	
2011-12	TR line	6.46	Balance & retention payments
	Substation	8.00	
	Subtotal	14.46	
2012-13	Substation	4.00	Balance & retention payments
	Subtotal	4.00	
	Total	407.33	

18. It is seen that the claim of the petitioner is in tune with the provisions of the 2009 regulations and therefore additional capital expenditure as projected has been allowed for the purpose of calculation of tariff.

DEBT- EQUITY RATIO

19. Regulation 12 of the 2009 regulations provides that,

*“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.”

20. Details of debt-equity in respect of the transmission assets as on 1.4.2009 are as under:-

	Approved		As on date of commercial operation	
	Amount (₹ in lakh)	%	Amount (₹ in lakh)	%
Debt	5560.90	70.00	4090.58	70.00
Equity	2383.24	30.00	1753.10	30.00
Total	7944.14	100.00	5843.68	100.00

21. The details of debt-equity in respect of the transmission as on 31.3.2014 are as under:-

	As on 31.3.2014	
	Amount (₹ in lakh)	%
Debt	4375.71	70.00
Equity	1875.30	30.00
Total	6251.01	100.00

22. As regards the additional capital expenditure, (referred to as “Add-Cap” in the table below”) debt-equity details are as given overleaf:-

	Amount (₹ in lakh)	%
Add Cap for 2010-11		
Debt	272.21	70.00
Equity	116.66	30.00
Total	388.87	100.00
Add Cap for 2011-12		
Debt	10.12	70.00
Equity	4.34	30.00
Total	14.46	100.00
Add Cap for 2012-13		
Debt	2.80	70.00
Equity	1.20	30.00
Total	4.00	100.00

RETURN ON EQUITY

23. 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”

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

25. 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.

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

	(₹ in lakh)			
	2010-11	2011-12	2012-13	2013-14
Opening Equity	1753.10	1869.77	1874.10	1875.30
Addition due to additional capital expenditure	116.66	4.34	1.20	0.00
Closing Equity	1869.77	1874.10	1875.30	1875.30
Average Equity	1811.43	1871.93	1874.70	1875.30
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09	11.33%	11.33%	11.33%	11.33%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%	17.481%
			%	
Return on Equity (Pre Tax)	237.49	327.23	327.72	327.82

INTEREST ON LOAN

27. 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."

28. In these calculations, interest on loan has been worked out as detailed below:-

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

(c) As regards the moratorium period availed by the transmission licensee, the repayment of the loan is to be considered from the first year of commercial operation of the project and be equal to the annual depreciation allowed;

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

(e) The methodology followed for the calculation of weighted average Rate of Interest in case of floating interest loans in Petition 132/2010, has been adopted in the instant petition. Accordingly, interest on Loan has been calculated on the basis of rate prevailing as on date of commercial operation. Any subsequent change in rate of Interest will be considered at the time of truing up.

29. Detailed calculation of the weighted average rate of interest has been given in Annexure to this order.

30. 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	4090.58	4362.79	4372.91	4375.71
Cumulative Repayment upto Previous Year	221.49	460.13	788.88	1118.11
Net Loan-Opening	3869.09	3902.65	3584.03	3257.60
Addition due to additional capital expenditure	272.21	10.12	2.80	0.00
Repayment during the year	238.64	328.75	329.23	329.34
Net Loan-Closing	3902.65	3584.03	3257.60	2928.26
Average Loan	3885.87	3743.34	3420.81	3092.93
Weighted Average Rate of Interest on Loan	9.5812%	9.5672%	9.5558%	9.5492%
Interest	279.23	358.13	326.89	295.35

DEPRECIATION

31. Regulation 17 of the 2009 regulations provides for computation of depreciation as given overleaf:-

“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.”

32. Notional date of commercial operation of the combined assets is 1.7.2010. 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 of 2009 regulation.

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

	Upto DOCO	2010-11	2011-12	2012-13	(₹ in lakh) 2013-14
Opening Gross Block	5843.68	5843.68	6232.55	6247.01	6251.01
Addition due to projected additional capitalisation		388.87	14.46	4.00	0.00
Closing Gross Block		6232.55	6247.01	6251.01	6251.01
Average Gross Block		6038.12	6239.78	6249.01	6251.01
Rate of Depreciation		5.2696%	5.2686%	5.2686%	5.2686%
Depreciable Value		5434.30	5615.80	5624.11	5625.91
Remaining Depreciable Value		5212.81	5155.67	4835.23	4507.80
Depreciation		238.64	328.75	329.23	329.34

OPERATION & MAINTENANCE EXPENSES

34. 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:-

Elements	2009-10	2010-11	2011-12	2012-13	2013-14
132 kV D/C Single Circuit (Single Conductor) transmission line (in lakh per km)	0.269	0.284	0.301	0.318	0.336
132 kV S/C Single Circuit (Single Conductor) transmission line (in lakh per km)	0.179	0.189	0.200	0.212	0.224
132 kV and below bay (in lakh per Bay)	26.20	27.70	29.28	30.96	32.73

35. Based on the above norms, the petitioner has calculated the following operation and maintenance expense which is allowed:-

Element	(₹ in lakh)			
	2010-11 (pro rata)	2011-12	2012-13	2013-14
78.48 Km . 132 kV D/C Single Circuit (Single Conductor) transmission line (lakh per km)	16.72	23.62	24.96	26.37
31.25 Kms 132 kV S/C Single Circuit (Single Conductor) transmission line (lakh per km)	4.43	6.25	6.63	7.00
3 Nos. 132 kV and below bay (lakh per Bay)	62.33	87.84	92.88	98.19
Total O&M	83.47	117.71	124.46	131.56

36. 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.

37. We observe that these issues have been raised by the petitioner in other petitions also. A view is yet to be taken by the Commission on reimbursement of the cost of wage hike and reimbursement of licence fees. The decision as and when taken will be applicable to the present case also.

INTEREST ON WORKING CAPITAL

38. 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 Subsequent to the second amendment notified in June 2011, Regulation 18(3) of the 2009 regulations, provides that rate of interest on working capital shall be on normative basis and shall be equal to the SBI Base Rate plus 350 basis points as on 1.7.2010 or as on 1st April of the year in which the generating station or a unit thereof or the transmission system, as the case may be, is declared under commercial operation, whichever is later in respect of the units or station whose date of commercial operation lies between the period 1.7.2010 to 31.3.2014. The interest on working capital is payable on normative basis notwithstanding that the transmission licensee has not taken working capital loan from any outside agency. Based on the above provision, rate of interest has been computed as 11.00% for calculation of interest on working capital.

39. Necessary computations in support of interest on working capital are given as under:-

(₹ in lakh)

	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	16.69	17.66	18.67	19.73
O & M expenses	9.27	9.81	10.37	10.96
Receivables	190.37	192.67	188.71	184.63
Total	216.34	220.14	217.75	215.32
Rate of Interest	11.00%	11.00%	11.00%	11.00%
Interest	17.85	24.22	23.95	23.69

TRANSMISSION CHARGES

40. The transmission charges being allowed for the transmission assets are summarized below:-

	(₹ in lakh)			
	2010-11	2011-12	2012-13	2013-14
Depreciation	238.64	328.75	329.23	329.34
Interest on Loan	279.23	358.13	326.89	295.35
Return on equity	237.49	327.23	327.72	327.82
Interest on Working Capital	17.85	24.22	23.95	23.69
O & M Expenses	83.47	117.71	124.46	131.56
Total	856.69	1156.04	1132.25	1107.76

OTHER ISSUES

41. 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.

42. 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.

43. 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 it is subjected to such service tax. We consider the prayer premature. The petitioner is at liberty to approach the Commission for any relief at the appropriate as per law.

44. 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.

45. 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.

46. This order disposes of Petition No. 325/2010.

Sd/-
(M. Deena Dayalan)
Member

Sd/-
(V.S.Verma)
Member

Sd/-
(S. Jayaraman)
Member



Annexure

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN					
(₹ in lakh)					
	Details of Loan	2010-11	2011-12	2012-13	2013-14
1	Bond-XXIV				
	Gross loan opening	1811.45	1811.45	1811.45	1811.45
	Cumulative Repayment upto DOCO/previous year	0.00	150.95	301.91	452.86
	Net Loan-Opening	1811.45	1660.50	1509.54	1358.59
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	150.95	150.95	150.95	150.95
	Net Loan-Closing	1660.50	1509.54	1358.59	1207.63
	Average Loan	1735.97	1585.02	1434.06	1283.11
	Rate of Interest	9.95%	9.95%	9.95%	9.95%
	Interest	172.73	157.71	142.69	127.67
	Rep Schedule	12 annual installments from 26.03.2011			
2	Bond-XXVII				
	Gross loan opening	810.00	810.00	810.00	810.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	67.50	135.00
	Net Loan-Opening	810.00	810.00	742.50	675.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	67.50	67.50	67.50
	Net Loan-Closing	810.00	742.50	675.00	607.50
	Average Loan	810.00	776.25	708.75	641.25
	Rate of Interest	9.47%	9.47%	9.47%	9.47%
	Interest	76.71	73.51	67.12	60.73
	Rep Schedule	12 annual installments from 31.03.2012			
3	Bond-XXVIII				
	Gross loan opening	720.00	720.00	720.00	720.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	60.00
	Net Loan-Opening	720.00	720.00	720.00	660.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	60.00	60.00
	Net Loan-Closing	720.00	720.00	660.00	600.00
	Average Loan	720.00	720.00	690.00	630.00
	Rate of Interest	9.33%	9.33%	9.33%	9.33%
	Interest	67.18	67.18	64.38	58.78
	Rep Schedule	12 annual installments from 15.12.2012			



4	Bond-XXIX				
	Gross loan opening	311.00	311.00	311.00	311.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	25.92
	Net Loan-Opening	311.00	311.00	311.00	285.08
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	25.92	25.92
	Net Loan-Closing	311.00	311.00	285.08	259.17
	Average Loan	311.00	311.00	298.04	272.13
	Rate of Interest	9.200%	9.200%	9.200%	9.200%
	Interest	28.61	28.61	27.42	25.04
	Rep Schedule	12 annual installments from 12.03.2013			
5	Bond XXX				
	Gross loan opening	321.00	321.00	321.00	321.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	321.00	321.00	321.00	321.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	26.75
	Net Loan-Closing	321.00	321.00	321.00	294.25
	Average Loan	321.00	321.00	321.00	307.63
	Rate of Interest	8.80%	8.80%	8.80%	8.80%
	Interest	28.25	28.25	28.25	27.07
	Rep Schedule	12 annual installments from 29.09.2013			
	Total Loan				
	Gross loan opening	3973.45	3973.45	3973.45	3973.45
	Cumulative Repayment upto DOCO/previous year	0.00	150.95	369.41	673.78
	Net Loan-Opening	3973.45	3822.50	3604.04	3299.67
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	150.95	218.45	304.37	331.12
	Net Loan-Closing	3822.50	3604.04	3299.67	2968.55
	Average Loan	3897.97	3713.27	3451.86	3134.11
	Rate of Interest	9.5812%	9.5672%	9.5558%	9.5492%
	Interest	373.47	355.26	329.85	299.28