CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 58/TT/2012

Coram:

Shri V.S. Verma, Member Shri M. Deena Dayalan, Member

Date of Hearing: 01.10.2013 Date of Order : 31.01.2014

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms & Conditions of tariff) Regulations, 2009 for determination of Transmission Tariff for 765/400 Bilaspur Pooling station (near Sipat) along with LILO of Sipat-Seoni Ckt-1 with 3x80 MVAR Switchable Line Reactor, 3x80 MVAR Bus Reactor and 765/400 kV,1500 MVA Autotransformer 1 & 2 under WRSS X Scheme in WR for Tariff Block 2009-14 period.

And In the matter of:

Power Grid Corporation of India Limited Saudamini, Plot No 2, Sector 29 Gurgaon – 122001.

.....Petitioner

Vs

- Madhya Pradesh Power Management Company Ltd., Shakti Bhawan, Rampur Jabalpur-482 008.
- Maharashtra State Electricity Distribution Company Limited, Prakashgad, 4th floor Andehri (East), Mumbai-400 052.
- Gujarat Urja Vikas Nigam Ltd., Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara-390 007.
- 4. Electricity Department, Government of Goa, Vidyut Bhawan, Panaji, Near Mandvi Hotel. Goa-403 001.
- 5. Electricity Department,
 Administration of Daman and Diu.



Daman-396 210.

6. Electricity Department, Administration of Dadra Nagar Haveli, U.T., Silvassa-396 230.

7. Chhattisgarh State Electricity Board, P.O. Sunder Nagar, Dangania, Raipur Chhattisgarh-492 013.

8. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Ltd., 3/54, Press Complex, Agra-Bombay Road Indore -452 008.Respondents

For petitioner : Ms. Sangeeta Edwards, PGCIL

Shri S. S. Raju, PGCIL Shri M M Mondal, PGCIL Shri B K Sahoo, PGCIL

For respondents : None

ORDER

This petition has been filed by Power Grid Corporation of India (PGCIL) seeking approval of transmission tariff for 765/400 Bilaspur Pooling station (near Sipat) along with LILO of Sipat- Seoni Ckt-1 with 3x80 MVAR Switchable Line Reactor, 3x80 MVAR Bus Reactor and 765/400 kV,1500 MVA Auto-transformer 1 & 2 under WRSS X Scheme in WR (hereinafter referred to as "the transmission asset") from the date of commercial operation to 31.03.2014 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, (hereinafter referred to as "the 2009 Tariff Regulations").

2. Investment approval of the project was accorded by the Board of Director of the petitioner vide the Memorandum dated 16.02.2009 at an estimated cost of ₹66496 lakh including IDC of ₹4696 lakh (based on 4th

Quarter, 2008 price level).

3. Scope of the work covered under the scheme is as follows:-

Transmission Lines

LILO of Sipat- Seoni 765 kV S/C line at WR Pooling station near Sipat.

Sub-stations

Establishment of 765/400 kV, 2x1500MVA WR Pooling station near Sipat.

4. Initially the petitioner had claimed tariff from the anticipated date of commercial operation i.e 1.3.2012 to 31.3.2014. The petitioner, vide affidavit dated 15.6.2012, has submitted that the asset has been put under commercial operation from 1.4.2012 and accordingly furnished revised capital cost certificate along with funding pattern. Details of FR cost, capital cost as on actual commercial operation and estimated additional capital expenditure projected to be incurred for the asset covered in this petition are summarized below:-

(₹ in lakh)

Apportioned	Actual cost	Projected	Additional	Total Estimated
Approved	incurred as	Capital Expenditure		Completion cost
Cost	on DOCO	2012-13	2013-14	
66496.08	38769.73	9952.54	435.88	49158.15

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

(₹ in lakh)

Particulars	2011-12	2012-13	2013-14
	(Pro-rata)		
Depreciation	169.27	2285.23	2467.20
Interest on Loan	211.39	2759.49	2773.16
Return on equity	173.37	2354.60	2543.48
Interest on Working	13.52	178.91	188.37
Capital			
O & M Expenses	51.15	648.94	686.07
Total	618.70	8227.17	8658.28

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

(₹ in lakh)

Particulars	2011-12 (Pro-rata)	2012-13	2013-14
Maintenance Spares	92.07	97.34	102.91
O & M expenses	51.15	54.08	57.17
Receivables	1237.40	1371.20	1443.05
Total	1380.62	1522.62	1603.13
Interest	13.52	178.91	188.37
Rate of Interest	11.75%	11.75%	11.75%

7. Reply to the petition has been filed only by the Madhya Pradesh Power Management Co. Ltd. (MPPMCL), which was earlier known as Madhya Pradesh Power Trading Company Limited, vide its affidavit dated 16.9.2013. MPPMCL has submitted that the petitioner has gone for one spare single-phase unit of auto transformer which was not a part of the project and the petitioner's clarification that the same is as per the prevailing practice, is not acceptable to the respondent. In this regard, the petitioner in response to Commission's query has submitted that the minimisation of power supply outage time/continuity of power supply in case of 765 kV level plays an important role. The transformers and reactors for such high voltage are large in capacity and transportation of 3-phase unit is difficult because of its large size. Due to constraints in transportation of such bulky 3-phase units, single

phase units are manufactured. As per the prevailing practice, single-phase units of reactors or transformers are used to maintain high reliability of the transmission network. In the instant case, the 2X1500 MVA, 765/400 kV autotransformer consists of 6 single-phase units each of 500 MVA. To meet any contingency one spare unit of 765/400kV, 500 MVA, single-phase, autotransformer and 765 kV, 80MVAR, single phase, shunt reactor has been provided in the scheme. We are of the view that a spare auto transformer and shunt reactor are required to maintain continuity of power supply at the EHV levels and we are convinced with the clarification given by the petitioner and accordingly one spare single-phase auto transformer and one shunt reactor unit is allowed and its cost shall be accordingly capitalised. However, the petitioner is directed to ensure that in all future cases, the line reactors are installed after a detailed study and operational feedback from the operators. Further, the petitioner should also ensure that the requirement of the reactive compensation equipment is discussed in the Standing Committee/RPCs and approval of its Board be also obtained by the petitioner.

- 8. The other issues raised by MPPMCL, like time and cost over-run and the clarifications given by the petitioner are considered in the respective paragraphs herein below.
- 9. Having heard the representatives of the parties and perused the material on records, we proceed to dispose of the petition.

Capital cost

- 10. As regards the capital cost, Regulation 7 (1)(a) of the 2009 Tariff 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 funds deployed,-up to the date of commercial operation of the project, as admitted by the Commission, after prudence check."
- 11. The petitioner has claimed capital cost of ₹38769.73 lakh as on the date of commercial operation vide management certificate dated 14.5.2012 (affidavit dated 15.6.2012). Admissibility of the same is being examined hereunder.

Time Over-run

- 12. As per investment approval, the asset was scheduled to be commissioned within 36 months from the date of investment approval, i.e. 16.2.2009, against which asset was put under commercial operation on 1.4.2012. Accordingly, there is a delay of 1 month. MPPMCL has submitted that the petitioner has not properly substantiated the delay and the IDC and IEDC for the period of delay should not be loaded on the beneficiaries.
- 13. The petitioner, vide affidavit dated 16.09.2013, has submitted the reason for delay in commissioning of the asset. According to the petitioner, the delay in commissioning was mainly due to ROW issue along the route of the line. It has been submitted that during the course of execution process,

the transmission line is passing through Village Baharai under Bilaspur district and nine mud house built on Government land were coming under the corridor of the line. The petitioner had requested, through its letter dated 22.10.2011, the concerned SDM for assessment of the compensation for the houses. The matter was perused with the local authorities vigorously. Finally, on 2.3.2012 the compensation was finalized through an agreement between the house owners, in presence of Gram Prabhari, Patwari and Additional Tehsildar and the house owners agreed for construction of the line (stringing). After the above said meeting and agreement with the house owners, the Stringing was completed in March, 2012 and the line was declared under commercial operation w.e.f. 1.4.2012.

14. We have considered the submissions of the petitioner and the documentary evidences submitted by the petitioner regarding the delay attributable to land acquisition from the District Administration and we are convinced with the submission made by the petitioner. Accordingly, we condone the marginal delay of one month in commissioning of the transmission asset.

Treatment of initial spares

15. As per Regulation 8(iv) (a), of the 2009 Tariff Regulations, the Initial Spares to be allowed for sub-station is 2.5% of total sub-station cost and for transmission line is 0.75% of the total cost of the transmission line. Against total sub-station cost of ₹47772.90 lakh, the petitioner, vide its affidavit dated 15.06.2012, has claimed ₹989.71 lakh towards initial spares for sub-station, which works out to 2.07%. The petitioner has not claimed initial spares for

transmission line. Thus, the initial spares for sub-station is allowed as claimed.

Cost variation

- 16. MPPMCL has submitted that the estimated cost of the project was projected very high as compared to the actual completion cost and objected to the abnormal variation in the actual cost and the sanctioned cost. MPPMCL has further observed that the expenditure on certain items such as site preparation, control room, office building, out-door lighting, etc. is higher than the prevailing norms.
- 17. In this connection the petitioner has clarified, vide affidavit dated 3.8.2012, that the main reason for reduction in actual estimated cost is due to the reduction in line length due to shifting of location of Bilaspur Pooling Station (near Sipat). Apart from above, cost reduction is also because of decrease in awarded prices for transformer and reactor. We are in agreement with the clarification offered by the petitioner and accept the same.
- 18. We also over-rule the objection by the above respondent regarding the cost of certain individual items being in excess of the prevailing norms, based on the prudence check and the fact that there is cost over-run as such.
- 19. Based on the above, capital cost of ₹38769.73 lakh, as on date of commercial operation vide management certificate dated 14.5.2012, submitted under affidavit dated 15.6.2012, has been considered for the purpose of tariff determination.

Additional capital expenditure

20. With regard to additional capital expenditure, clause 9(1) of the 2009 Tariff Regulations provides as under:-

"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.

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

21. The 2009 Tariff Regulations further 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 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."

- 22. Based on the above, cut-off date of the transmission assets is 31.3.2015.
- 23. The petitioner has claimed additional capital expenditure as per the following details, which is allowed as the same are towards balance and retention payments and are within the cut-off date:-

(₹ in lakh)

		7 111 101111
Particulars	2012-13	2013-14
Lease hold Land	4.00	0.00
Building & Other Civil Works	2762.71	99.88
Transmission Line	243.17	0.00
Sub-Station Equipments	6893.24	336.00
PLCC	49.42	0.00
Total	9952.54	435.88

Debt- Equity Ratio

- 24. 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."
- 25. The details of Debt-Equity as on the date of commercial operation of the transmission assets are as follows:-

(₹ in lakh)

Capital cost a	Capital cost as on the date of commercial operation					
Particulars	Particulars Amount					
Debt	27138.81	70.000				
Equity	11630.92	30.000				
Total	38769.73	100.00				

26. Details of Debt – Equity as on 31.3.2014 are as under:-

(₹ in lakh)

Capital cost as on 31.3.2014					
Particulars	Amount	%			
Debt	34410.71	70.000			
Equity	14747.45	30.000			
Total	49158.15	100.00			

Return on Equity

- 27. Regulation 15 of the 2009 regulations as amended 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.
- (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 year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations."

- 28. Return on Equity has been computed as per Regulation 15 of the 2009 Tariff Regulations. Pre-tax Return on Equity of 17.481% has been considered.
- 29. Details of the return on equity allowed are as under:-

(₹ in lakh)

Particulars	2012-13	2013-14
Opening Equity	11630.92	14616.68
Addition due to Additional	2985.76	130.76
Capitalisation		
Closing Equity	14616.68	14747.45
Average Equity	13123.80	14682.06
Return on Equity (Base Rate)	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.33%	11.33%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%
Return on Equity (Pre Tax)	2294.17	2566.57

Interest on loan

- 30. Regulation 16 of the 2009 Tariff 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 refinancing 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."

- 31. In these calculations, interest on loan has been computed on the following basis:-
 - (a) Gross amount of loan, repayment of instalments and rate of interest on actual loans have been considered as per the petition.

- (b) The yearly repayment for the tariff period 2009-14 has been considered to be equal to the depreciation allowed for that year.
- (c) Notwithstanding 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.
- (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.
- 32. Further, it is noticed that the petitioner has considered "Proposed Domestic Loan" @ 9.35% in actual loan portfolio (in case of all the assets covered in the instant petition) for the purpose of determination of weighted average rate of interest to be considered for the computation of interest on normative loan. As per Regulation 16 (5) of the 2009 Tariff Regulations the rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio. Accordingly, actual loans drawn alone have been considered for computation of weighted average rate of interest in this order.
- 33. The interest on loan has been calculated on the basis of prevailing rate on date of commercial operation. Any subsequent change in rate of interest will be considered at the time of truing up.

- 34. Detailed calculations in support of the weighted average rate of interest have been given in Annexure.
- 35. Based on the above, interests on loan has been calculated as under:-

		(₹ in lakh)
Particulars	2012-13	2013-14
Gross Normative Loan	27138.81	34105.59
Cumulative Repayment upto Previous Year	0.00	2240.71
Net Loan-Opening	27138.81	31864.88
Addition due to Additional Capitalisation	6966.78	305.12
Repayment during the year	2240.71	2487.42
Net Loan-Closing	31864.88	29682.58
Average Loan	29501.84	30773.73
Weighted Average Rate of Interest on Loan	9.1698%	9.1711%
Interest	2705.27	2822.30

Depreciation

- 36. Regulation 17 of the 2009 Tariff 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.

Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site:

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.

- (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."
- 37. The assets in the instant petition were put on commercial operation on 1.4.2012 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 to the 2009 Tariff Regulations.
- 38. Details of the depreciation worked out are as under:-

	(₹	in lakh)
Particulars	2012-13	2013-14
Opening Gross Block	38769.73	48722.27
Addition during 2009-14 due to	9952.54	435.88
Projected Additional Capitalisation		
Gross Block	48722.27	49158.15
Average Gross Block	43746.00	48940.21
Rate of Depreciation	5.1221%	5.0826%
Depreciable Value	39371.40	44046.19
Remaining Depreciable Value	39371.40	41805.48
Depreciation	2240.71	2487.42

Operation & maintenance expenses

39. Clause (g) of Regulation 19 of the 2009 Tariff Regulations prescribes the norms for operation and maintenance expenses based on the type of substation and line. Norms prescribed in respect of the elements covered in the instant petition are as follows:-

Norms for AC lines:

(₹ in lakh per km)

Element	2009-10	2010-11	2011-12	2012-13	2013-14
S/C (Bundled with four	0.627	0.663	0.701	0.741	0.783
or more Conductors)					

Norms for sub-station:

(₹ in lakh per bay)

Element	2009-10	2010-11	2011-12	2012-13	2013-14
765 kV	73.36	77.56	81.99	86.68	91.64
400 kV	52.40	55.40	58.57	61.92	65.46

40. Based on the above norms, O&M charges for the assets involved in the petition have been calculated as given hereunder:-

(₹ in lakh)

		(X III lakii)
Elements of Asset-I	2012-13	2013-14
LILO of Sipat-Seoni-I at Bilaspur i.e. 7.911 km S/C 765 kV Quad conductor Line	5.02	5.31
6 Nos. 765 kV bays 2 Nos. 400 kV bays (Actual DOCO: 1.4.2012)	520.08 123.84	549.84 130.92
Total	648.94	686.07

The petitioner has submitted that O & M expenses 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 and by escalating it by 5.72% per annum for arriving at the norms for the years of tariff period. 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 expenses for the tariff period 2009-14. The petitioner has further submitted that it may approach the Commission for suitable revision in the norms for O & M expenses in case the impact of wage hike with effect from 1.1.2007 is more than 50%.

42. The Commission has given effect to the impact of pay revision in the 2009 Tariff Regulations by factoring 50% on account of pay revision of the employees of PSUs after extensive stakeholders' consultation. We do not see any reason why the admissible amount is inadequate to meet the requirement of the employee cost. However, in case the petitioner approaches with any such application, the same shall be dealt with in accordance with law.

Interest on working capital

43. As per the 2009 Tariff 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 Tariff Regulations, receivables will be equivalent to two months' of fixed cost. The petitioner has claimed the receivables on the basis of 2 months' of annual 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 Tariff 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 Tariff 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

As per Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2011 dated 21.6.2010, SBI Base Rate Plus 350 bps as on 1.4.2012 (i.e.13.50%) has been considered as the rate of interest on working capital for the asset covered in the petition.

44. Necessary computations in support of interest on working capital are appended herein below:-

	(₹ ir	(₹ in lakh)	
Particulars	2012-13	2013-14	
Maintenance Spares	97.34	102.91	
O & M expenses	54.08	57.17	
Receivables	1348.60	1463.59	
Total	1500.02	1623.68	
Rate of Interest	13.50%	13.50%	
Interest	202.50	219.20	

Transmission charges

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

	(र in lakh)	
Particulars	2012-13	2013-14
Depreciation	2240.71	2487.42
Interest on Loan	2705.27	2822.30
Return on equity	2294.17	2566.57
Interest on Working Capital	202.50	219.20
O & M Expenses	648.94	686.07
Total	8091.60	8781.56

46. Transmission charges allowed are subject to truing up in accordance with the 2009 Tariff Regulations.

Other Issues

- 47. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition. In accordance with the Commission's decision in order dated 11.1.2010 in Petition No. 109/2009, the petitioner shall be entitled to recover the filing fee from the beneficiaries. The petitioner shall also be entitled for reimbursement of expenses incurred by it on publication of notices in connection with the present petition, directly from the beneficiaries on prorata basis.
- 48. 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 as per law.
- 49. Further, the petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42A(1)(b) of the 2009 Tariff Regulations.
- 50. The billing collection and disbursement of the transmission charges shall be governed by provision of the Central Electricity Regulatory Commission (Sharing of inter-State transmission charges and losses) Regulations, 2010.

51. This order disposes of Petition No. 58/TT/2012.

sd/- sd/-

(M. Deena Dayalan) Member (V. S. Verma) Member

Annexure

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

			(₹ in lakh)
	Details of Loan	2012-13	2013-14
1	Bond XXIX		
	Gross loan opening	1017.00	1017.00
	Cumulative Repayment upto DOCO/previous	0.00	84.75
	year		
	Net Loan-Opening	1017.00	932.25
	Additions during the year	0.00	0.00
	Repayment during the year	84.75	84.75
	Net Loan-Closing	932.25	847.50
	Average Loan	974.63	889.88
	Rate of Interest	9.20%	9.20%
	Interest	89.67	81.87
	Rep Schedule	12 annual	
	Trop companie	installments from	
		12.3.2013	
2	Bond XXX		
	Gross loan opening	263.00	263.00
	Cumulative Repayment upto DOCO/previous	0.00	0.00
	year		
	Net Loan-Opening	263.00	263.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	21.92
	Net Loan-Closing	263.00	241.08
	Average Loan	263.00	252.04
	Rate of Interest	8.80%	8.80%
	Interest	23.14	22.18
	Rep Schedule	12 Equal Annual	
	Trop Conocado	Installments from	
		29.9.2013	
3	BOND-XXXI		
	Gross loan opening	2924.00	2924.00
	Cumulative Repayment upto DOCO/previous	0.00	0.00
	year		
	Net Loan-Opening	2924.00	2924.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	243.67
	Net Loan-Closing	2924.00	2680.33
	Average Loan	2924.00	2802.17
	Rate of Interest	8.90%	8.90%
	Interest	260.24	249.39
	Rep Schedule	12 Equal Annual	
	Trop Conocado	Installments from	
		25.2.2014	
4	Bond XXXV		
-	Gross loan opening	10100.00	10100.00
	Cumulative Repayment upto DOCO/previous	0.00	0.00
	year		2.30

	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	10100.00	10100.00
	Average Loan	10100.00	10100.00
	Rate of Interest	9.640%	9.640%
	Interest	973.64	973.64
	Rep Schedule	12 Equal Annual Installments from 31.5.2015	
5	Bond XXXVI		
	Gross loan opening	883.00	883.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	883.00	883.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	883.00	883.00
	Average Loan	883.00	883.00
	Rate of Interest	9.35%	9.35%
	Interest	82.56	82.56
	Rep Schedule	12 Equal Annual Installments from 29.8.2016	
6	Bond XXXIV		
	Gross loan opening	10835.00	10835.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	10835.00	10835.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	
			0.00
			0.00 10835.00
	Net Loan-Closing	10835.00	10835.00
	Net Loan-Closing Average Loan	10835.00 10835.00	10835.00 10835.00
	Net Loan-Closing Average Loan Rate of Interest	10835.00 10835.00 8.840%	10835.00 10835.00 8.84%
	Net Loan-Closing Average Loan	10835.00 10835.00	10835.00 10835.00
7	Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XXXIII	10835.00 10835.00 8.840% 957.81 12 Equal Annual Installments from 21.10.2014	10835.00 10835.00 8.84% 957.81
7	Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule	10835.00 10835.00 8.840% 957.81 12 Equal Annual Installments from	10835.00 10835.00 8.84%
7	Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XXXIII Gross Ioan opening Cumulative Repayment upto DOCO/previous year	10835.00 10835.00 8.840% 957.81 12 Equal Annual Installments from 21.10.2014 900.00 0.00	10835.00 10835.00 8.84% 957.81 900.00 0.00
7	Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XXXIII Gross Ioan opening Cumulative Repayment upto DOCO/previous	10835.00 10835.00 8.840% 957.81 12 Equal Annual Installments from 21.10.2014	10835.00 10835.00 8.84% 957.81
7	Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XXXIII Gross Ioan opening Cumulative Repayment upto DOCO/previous year	10835.00 10835.00 8.840% 957.81 12 Equal Annual Installments from 21.10.2014 900.00 0.00	10835.00 10835.00 8.84% 957.81 900.00 0.00
7	Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XXXIII Gross Ioan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening	10835.00 10835.00 8.840% 957.81 12 Equal Annual Installments from 21.10.2014 900.00 900.00	10835.00 10835.00 8.84% 957.81 900.00 0.00
7	Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XXXIII Gross Ioan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year	10835.00 10835.00 8.840% 957.81 12 Equal Annual Installments from 21.10.2014 900.00 0.00	10835.00 10835.00 8.84% 957.81 900.00 0.00
7	Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XXXIII Gross loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year	10835.00 10835.00 8.840% 957.81 12 Equal Annual Installments from 21.10.2014 900.00 0.00	10835.00 10835.00 8.84% 957.81 900.00 0.00 900.00 0.00
7	Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XXXIII Gross loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing	10835.00 10835.00 8.840% 957.81 12 Equal Annual Installments from 21.10.2014 900.00 0.00 0.00 0.00 0.00	900.00 900.00 900.00 900.00
7	Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XXXIII Gross Ioan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan	10835.00 10835.00 8.840% 957.81 12 Equal Annual Installments from 21.10.2014 900.00 0.00 0.00 0.00 900.00 900.00	900.00 900.00 900.00 900.00
7	Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XXXIII Gross loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule	10835.00 10835.00 8.840% 957.81 12 Equal Annual Installments from 21.10.2014 900.00 0.00 0.00 0.00 900.00 900.00 900.00 8.64%	900.00 900.00 900.00 900.00 900.00 900.00 900.00 900.00 8.64%
7	Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XXXIII Gross Ioan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest	10835.00 10835.00 8.840% 957.81 12 Equal Annual Installments from 21.10.2014 900.00 0.00 0.00 0.00 900.00 900.00 900.00 8.64% 77.76 12 Equal Annual Installments from	900.00 900.00 900.00 900.00 900.00 900.00 900.00 900.00 8.64%

Cumulative Repayment upto DOCO/previous	0.00	84.75
year		
Net Loan-Opening	26922.00	26837.25
Additions during the year	0.00	0.00
Repayment during the year	84.75	350.33
Net Loan-Closing	26837.25	26486.92
Average Loan	26879.63	26662.08
Rate of Interest	9.1698%	9.1711%
Interest	2464.82	2445.22