

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 95/TT/2011

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

Date of Hearing:16.2.2012

Date of Order:25.4.2012

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 from anticipated DOCO 1.7.2011 to 31.3.2010 for transmission system associated with SEWA-II HEP (Combined Elements) in Northern Region for tariff block 2009-14 period under Regulation of 2009.

And

In the matter of:

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

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited, Jaipur
2. Ajmer Vidyut Vitran Nigam Limited, Jaipur
3. Jaipur Vidyut Vitran Nigam Limited, Jaipur
4. Jodhpur Vidyut Vitran Nigam Limited, Jaipur
5. Himachal Pradesh State Electricity Board, Shimla
6. Punjab State Electricity Board, Patiala
7. Haryana Power Purchase Centre, Panchkula
8. Power Development Department, Jammu
9. Uttar Pradesh Power Corporation Ltd., Lucknow
10. Delhi Transco Limited, New Delhi
11. BSES Yamuna Power Limited, New Delhi
12. BSES Rajdhani Power limited, New Delhi
13. North Delhi Power Limited, New Delhi
14. Chandigarh Administration, Chandigarh



15. Uttarakhand Power Corporation Ltd., Dehradun
16. North Central Railway, Allahabad
17. New Delhi Municipal Council, New Delhi

.....Respondents

The following were present:

1. Shri S.S. Raju, PGCIL
2. Shri Rajeev Gupta, PGCIL
3. Shri Tej Pal Singh, PSPCL
4. Shri Padamjit Singh, PSPCL
5. Shri R.B. Sharma, Advocate, BRPL and JSEB
6. Shri Sunil Barnwal, BRPL
7. Shri Sanjay Srivastava, BRPL

ORDER

This petition has been filed by Powergrid Corporation of India Limited (PGCIL) seeking approval for transmission tariff from anticipated date of commercial operation (i.e. 1.7.2011) to 31.3.2014, under transmission system associated with SEWA-II HEP (Combined Elements) in Northern Region (hereinafter referred to as "transmission assets") for tariff block 2009-14 under Regulation 86 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 (hereinafter referred to as "2009 regulations").

2. The administrative approval and expenditure sanction for the transmission project was accorded by Board of Directors of PGCIL vide C/CP/SEWA-II dated 18.7.2005 for ₹9847 lakh, including IDC of ₹473 (based on 4th Quarter, 2004 price level).

3. The scope of work covered under the instant petition includes construction of following transmission line and Sub-station:-

Transmission Lines

- a. SEWA II – Hiranagar 132 kV D/C line
- b. SEWA II – Mahanpur 132 kV D/C line



- c. Stringing of both ckts of Mahanpur-Kathua 132 kV D/C line (Taking over the works from Power Development Department, Jammu & Kashmir (PDD, J&K) on completion of activities upto tower erection but without stringing and PDD, J&K shall be paid for works executed by them)

Sub-stations

- a. Extension of 220/132 kV Hiranagar Sub-station of PDD, J&K – 2 no. of 132 kV bays.
- b. Extension of 132 KV Kathua Sub-station of PDD, J&K – 2 no. of 132 kV bays.
- c. Extension of 132 kV Mahanpur Substation of PDD, J&K – 2 no. 13 kV bays.

4. The tariff was initially claimed on the basis of the anticipated date of commercial operation, i.e. 1.7.2011. Later, the petitioner submitted that the actual date of commercial operation of the transmission assets was 1.9.2011. Accordingly, the petitioner was directed to submit the Forms as per actual date of commercial operation. The revised Forms were submitted by the petitioner vide affidavit dated 21.11.2011.

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

	(₹ in lakh)		
	2011-12 (pro-rata)	2012-13	2013-14
Depreciation	263.35	467.38	468.93
Interest on Loan	295.51	491.10	448.31
Return on equity	261.81	464.61	466.15
Interest on Working Capital	22.41	39.33	39.16
O & M Expenses	125.51	227.47	240.45
Total	968.59	1689.89	1663.00

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

(₹ in lakh)

	2011-12 (Pro-rata)	2012-13	2013-14
Maintenance Spares	32.27	34.12	36.07
O & M expenses	17.93	18.96	20.04
Receivables	276.74	281.65	277.17
Total	326.94	334.73	333.28
Interest	22.41	39.33	39.16
Rate of Interest	11.75%	11.75%	11.75%

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. Reply to the petition has been filed by Respondent No.6, Punjab State Power Corporation Ltd (PSPCL), Respondent No.9, Uttar Pradesh Power Corporation Limited (UPPCL), and Respondent No.12, BSES Rajdhani Power Ltd (BRPL). PSPCL, in its reply, vide affidavit dated 1.8.2011, has raised the issue of time over-run, cost over-run and O&M expenses. UPPCL, in its reply dated 6.1.2012, raised the issue of time over-run, O&M expenses, grossing up, service tax, license fee, filling fee, etc. BRPL, in its reply dated 11.1.2012, raised the issue of time over-run, cost over-run and O&M expenses, grossing up, service tax, license fee, filling fee, etc. The objections raised by the respondents have been dealt in relevant paragraphs of this order.

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

TIME OVER RUN

9. As per investment approval, the asset was scheduled to be commissioned within 27 months from the date of letter of award for Tower Package. The date of letter of award for Tower Package was 7.2.2006 and thus the transmission assets were to be commissioned by May, 2008. The asset was anticipated to be commissioned 1.7.2011. However, the actual date of commercial operation of the assets was 1.9.2011. Thus, there was a delay of 40 months. The petitioner has submitted, in the petition and during the hearing on 21.11.2011, following reasons for time over-run.

(a) Time over-run up to 31.3.2009 (11 Months)

The 132 kV D/C SEWA-II- Mahanpur line was ready for commissioning on 31.3.2009 along with 132 kV D/C SEWA-II Hiranagar line and the reasons for the delay were detailed in the Petition No. 73/2010 along with supporting documents. The delay of 11 months was condoned by the Commission, in its order dated 15.2.2011 in Petition No. 73/2010.

(b) Time over-run from 1.4.2009 to 1.9.2011 (29 Months)

The 132 kV D/C Mahanpur –Kathua line was handed over, as is where basis, by Power Development Department (PDD), Jammu & Kashmir (J&K) only on 23.6.2009. On taking over the line from PDD, J&K, the petitioner had to carry out the left over incomplete works of PDD, J&K also. Though, as per the scope of the investment approval only stringing activity was to be carried out by the petitioner, after completion of the works up to tower erection by PDD J&K, it had to carry out additional work of procurement of 41 towers and 2 gantries and foundation work of 5

towers and 2 gantries, which was not completed by J&K at the time of handing over. The work related to forest clearances, power line and railway crossing clearances were also started by the petitioner after taking over.

(c) There were lot of ROW problems at each location during tower erection as PDD, J&K did not take proper clearance at the time of casting foundations and lot of construction material was lying at site which was hindering cultivation works of farmers.

(d) After successful completion of the works, the line was put under commercial operation on 1.9.2011. The execution time available with the petitioner was about 26 months against 27 months schedule given in the investment approval. Hence, the available execution time was just sufficient for execution of the line and as such no delay can be attributed to the petitioner.

10. The respondent, PSPCL in its reply submitted that extra amount of IDC for the delayed period may not be allowed.

11. The respondent, BRPL, submitted that justification given by the petitioner for cost and time over-run are inadequate, hence IDC&IEDC for the delayed period may not be allowed. The respondents, UPPCL and BRPL have submitted that the Commission disallowed IDC & IEDC of ₹189.51 lakh for Asset-I, vide order dated 15.2.2011 in Petition No. 73/2010, still the petitioner has included the same amount in the tariff calculation in the instant petition. The amount disallowed by the Commission in the said petition may therefore be deleted from the capital cost.

12. The petitioner started the work after 23.6.2009 i.e. after handing over of the line by PDD, J&K. Therefore, the time taken by the petitioner for actual execution was about 26 months against the 27 months schedule given in the investment approval. Moreover, the scope of work also increased to include, different clearances, part of supply and foundation work etc., which were not completed by PDD, J&K. In view of the above mentioned circumstances the time over-run in execution of the Project is condoned, since it was beyond the control of the petitioner.

COST VARIATION

13. BRPL raised the issue of cost variation both in its reply and during the oral submission particularly with regard to cost of sub-station equipments, tower steel, conductors and hardware fittings. PSPCL has raised the issue of higher cost estimates.

14. The petitioner, in its affidavit dated 21.11.2011, has submitted that the estimate for sub-station for SEWA-II HEP Transmission System was prepared based on 4th Quarter 2004 price level, whereas the works were awarded / supplied in 2006/2007. The estimates are prepared by the petitioner as per well defined procedures for cost estimate. The cost estimate is broad indicative of cost worked out generally on the basis of average unit rates of recently awarded contracts. Open Competitive Bidding route is adopted to obtain lowest possible market prices and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices obtained through tenders may happen to be lower or higher than the cost estimate depending upon prevailing market conditions. In the instant

case, the reason for cost variation in certain elements is due to the variation in estimated and awarded prices plus price variation.

15. We have considered the reasons for variation between the estimated cost and the actual completion cost submitted by the petitioner. It is noted that the estimated completion cost of the Project is ₹8847 lakh as against the approved estimated cost of ₹9847 lakh. Despite the time over-run, the petitioner's estimated cost in the FR is on the higher side. We would expect the petitioner to adopt a prudent procedure to make cost estimates of different elements of the transmission projects more realistic.

CAPITAL COST

16. 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.”

17. The details of expenditure and projected additional capital expenditure claimed by the petitioner are as follows:-

(₹ in lakh)

Name of the asset	Apportioned approved cost	Actual cost claimed as on Notional DOCO	Projected Additional Capital Expenditure		Estimated completion cost
			2011-12	2012-13	
Transmission System Associated with SEWA-II (Combined elements)	9847.00	8286.44	543.30	59.00	8888.74

The cost claimed by the petitioner, as on notional date of commercial operation, is inclusive of disallowed IDC and IEDC amounting to ₹189.51 lakh and ₹68.65 lakh for Asset 1 and Asset 2 respectively and initial spares amounting to ₹80.49 lakh and ₹3.23 lakh pertaining to transmission line and sub-station.

18. IDC and IEDC of ₹189.51 and ₹68.65 lakh for Asset 1 and Asset 2 respectively for the delayed period of 5 months (April 2009 to August 2009) was disallowed, vide order dated 15.2.2011 in Petition No. 73/2010 which has been upheld by the Hon'ble Appellate Tribunal for Electricity by its order dated 12.1.2012 in Appeal No.104 of 2011.

19. Accordingly, disallowed IDC & IEDC amounting to ₹189.51 lakh and ₹68.65 lakh for Asset 1 and Asset 2 respectively, vide order dated 15.2.2011 in Petition No. 73/2010 and order dated 10.8.2011 in Petition No. 325/2010 has been deducted from the capital cost claimed.

20. Tariff allowed in the instant petition for Transmission System associated with SEWA –II (Combined Elements) shall supersede the tariff approved for Combined Asset- 1 & 2, vide order dated 10.8.2011 in Petition No. 325/2010 for 2009-2014 period, w.e.f. 1.9.2011.



TREATMENT OF INITIAL SPARES

21. Petitioner has claimed initial spares of ₹80.49 lakh and ₹3.23 lakh pertaining to transmission line and sub-station. Initial spares claimed for sub-station falls within the ceiling limits specified in 2009 regulations.

22. The initial spares claimed for transmission line are proportionately reduced after deducting disallowed IDC and IEDC from the capital cost claimed by the petitioner as on the notional date of commercial operation.

23. Initial spares pertaining to transmission lines are in excess of ₹1.51 lakh as per Regulation 8 of the 2009 regulations. Accordingly, initial spares have been worked out as follows:-

Particulars	Cost as on cut-off date excluding IDC & IEDC disallowed pertaining to Transmission Line	Initial spare claimed	Initial spares claimed (excluding proportionate IDC & IEDC)	Ceiling limits as per Regulation 8 of 2009 Regulation	Initial spares worked out	Excess initial spares claimed
	(a)	(b)	(c)	(d)	(e) =((a)-(c))*(d)/(100%-(d))	(f)=(c)-(e)
Transmission line	7569.49	80.49	78.08	0.75%	56.57	(21.51)

ADDITIONAL CAPITAL EXPENDITURE

24. As per Regulation 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”

25. 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, the cut-off date for Transmission System associated with SEWA-II (Combined Elements) is 31.3.2014.

26. Details of proposed additional capital expenditure for Combined Assets are as follows:-

(₹ in lakh)			
Year	Work/Equipment proposed to be added after COD upto cut off date / beyond cutoff date	Amount capitalized and proposed to be capitalized	Justification as per purpose
2011-12	TR line	432.69	Balance & retention payments
	Substation	98.74	
	PLCC	8.83	
	Lease Hold Land	3.04	
	Total	543.30	
2012-13	TR line	45.00	Balance & retention payments
	Substation	14.00	
	Total	59.00	

Projected additional capital expenditure is mainly on account of Balance & Retention payments, which falls within the cut-off date. Hence, the same has been considered for the purpose of tariff calculation.

DEBT- EQUITY RATIO

27. 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.”

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

(₹ in lakh)				
	Approved		Cost as on DOCO	
	Amount (₹ in lakh)	%	Amount (₹ in lakh)	%
Debt	6892.90	70.00	5604.74	70.00
Equity	2954.10	30.00	2402.03	30.00
Total	9847.00	100.00	8006.77	100.00

29. Detail of debt- equity ratio of assets as on 31.3.2014 is given hereunder:-

(₹ in lakh)		
Capital cost as on 31.3.2014		
	Amount (₹ in lakh)	%
Debt	6026.35	70.00
Equity	2582.72	30.00
Total	8609.07	100.00

30. Details of projected additional capital expenditure claimed by the petitioner are given hereunder:-

(₹ in lakh)		
Particulars	Additional capital expenditure for 2011-13	
	(₹ in lakh)	%
Nominative		
Debt	380.31	70.00
Equity	162.99	30.00
Total	543.30	100.00
Additional Capital for 2012-13		
Debt	41.30	70.00
Equity	17.70	30.00
Total	59.00	100.00

RETURN ON EQUITY

31. 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"

32. The following amount of equity has been considered for calculation of return of equity:-

(₹ in lakh)

Description	Equity on DOCO/Notional DOCO	Notional equity due to ACE for the period 2011-12	Total equity considered for tariff calculations for the period 2011-12	Notional equity due to ACE for the period 2012-13	Total equity considered for tariff calculations for the period 2012-13	Notional equity due to ACE for the period 2013-14	Total equity considered for tariff calculations for the period 2013-14
Transmission system associated with SEWA-II (Combined Elements)	2402.03	162.99	2483.53	17.70	2573.87	0.00	2582.72

33. Return on equity has been calculated as per Regulation 15 of the 2009 regulation with pre-tax return on equity of 17.481%.

34. Petitioner's prayer to allow grossing up the base rate of return on equity based on tax rates viz., MAT, surcharge, any other cess, charges, levies etc., as per relevant Finance Act, shall be settled in accordance with the provisions of Regulation 15 of 2009 regulations.

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

(₹ in lakh)

	2011-12 (pro-rata)	2012-13	2013-14
Opening Equity	2402.03	2565.02	2582.72
Addition due to Additional Capitalisation	162.99	17.70	0.00
Closing Equity	2565.02	2582.72	2582.72
Average Equity	2483.53	2573.87	2582.72
Return on Equity (Base Rate)	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.33%	11.33%	11.33%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	253.25	449.94	451.49

INTEREST ON LOAN

36. 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.”

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

(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) Moratorium period availed by the transmission licensee, the repayment of the loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed;

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

(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.

38. The methodology followed for calculation of weighted average rate of interest in case of floating interest loans in Petition No. 132/2010 has been adopted in the instant petition. Accordingly, the interest on loan has been calculated on the basis of rate prevailing as on 1.4.2009/date of commercial operation. Any change in the rate of interest subsequently to 1.4.2009 /date of commercial operation will be considered at the time of truing up.

39. Repayment of normative loan i.e. ₹597.11 lakh for Combined Assets-1&2 during September 2009 to August 2011 has been considered as Cumulative Repayment of Normative Loan for Transmission System associated with SEWA –II (Combined Elements) as on the notional date of commercial operation i.e. 1.9.2011.

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

41. Details of the interest on loan worked on the above basis are as follows:-

	(₹ in lakh)		
	2011-12 (pro-rata)	2012-13	2013-14
Gross Normative Loan	5604.74	5985.05	6026.35
Cumulative Repayment upto Previous Year	597.11	851.84	1304.45
Net Loan-Opening	5007.63	5133.21	4721.90
Addition due to Additional Capitalisation	380.31	41.30	0.00
Repayment during the year	254.73	452.60	454.16
Net Loan-Closing	5133.21	4721.90	4267.74
Average Loan	5070.42	4927.55	4494.82
Weighted Average Rate of Interest on Loan	9.4155%	9.3977%	9.3825%
Interest	278.49	463.08	421.72

DEPRECIATION

42. 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".

43. Notional date of commercial operation of Transmission System associated with SEWA –II (Combined Elements) was 1.9.2011 and accordingly will complete 12 years beyond 2013-14 and thus depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-III of 2009 regulations.

44. Depreciation of Combined Asset-1 & 2 i.e. ₹ 597.11 lakh for the period from September 2009 to August 2011 has been considered as Cumulative Depreciation for Transmission System associated with SEWA –II (Combined Elements).

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

	(₹ in lakh)		
	2011-12 (pro-rata)	2012-13	2013-14
Opening Gross Block	8006.77	8550.07	8609.07
Addition during 2009-14 due to Projected Additional Capitalisation	543.30	59.00	0.00
Closing Gross Block	8550.07	8609.07	8609.07
Average Gross Block	8278.42	8579.57	8609.07
Rate of Depreciation	5.2750%	5.2754%	5.2754%
Depreciable Value	7450.58	7721.61	7748.16
Remaining Depreciable Value	6853.47	6869.77	6443.71
Depreciation	254.73	452.60	454.16

OPERATION & MAINTENANCE EXPENSES

46. The petitioner submitted that the O&M expenses 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 expenses for tariff period 2009-14. The petitioner has submitted that it would approach the Commission for suitable revision in the norms for O&M expenses in case the impact of wage hike w.e.f 1.1.2007 is more than 50%.

47. The UPPCL in its reply has submitted that once the O&M norms have been defined, the question of actuals does not arise. The O&M norms have been prescribed after detailed consultations, discussions and public hearing and sanctity of the same should be maintained.

48. The respondents BRPL and PSPCL submitted that the O&M should be allowed only as per existing norms.

49. 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 assets covered in the instant petition are as under:-

Element	2009-10	2010-11	2011-12	2012-13	2013-14
132 kV D/C single conductor, T/line (₹ Lakh/ kms.)	0.269	0.284	0.301	0.318	0.336
132 kv bay (₹ Lakh/ bay.)	26.20	27.70	29.28	30.96	32.73

50. As per the existing norms specified in 2009 regulations, allowable O&M expenses for the assets covered in this petition are as under:-

(₹ in lakh)

Element	2009-10	2010-11	2011-12 (pro- rata)	2012-13	2013-14
131.167(78.48+31.25+21.437) km, 132 kV D/C, single conductor T/L	Nil	Nil	23.03	41.71	44.07
6 nos., 400 kV, bays	Nil	Nil	102.48	185.76	196.38
Total O&M Expenditure	Nil	Nil	125.51	227.47	240.45

51. It is clarified that, if any, application for revision of norms of O&M expenses is filed by the petitioner in future, it will be dealt with in accordance with law.

INTEREST ON WORKING CAPITAL

52. As per the 2009 regulations the components of the working capital and the interest thereon are given as follows:-

(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 of the recommended O & M expenses.

(iv) Rate of interest on working capital: In the calculations, as per Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2011 dated 21.06.2011, SBI Base Rate (8.25%) Plus 350Bps i.e. 11.75% has been considered as the rate of interest on working capital.

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

	(₹ in lakh)		
	2011- 12 (pro-rata)	2012-13	2013-14
Maintenance Spares	32.77	34.12	36.07
O & M expenses	17.93	18.96	20.04
Receivables	266.77	271.88	267.64
Total	316.98	324.96	323.75
Interest	21.73	38.18	38.04

TRANSMISSION CHARGES

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

	(₹ in lakh)		
	2011-12 (pro-rata)	2012-13	2013-14
Depreciation	254.73	452.60	454.16
Interest on Loan	278.49	463.08	421.72
Return on equity	253.25	449.94	451.49
Interest on Working Capital	21.73	38.18	38.04
O & M Expenses	125.51	227.47	240.45
Total	933.71	1631.27	1605.86

FILING FEE AND THE PUBLICATION EXPENSES

55. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. UPPCL and BRPL have submitted that the filing fee shall be governed as per the Commission's orders. In accordance with our order dated 11.1.2010 in Petition No. 109/2009, the petitioner shall be entitled to recover the filing fee directly from the beneficiaries on *pro-rata* basis. The petitioner shall also be

entitled for reimbursement of the publication expenses in connection with the present petition directly from the beneficiary on *pro-rata* basis.

LICENCE FEE

56. The petitioner has submitted that they be allowed to bill and recover the licence fee separately from the respondents. 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.

57. The respondents, UPPCL and BRPL have submitted that the petitioner's request for reimbursement for licence fee should be rejected as license fee is the eligibility fee of a license holder and it is the onus of the petitioner. It has been further submitted that there is no specific provision for recovery of license fee in the 2009 regulations. It is clarified that reimbursement of licence fee shall be dealt in accordance with our vide order dated 25.10.2011 on Petition No. 21/2011 and 22/2011.

SERVICE TAX

58. The petitioner has made a prayer to allow to bill and recover the service tax on transmission charges separately from the respondents, if it is subjected to such service tax in future. The respondent BRPL and UPPCL have objected to levying of service tax on the beneficiaries. We consider the prayer of the petitioner pre-mature and accordingly it is rejected

SHARING OF TRANSMISSION CHARGES

59. With effect from 1.7.2011, the billing, collection & 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 as amended.

60. This order disposes of Petition No.95/TT/2011.

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

Details of Loan	2011-2012	2012-2013	2013-2014
1 Bond-XXXIII			
Gross loan opening	185.00	185.00	185.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	185.00	185.00	185.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	185.00	185.00	185.00
Average Loan	185.00	185.00	185.00
Rate of Interest	8.64%	8.64%	8.64%
Interest	15.98	15.98	15.98
Rep Schedule	12 Annual installments from 8.7.2004		
2 Bond-XXIX			
Gross loan opening	311.00	311.00	311.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	25.92
Net Loan-Opening	311.00	311.00	285.08
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	25.92	25.92
Net Loan-Closing	311.00	285.08	259.17
Average Loan	311.00	298.04	272.13
Rate of Interest	9.20%	9.20%	9.20%
Interest	28.61	27.42	25.04
Rep Schedule	12 Annual installments from 12.3.2013		
3 Bond- XXVIII			
Gross loan opening	920.00	920.00	920.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	76.67

Net Loan-Opening	920.00	920.00	843.33
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	76.67	76.67
Net Loan-Closing	920.00	843.33	766.67
Average Loan	920.00	881.67	805.00
Rate of Interest	9.33%	9.33%	9.33%
Interest	85.84	82.26	75.11
Rep Schedule	12 Annual installments from 15.12.2012		
4 Bond- XXXIV			
Gross loan opening	457.00	457.00	457.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	457.00	457.00	457.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	457.00	457.00	457.00
Average Loan	457.00	457.00	457.00
Rate of Interest	8.84%	8.84%	8.84%
Interest	40.40	40.40	40.40
Rep Schedule	12 Annual Installments from 21.10.2014		
5 Bond-XXXI			
Gross loan opening	182.00	182.00	182.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	182.00	182.00	182.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	15.17
Net Loan-Closing	182.00	182.00	166.83
Average Loan	182.00	182.00	174.42
Rate of Interest	8.90%	8.90%	8.90%
Interest	16.20	16.20	15.52
Rep Schedule	12 Annual installments from 25.2.2014		
6 Bond-XXIV			
Gross loan opening	2122.00	2122.00	2122.00
Cumulative Repayment upto DOCO/previous year	176.83	353.67	530.50
Net Loan-Opening	1945.17	1768.33	1591.50
Additions during the year	0.00	0.00	0.00
Repayment during the year	176.83	176.83	176.83
Net Loan-Closing	1768.33	1591.50	1414.67



Average Loan	1856.75	1679.92	1503.08
Rate of Interest	9.95%	9.95%	9.95%
Interest	184.75	167.15	149.56
Rep Schedule	12 annual installments from 26.3.2011		
7 Bond-XXXVI			
Gross loan opening	94.50	94.50	94.50
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	94.50	94.50	94.50
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	94.50	94.50	94.50
Average Loan	94.50	94.50	94.50
Rate of Interest	9.35%	9.35%	9.35%
Interest	8.84	8.84	8.84
Rep Schedule	12 annual installments from 29.8.2016		
8 Bond-XXX			
Gross loan opening	629.00	629.00	629.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	629.00	629.00	629.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	52.42
Net Loan-Closing	629.00	629.00	576.58
Average Loan	629.00	629.00	602.79
Rate of Interest	8.80%	8.80%	8.80%
Interest	55.35	55.35	53.05
Rep Schedule	12 Annual Installments from 29.9.2013		
9 Bond-XXVII			
Gross loan opening	900.00	900.00	900.00
Cumulative Repayment upto DOCO/previous year	0.00	75.00	150.00
Net Loan-Opening	900.00	825.00	750.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	75.00	75.00	75.00
Net Loan-Closing	825.00	750.00	675.00
Average Loan	862.50	787.50	712.50
Rate of Interest	9.47%	9.47%	9.47%
Interest	81.68	74.58	67.47
Rep Schedule	12 Annual Installments from 31.3.2012		
Total Loan			
Gross loan opening	5800.50	5800.50	5800.50
Cumulative Repayment upto DOCO/previous year	176.83	428.67	783.08



Net Loan-Opening	5623.67	5371.83	5017.42
Additions during the year	0.00	0.00	0.00
Repayment during the year	251.83	354.42	422.00
Net Loan-Closing	5371.83	5017.42	4595.42
Average Loan	5497.75	5194.63	4806.42
Rate of Interest	9.4155%	9.3977%	9.3825%
Interest	517.64	488.18	450.96

