CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 49/TT/2013

Coram:

Shri Gireesh B. Pradhan, Chairperson
Shri M. Deena Dayalan, Member
Shri A. K. Singhal, Member

Date of Hearing : 12.11.2013
Date of Order : 03.07.2014

In the matter of:

Approval of transmission tariff for installation of 400/220 kV, 1*315 MVA Auto Transformer at 400/220 kV Sub-station at Vapi (anticipated date of commercial operation 1.2.2013) under Western Region from date of commercial operation to 31.3.2014 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

And in the matter of:

Power Grid Corporation of India Limited
"Saudamini", Plot No.2,
Sector-29, Gurgaon -122 001. ………**Petitioner**

Vs

1. Madhya Pradesh Power Trading Company Ltd.,
Shakti Bhawan, Rampur
Jabalpur-482 008.

2. Maharashtra State Electricity Distribution Company Limited,
Prakashgad, 4th floor
Andehri (East), Mumbai-400 052.

3. 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	:	Shri M. M. Mondal, PGCIL Shri B. K. Sahoo, PGCIL Shri S.S Raju, PGCIL Ms. Sangeeta Edwards, PGCIL Shri D. Nikhandia, PGCIL
For respondent	:	None

ORDER

The petition has been filed by Power Grid Corporation of India Limited (PGCIL) for approval of the transmission tariff for installation of 400/220 kV, 1*315 MVA Auto Transformer at 400/220 kV Sub-station at Vapi (hereinafter referred to "transmission tariff") in Western Region for tariff block 2009-14 period based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations").

2. The Investment Approval (I.A.) for installation of 400/220 kV, 1*315 MVA Auto Transformer at 400/220 kV Sub-station at Vapi was accorded by the Board of

Directors of the petitioner, vide letter dated 27.9.2011 at an estimated cost of ₹2118 lakh including IDC of ₹57 lakh (based on 2nd quarter, 2011 price level). The project was scheduled to be commissioned within 15 months from the date of investment approval i.e. by 1.1.2013. The scope of works covered under the scheme broadly include:-

Sub-station:

(i) Vapi (POWERGRID) 400/200 kV Substation(Extension)

400 kV
315 MVA 400/220 kV Transformer : 1
ICT bay : 1

220kV
ICT Bay : 1

3. The petitioner has claimed tariff on the basis of anticipated date of commercial operation of 1.2.2013. The petitioner has submitted, vide affidavit dated 25.4.2013, revised management certificates and tariff forms as per the actual date of commercial operation, i.e. 1.3.2013.

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

(` in lakh)

Particulars	2012-13 (pro-rata)	2013-14
Depreciation	6.11	86.50
Interest on Loan	7.18	97.24
Return on Equity	6.26	88.68
Interest on working capital	0.93	12.42
O & M Expenses	8.77	111.28
Total	29.25	396.12

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

(` in lakh)

Particulars	2012-13 (pro-rata)	2013-14
Maintenance Spares	15.79	16.69
O & M Expenses	8.77	9.27
Receivables	58.50	66.02
Total	83.06	91.98
Rate of Interest	0.93	12.42
Interest	13.50%	13.50%

6. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act. Maharashtra State Electricity Distribution Company Limited (MSEDCL), Respondent No. 2, has filed its reply, vide affidavit dated 24.1.2013. The petitioner has filed rejoinder to the reply filed by MSEDCL, vide affidavit dated 30.4.2013. The objections raised by the respondent in their reply and the clarifications given by the petitioner are addressed in the relevant paragraphs of this order.

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

Capital cost

8. Regulation 7 of the 2009 Tariff Regulations provides as follows:-

"(1) Capital cost for a project shall include:-

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

(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.

(2) The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff:

Provided that in case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out based on the benchmark norms to be specified by the Commission from time to time:

Provided further that in cases where benchmark norms have not been specified, prudence check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of tariff."

9. Details of capital cost submitted by the petitioner, vide affidavit dated 25.4.2013, as on the actual date of commercial operation and estimated additional capital expenditure projected to be incurred for the asset covered in the petition are as follows:-

(₹ in lakh)

Apportioned approved cost	**Expenditure up to DOCO***	**Projected expenditure from DOCO to 31.3.2013**	**Projected expenditure for 2013-14**	**Total estimated completion cost**
2117.76	1338.27	99.97	399.87	1838.11

*Capital cost as on the actual date of commercial operation is inclusive of initial spares.

<u>Time Over-run</u>

10. Investment Approval (IA) for the project was accorded on 27.9.2011 and as per the IA, the transmission asset was scheduled to be commissioned within 15 months i.e. by 1.1.2013. However, the transmission asset was commissioned on 1.3.2013. The commissioning of the asset was delayed by two months.

11. The petitioner was asked to submit justification along with documentary evidence for delay in the commissioning of the asset. The petitioner in its reply vide affidavit dated 26.4.2013 has submitted as under:-

> "it is submitted that the bidder who emerged as L1 was new in setting up a substation. Thus several negotiations were made with the L1 bidder for tie-ups of technology and manpower with existing reputed vendors before award of contract for smooth completion of work of the instant project. Finally, the work was approved in Jan' 2012 and the ICT was put under commercial operation on 01.03.2013**.**
>
> It is to be mentioned here that due to this marginal delay there was no bottleneck in power flow as well as the project was completed within the approved cost. It is prayed that Hon'ble Commission may kindly condone the marginal delay in commissioning and allow full tariff as claimed in the petition."

12. The Hon'ble Appellate Tribunal for Electricity in its judgement dated 27.4.2011 in Appeal No. 72/2010 (MSPGCL Vs. MERC & Ors.) has laid down the following principles for prudence check of time over-run related cost:-

> "7.4. The delay in execution of a generating project could occur due to following reasons:
>
> > i) due to factors entirely attributable to the generating company, e.g., imprudence in selecting the contractors/suppliers and in executing contractual agreements including terms and conditions of the contracts, delay in award of contracts, delay in providing inputs like making land available to the contractors, delay in payments to contractors/suppliers as per the terms of contract, mismanagement of finances, slackness in project management like improper co-ordination between the various contractors, etc.
> >
> > ii) due to factors beyond the control of the generating company e.g. delay caused due to force majeure like natural calamity or any other reasons which clearly establish, beyond any doubt, that there has been no imprudence on the part of the generating company in executing the project.
> >
> > iii) situation not covered by (i) & (ii) above.
> >
> > In our opinion in the first case the entire cost due to time over run has to be borne by the generating company. However, the Liquidated Damages (LDs) and insurance proceeds on account of delay, if any, received by the generating company could be retained by the generating company. In the second case the generating company could be given benefit of the additional cost incurred due to time over-run. However, the consumers should get full benefit of the LDs recovered from the contractors/suppliers of the generating company and the insurance proceeds, if any, to reduce the capital cost. In the third case the additional cost due to time overrun including the LDs and insurance proceeds

> could be shared between the generating company and the consumer. It would also be prudent to consider the delay with respect to some benchmarks rather than depending on the provisions of the contract between the generating company and its contractors/suppliers. If the time schedule is taken as per the terms of the contract, this may result in imprudent time schedule not in accordance with good industry practices."

13. We have considered the submission of the petitioner. Even though, the investment approval for the assets was accorded in September 2011 with the scheduled completion period of 15 months, the award for the work was given in the month of January, 2012. The project was put on commercial operation on 1.3.2013 in place of the scheduled date of 1.1.2013. The petitioner has submitted that the delay of 2 months in execution of the project is on account of the delay in commencement of the work. The petitioner has explained that award of LOI was delayed on account of inexperience of L-I bidder and the petitioner had to put in efforts for tie-ups of technology and manpower of the L-I bidder with the existing vendors of the petitioner before awarding the LOI. In our view, the petitioner's plea regarding the inexperience of L-I bidder shows that the petitioner was not prudent in selecting the competent and experienced contractor for execution of the work. The delay in awarding the LOI on the ground of inexperience of the L-I bidder with regard to setting up the sub-station and its impact cannot be passed on to the beneficiaries. In our view, the instant case is covered under the first principle enunciated by the Appellate Tribunal in the above quoted judgment. The petitioner is not entitled for the condonation of time over run of 2 months period for execution of the project and accordingly, the IDC for the two months is disallowed.

14. Details of IDC disallowed are as given overleaf:-

(₹ in lakh)

As per Management Certificate submitted vide affidavit dated 7.3.2013		
	IDC	IEDC
Expenditure from 1.4.2012 to 28.2.2013 (upto DOCO)	12.50	0.00
Total IDC and IEDC Claimed	**12.50**	**0.00**
Details of IDC & IEDC disallowed for 2 months		
Disallowed IDC and IEDC for 2 months (Pro rata)	2.27	0.00
Total	**2.27**	**0.00**

Cost Variation

15. The total completion cost of the asset is ₹1838.11 lakh against the apportioned approved cost of ₹2117.76 lakh. Hence, there is no cost over-run. However, there is a marginal cost variation in case of switchgear, CT, PT, CV, isolators, transformer and structure for switchyard. The cost variation in these items is marginal and hence it is allowed.

16. It is observed that the completion cost is lower than the estimated cost. As pointed out by us in other petitions, the cost estimates of the petitioner are not realistic in the instant case. We direct the petitioner to adopt a prudent procedure to make cost estimates of different elements of the transmission projects more realistic.

Initial Spares

17. The petitioner has claimed initial spares of ₹98.6 lakh (5.36%), which is restricted to ceiling norm of 2.5% specified in the 2009 Tariff Regulations. The initial spares allowed for the sub-station are as follows:-

(₹ in lakh)

Particulars	**Cost as on cut-off date**	**Capital cost as on cut-off date after deducting IDC**	**Initial spares claimed**	**Proportionate Initial spares claimed after deducting IDC**	**Ceiling limits as per 2009 Tariff Regulations**	**Initial spares worked out**	**Excess initial spares claimed**
(a)	(b)	(c)	(d)	(e)=(d)/(b)*(c)	(f)	(g)=((c)-(e))*(f)/(100%-(f))	(h)=(e)-(g)
Sub-station	1838.11	1835.84	98.68	98.56	2.50%	44.55	**54.01**

Initial spares will be reviewed on submission of actual capital cost incurred up to cut-off date at the time of truing up.

18. The capital cost as on the date of commercial operation considered for the purpose of tariff calculations after excluding disallowed IDC and excess initial spares is given below:-

(₹ in lakh)

Capital cost claimed by the petitioner	**Disallowed IDC**	**Excess initials pares deducted**	**Capital cost as on DOCO considered for computing tariff**
1338.27	2.27	54.01	1281.98

<u>Projected Additional Capital Expenditure</u>

19. Clause (1) of Regulation 9 of the 2009 Tariff Regulations provides as follows:-

> "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:"

20. Clause (11) of Regulation 3 of the 2009 Tariff Regulations 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 in case the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31st March of the year closing after 3 years of the year of commercial operation".

Accordingly, the cut-off date for the instant assets is 31.3.2016.

21. The petitioner has claimed projected additional capital expenditure amounting to ₹99.97 lakh and ₹399.87 lakh for the financial year 2012-2013 and 2013-2014 respectively. The additional capital expenditure claimed falls within the cut-off date. Hence, it has been considered for the purpose of tariff calculation.

22. The details of the estimated capital expenditure as on 31.3.2014 are as follows:-

(**₹ in lakh**)

Approved apportioned cost (FR)	**Expenditure up to DOCO**	**Projected expenditure from DOCO to 31.03.2013**	**Projected expenditure 2013-14**	**Total projected expenditure**
2117.76	1338.27	99.97	399.87	**1838.11**

23. The additional capitalisation has been considered in the debt-equity ratio of 70:30.

Debt- Equity Ratio

24. Regulation 12 of the 2009 Tariff Regulations provides as under:-

"12. Debt-Equity Ratio (1) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff:

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

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 funding details as on the date of commercial operation submitted by the petitioner is as follows:-

(` in lakh)

	As per Form-6		**As per Form-13**	
Particulars	**Amount**	**%**	**Amount**	**%**
Debt	936.79	70.00	347.00	25.93
Equity	401.48	30.00	**991.27	74.07
Total	**1338.27**	**100.00**	**1338.27**	**100.00**
** Balancing figure				

26. The balancing figure of equity as on the date of commercial operation is 74.07% and it exceeds the specified limit of 30%. Therefore, equity has been

restricted to 30% as provided in Regulation 12 (3) of the 2009 Tariff Regulations.

27. Based on Form- 13 debt against capital expenditure as on 31.3.2014 is as below:-

(` in lakh)

Particulars	Amount	Debt Portion
Capital cost as on DOCO	1338.27	347.00
Add-cap for 2012-13	99.97	589.79
Add-cap for 2012-13	399.87	0.00
Total	1838.11	936.79
Debt% **Equity		50.96% 949.04 (100%-50.96%)

28. However, the petitioner has claimed the debt equity ratio on normative basis. It shall be reviewed at the time of truing up.

29. Debt equity ratio after adjusting IDC and excess initial spares as on actual date of commercial operation is as follows:-

(` in lakh)

Capital cost as on date of commercial operation		
Particulars	**Amount**	**%**
Debt	897.39	70.00
Equity	384.59	30.00
Total	**1281.98**	**100.00**

30. Detail of debt-equity ratio of assets as on 31.3.2014 is as follows:-

(` in lakh)

Capital cost as on 31.3.2014		
Particulars	**Amount**	**%**
Debt	1247.28	70.00
Equity	534.55	30.00
Total	**1781.82**	**100.00**

Return on Equity

31. Regulation 15 of the 2009 Tariff Regulations provides as under:-

> “15. (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.
>
> (2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% for thermal generating stations, transmission system and run of the river generating station, and 16.5% for the storage type generating stations including pumped storage hydro generating stations and run of river generating station with pondage and shall 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".

32. The petitioner has submitted that the timeline specified for claiming additional return on equity of 0.5%, in the Appendix-II to the 2009 Tariff Regulations for

400/220 kV Sub-station is 24 months and the instant transmission asset has been commissioned in 17 months. Accordingly, the instant transmission asset qualifies for additional return of equity of 0.5% and hence the same may be allowed. We have considered the submissions of the petitioner. The timeline for allowing additional return on equity of 0.5% specified in the 2009 Tariff Regulations is for new Sub-stations. In the present case, the auto transformer has been installed in an existing sub-station and hence the timeline specified for a new sub-station cannot be extended to the instant case. Accordingly, the petitioner's prayer for additional return on equity is not allowed.

33. Based on the above, the return on equity has been considered as given hereunder:-

(` in lakh)

Particulars	**2012-13**	**2013-14**
Opening Equity	384.59	414.59
Addition due to Additional Capitalisation	29.99	119.96
Closing Equity	414.59	534.55
Average Equity	399.59	474.57
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)	**5.82**	**82.96**

34. The petitioner's prayer to recover the shortfall or refund the excess Annual Fixed Charges, on account on return on equity due to change in applicable Minimum Alternate Tax/Corporate Income Tax rate as per the Income Tax Act, 1961 of the respective financial year directly without making any application before the Commission shall be dealt under Regulation 15(3) as state above. 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.

Interest on Loan

35. Regulation 16 of the 2009 Tariff Regulations provides as under:-

"16. **Interest on loan capital** (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."

36. In keeping with the provisions of Regulation 16 of the 2009 Tariff Regulations, the petitioner's entitlement to interest on loan has been calculated on the following basis:-

(a) Gross amount of loan, repayment of instalments and rate of interest on actual loan have been considered as per the affidavit dated 25.4.2013.

(b) The repayment for the tariff period 2009-14 has been considered to be equal to the depreciation allowed for that period.

(c) 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.

(d) Debt-equity ratio as on the date of commercial operation has been discussed above. As per actual loan details submitted by the petitioner in Form-13, it appears that the petitioner has not actually drawn loan amounting to `589.79 lakh for funding as on date of commercial operation. This amount has been actually drawn after the date of commercial operation but considered for funding as on date of commercial operation. The petitioner has neither claimed nor is being allowed interest against this amount as on the date of commercial operation.

37. Detailed calculations in support of the weighted average rates of interest have been given in Annexure to this order.

38. Based on the above, interest on loan has been calculated as given hereunder:-

(` in lakh)

Particulars	2012-13 (pro-rata)	2013-14
Gross Normative Loan	897.39	967.37
Cumulative Repayment upto previous year	0.00	5.86
Net Loan-Opening	897.39	961.51
Addition due to additional capital expenditure	69.98	279.91
Repayment during the year	5.86	83.52
Net Loan-Closing	961.51	1157.89
Average Loan	929.45	1059.70
Weighted Average Rate of Interest on Loan	8.8893%	8.8612%
Interest	6.89	93.90

Depreciation

39. Regulation 17 of the 2009 Tariff Regulations provides as follows:-

"17. **Depreciation** (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."

40. The assets covered in the current petition were put under commercial operation on 1.3.2013. The assets will complete 12 years beyond 2013-14. Accordingly, depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-III to the 2009 Tariff Regulations, as per details given hereunder:-

(` in lakh)

Particulars	2012-13 (pro-rata)	2013-14
Opening Gross Block	1281.98	1381.95
Addition due to Projected Additional Capitalisation	99.97	399.87
Closing Gross Block	1381.95	1781.82
Average Gross Block	1331.97	1581.89
Rate of Depreciation	5.2800%	5.2800%
Depreciable Value	1198.77	1423.70
Remaining Depreciable Value	1198.77	1417.84
Depreciation	5.86	83.52

<u>Operation & Maintenance Expenses (O&M Expenses)</u>

41. Clause (g) of Regulation 19 of the 2009 Tariff Regulations specifies the norms for O&M Expenses for the transmission system based on the type of sub-station and the transmission line. Norms specified in respect of the elements covered in the instant petition are as follows:-

Element	2009-10	2010-11	2011-12	2012-13	2013-14
400 kV bay (`l lakh / bay)	52.40	55.40	58.57	61.92	65.46
220 kV bay (` lakh / bay)	36.68	38.78	41.00	43.34	45.82

42. As per the 2009 Tariff Regulations, allowable O&M Expenses for the instant assets are as under:-

(` in lakh)

Elements	**2009-10**	**2010-11**	**2011-12**	**2012-13** (pro-rata)	**2013-14**
1 no., 400 kV ((` in lakh / bay)	---	---	---	5.16	65.46
1 no., 220 kV ((` in lakh / bay)	---	---	---	3.61	45.82
Total O&M	**---**	**---**	**---**	**8.77**	**111.28**

43. The petitioner has submitted that 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 also submitted that it would approach the Commission for suitable revision in the norms for O&M Expenses due to impact of wage revision.

44. 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

45. The petitioner is entitled to claim interest on working capital as per the 2009 Tariff Regulations. The components of the working capital and the petitioner's entitlement to interest thereon are discussed hereunder:-

(i) Receivables

As per Regulation 18(1)(c)(i) of the 2009 Tariff Regulations, receivables as a component of working capital 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 as part of the working capital 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 O&M Expenses for one month to be included in the working capital. The petitioner has claimed O&M Expenses for 1 month of the respective year. This has been considered in the working capital.

(iv) Rate of Interest on Working Capital

In accordance with clause (3) of Regulation 18 of the 2009 Tariff Regulations, the rate of interest on working capital shall be on normative basis and shall be equal to State Bank of India Base Rate of 10.00% plus 350 bps as on 1.4.2012 (13.50%). The interest on working capital for the assets covered in the petition has been worked out accordingly.

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

(` in lakh)

Particulars	2012-13 (pro-rata)	2013-14
Maintenance Spares	15.79	16.69
O & M Expenses	8.77	9.27
Receivables	56.50	63.97
Total	81.05	89.93
Interest	0.91	12.14

Transmission Charges

47. The transmission charges being allowed for the assets are summarized hereunder:-

(` in lakh)

Particulars	2012-13 (pro-rata)	2013-14
Depreciation	5.86	83.52
Interest on Loan	6.89	93.90
Return on Equity	5.82	82.96
Interest on Working Capital	0.91	12.14
O & M Expenses	8.77	111.28
Total	28.25	383.81

Filing fee and the publication expenses

48. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The MSEDCL has submitted that the filing fee shall be governed as per the Commission's order. The petitioner has clarified that reimbursement of expenditure has been claimed in terms of Regulation 42 of the 2009 Tariff Regulations. We have considered the submissions of both the petitioner and MSEDCL. The petitioner shall be entitled for reimbursement of the filing fees publication expenses in connection with the present petition, directly from the beneficiaries on *pro-rata* basis in accordance with Regulation 42A (1) (a) of the 2009 Tariff Regulations.

Licence Fee

49. The petitioner has 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. MSEDCL has submitted that the petitioner may not be allowed to recover the licence fee separately. The petitioner has clarified that the licence fee has been a new component of cost to the transmission licence under O&M stage of the project and has become incidental to the petitioner only from 2008-09. We would like to clarify that the petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42A (1) (b) of the 2009 Tariff Regulations.

Service Tax

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

such service tax in future. MSEDCL has submitted that Service Tax is in the negative list since 1.4.2012 and the petitioner's prayer is premature. We consider petitioner's prayer premature and accordingly this prayer is rejected.

Sharing of Transmission Charges

51. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time.

52. This order disposes of Petition No. 49/TT/2013.

sd/-	sd/-	sd/-
(A. K. Singhal) **Member**	**(M. Deena Dayalan)** **Member**	**(Gireesh B. Pradhan)** **Chairperson**

Annexure

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN			
			(₹ in lakh)
	Details of Loan	**2012-2013**	**2013-2014**
1	**Bond XXXVIII**		
	Gross loan opening	**100.00**	**100.00**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**0.00**
	Net Loan-Opening	100.00	100.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	100.00	100.00
	Average Loan	100.00	100.00
	Rate of Interest	9.25%	9.25%
	Interest	9.25	9.25
	Rep Schedule	Bullet Payment as on 09.03.2027	
2	**Bond XLII**		
	Gross loan opening	**0.00**	**589.79**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**0.00**
	Net Loan-Opening	0.00	589.79
	Additions during the year	589.79	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	589.79	589.79
	Average Loan	294.90	589.79
	Rate of Interest	8.80%	8.80%
	Interest	25.95	51.90
	Rep Schedule	Bullet Payment as on 13.03.2023	
3	**Bond XLI**		
	Gross loan opening	**247.00**	**247.00**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**0.00**
	Net Loan-Opening	247.00	247.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	247.00	247.00
	Average Loan	247.00	247.00
	Rate of Interest	8.85%	8.85%
	Interest	21.86	21.86
	Rep Schedule	12 annual installments from 19.10.2016	
	Gross loan opening	**347.00**	**936.79**
	Cumulative Repayment upto DOCO/previous year	0.00	0.00

	Net Loan-Opening	347.00	936.79
	Additions during the year	589.79	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	936.79	936.79
	Average Loan	641.90	936.79
	Rate of Interest	**8.8893%**	**8.8612%**
	Interest	57.06	83.01