CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 241/TT/2013

Coram: Shri Gireesh B. Pradhan, Chairperson Shri A. K. Singhal, Member Shri A. S. Bakshi, Member Dr. M. K. Iyer, Member

Date of Hearing : 06.10.2015 Date of Order : 29.02.2016

In the matter of:

Determination of transmission tariff for 220 kV D/C Vapi-Khadoli transmission line along with its associated bays (COD: 1.10.2010) under WRSS-V transmission system in Western Region for the period from COD to 31.3.2014, under Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2009

And in the matter of

Power Grid Corporation of India Limited, "Saudamani", Plot No.2, Sector-29, Gurgaon -122 001

.....Petitioner

Vs

- Madhya Pradesh Power Management Company Ltd., Shakti Bhawan, Rampur Jabalpur-482 008.
- 2. 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.

- Electricity Department, Government of Goa, Vidyut Bhawan, Panaji, Near Mandvi Hotel, Goa-403 001.
- 5. Electricity Department, Administration of Daman and Diu, Daman-396210.
- Electricity Department, Administration of Dadra Nagar Haveli, U.T. Silvassa-396 230.
- Chhattisgarh State Electricity Board, P.O. Sunder Nagar, Dangania, Raipur Chhattisgarh-492 013.
- Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Ltd., 3/54, Press Complex, Agra-Bombay Road Indore-452 008.

.....Respondents

For Petitioner : Shri A.M. Pavgi, PGCIL Shri Mohd. Mohasin, PGCIL Shri M.M. Mondal, PGCIL Shri S.K. Venkatesan, PGCIL

For Respondents : None

<u>ORDER</u>

The instant petition has been filed by Power Grid Corporation of India Ltd. (PGCIL) for approval of the transmission tariff for revision of transmission tariff of 220 kV D/C Vapi-Khadoli transmission line along with its associated bays (COD: 1.10.2010) under WRSS-V transmission system in Western Region for the period from COD to 31.3.2014 for tariff block 2009-14 period, in terms of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter "the 2009 Tariff Regulations").

2. The investment approval for the transmission project was accorded by the Board of Directors of the petitioner company vide letter dated 26.12.2007 at an estimated cost of ₹47769 lakh including IDC of ₹3497 lakh (based on 3rd Quarter, 2007 price level). The RCE for WRSS-V was approved by the Board of Directors of the petitioner company vide memorandum dated 1.11.2012. The scope of work covered under the project is as follows:-

Transmission Lines

- 1. Vapi Navi Mumbai 400 KV D/C line
- 2. LILO of Lonikhand (MSEB) Kalwa (MSEB) 400 KV S/C line at Navi Mumbai
- 3. Vapi-Khadoli (UT of DNH) 220 KV D/C line

Sub Stations

- 1. Establishment of 400/220KV New Substation (GIS) at Navi Mumbai
- 2. Establishment of 400/220KV Vapi Substation
- 3. Establishment of 220/66 KV Khadoli (UT of DNH) Substation

3. The instant petition covers single asset i.e. 220 kV D/C Vapi-Khadoli Transmission Line along with its associated bays under WRSS- V.

4. This order has been issued after considering the petitioner's affidavit dated 31.12.2013, 29.10.2014 and 21.8.2015.

5. Earlier, the transmission tariff in instant asset was determined vide order dated 30.12.2011 in Petition No. 321/2010, wherein the Commission has restricted

capital cost to apportioned approved cost in absence of approved revised cost estimates with a liberty to file revised tariff petition upon approval of revised cost estimates. The capital cost admitted was restricted to the apportioned approved cost i.e. ₹2898.92 lakh as against the estimated completion cost i.e. ₹ 3276.86 lakh in the absence of Revised Cost Estimates in accordance with 2009 Tariff Regulations. The relevant extract of vide order dated 30.12.2011 is as follows:-

"11. Petitioner PGCIL vide affidavit dated 25.5.2011 submitted that the amount towards tree compensation was increased to ₹192.35 lakh on account of increase in assessment rate by different Executive Magistrate for tree compensation and increase in number of trees. The information subsequently furnished by the petitioner shows that the compensation amount of ₹1,77,24133 includes ₹31,892 towards police protection. The amount of crop compensation claimed, vide affidavit dated 25.5.2011, and the proof of the disbursement of amount submitted vide affidavit dated 24.8.2011 is at variance. We allow tree and crop compensation of ₹1,77,24,133 that has already been paid and also ₹10 lakh and ₹15 lakh for compensation cases pending before the revenue authorities, amounting to ₹2,02,24,133. Since PGCIL has not submitted the Revised Cost Estimates (RCE) duly approved by its Board, the cost of the transmission elements is being restricted to ₹2898.92 lakh till the time RCE is submitted by them. There is no direct impact of the mismatch of the amount of crop compensation on the tariff at present, as the cost is being restricted to apportioned approved cost. We however direct the petitioner to submit affidavit reconciling the crop compensation figures at the time of filing the petition for truing up or while coming again for tariff along with the RCE, as the case may be."

6. In the instant petition, revision in transmission tariff has been claimed by the

petitioner based on revised cost estimate approved and projected expenditure to

be incurred up to 31.3.2014 under Regulation 6(1) of 2009 Tariff Regulation. The

relevant extract of above said regulation is as follows:-

"(1) The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up.

Provided that the generating company or the transmission licensee, as the case may be, may in its discretion make an application before the Commission one more time prior to 2013- 14 for revision of tariff."

7. The petitioner has claimed transmission charges for the instant assets as

under:-

			(₹ in	lakh)
Particulars	2010-11	2011-12	2012-13	2013-14
Depreciation	73.09	152.02	159.81	169.11
Interest on Loan	82.59	162.10	157.78	154.05
Return on equity	79.35	165.28	173.85	186.30
Interest on Working Capital	8.05	16.69	17.36	18.16
O & M Expenses	81.61	172.59	182.44	192.87
Total	324.69	668.68	691.24	720.49

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

			(₹ in lakh)				
Particulars	2010-11	2011-12	2012-13 2013-14				
Maintenance Spares	24.48	25.89	27.37	28.93			
O & M expenses	13.60	14.38	15.20	16.07			
Receivables	108.23	111.45	115.21	120.08			
Total	146.31	151.72	157.78	165.08			
Interest	8.05	16.69	17.36	18.16			
Rate of Interest	11.00%	11.00%	11.00%	11.00%			

9. Reply has been filed by Maharashtra State Electricity Distribution Company Limited Respondent No. 2, vide affidavit dated 30.8.2013. MSEDCL has raised the issue regarding additional capital expenditure, return on equity, rate on interest, service tax and licence fee. The objections raised by the MSEDCL in his reply are addressed in the relevant paragraphs of this order. 10. Having heard the representatives of the petitioner present at the hearing and

perused the material on record, we proceed to dispose of the petition.

Capital cost

11. 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."

12. The petitioner vide affidavit dated 21.8.2015, has submitted the detail of

apportioned approved cost as per investment approval ,apportioned approved cost

as per RCE ,cost as on COD (1.10.2010) and estimated capitalization projected to be incurred during 2010-11, 2011-12, 2012-13 and 2013-14, duly certified by Auditor is as follows:-

(₹ in lakh)

Apportioned approved cost	Apportioned approved cost (RCE)	Cost on COD	Projected	Projected additional capital expenditure			Total estimated cost
			COD to 31.3.2011	2011-12	2012-13	2013-14	
2898.92	3277.00	2665.95	133.48	87.71	207.12	144.87	3239.13

Cost over-run

13. The estimated completion cost i.e. ₹3239.13 lakh is within the RCE of ₹3277.00 lakh submitted vide affidavit 21.8.2015.

Time over-run

14. As per Investment Approval (IA), the project was scheduled to be commissioned within 33 months from the date of investment approval i.e. by 26.9.2010 against this the instant asset was put under commercial operation on 1.10.2010.

Treatment of IDC and IEDC

15. The petitioner vide Auditor's certificated dated 13.10.2014 has claimed IDC of ₹138.28 lakh. The petitioner was directed to submit computation of actual IDC on cash basis along with editable soft copy of computation in excel format. In response, the petitioner vide affidavit dated 9.11.2015 submitted the IDC of ₹ ₹123.20 lakh as on COD on cash basis without computation in soft copy.

Accordingly, IDC of ₹123.20 lakh as on CODs have been considered for the purpose of tariff determination. Further, IDC amounting to ₹15.08 lakh discharged after COD will be allowed at the time of truing up on the submission of adequate information along with computation in soft copy in excel format. The petitioner has claimed IEDC of ₹162.10 lakh, which is allowed for the purpose of tariff as the same is with the limit as given in RCE.

Treatment of initial spares

16. Regulation 8 of 2009 Tariff Regulations provides that initial spares shall be capitalised as a percentage of the original project cost, subject to following ceiling norms:-

Transmission line	0.75%
Transmission sub-station	2.5%
Series compensation devices	
& HVDC Station	3.5%

17. Initially, the petitioner has claimed initial spares of ₹86.12 lakh in Petition No. 321/2010, wherein, the initial spares of ₹25.69 lakh were allowed by the Commission in its order dated 30.12.2011. Based on RCE the initial spares may be revised as per ceiling of spares allowed in the 2009 Tariff Regulations. The petitioner has claimed initial spares amounting to ₹86.12 lakh pertaining to Substation. Further, the petitioner vide affidavit dated 21.8.2015 submitted that ₹67.92 lakh has been paid up to COD (1.10.2010) and balance amount of ₹ 18.20 lakh has been paid during 2012-13, which is included in the additional capital expenditure. The initial spares and additional capital expenditure which was restricted in vide

order dated 30.12.2011 in Petition No. 321/2010 due to non submission of RCE is allowed. The admissible initial spares worked out to ₹ 25.17 lakh as detailed below:-

(₹ in lakh)

					. ,
Capital	Initial	Capital cost up to	Proportionate	Ceiling	Initial
cost up to	spares	31.3.2014	initial spares	limit	spares
cut of date	claimed	considering IDC			worked
		on cash basis			out
1072.00	86.12	1067.40	85.75	2.50%	25.17

Capital Cost as on COD

18. The capital cost considered for tariff calculation as on COD, after making the necessary adjustment in respect of capitalization of IDC and initial spares is as follows:-

		(₹ in lakh)
Particulars	Capital cost as on COD vide CA Certificate dated 13.10.2014	Capital expenditure restricted due to initial spares adjustment and IDC on cash basis.
Freehold Land	0.00	0.00
Leasehold Land	0.00	0.00
Building & Other Civil Works	0.00	0.00
Transmission Line	1672.24	1662.78
Sub-Station Equipments	812.88	747.70
PLCC	180.83	179.81
Total	2665.95	2590.29

Projected additional capital expenditure

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

"Additional Capitalisation: (1) The capital expenditure incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

(i) Undischarged liabilities;

- (ii) 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".

21. Detail of the additional capital expenditure claimed from COD to 31.3.2014 for

the assets is as follows:-

				(₹ ir	lakh)
Particulars	2010-11	2011-12	2012-13	2013-14	Total
Freehold Land	0.00	0.00	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	0.00
Building & Other Civil Works	0.00	0.00	0.00	0.00	0.00
Transmission Line	52.97	65.65	50.57	123.49	292.68
Sub-Station	80.51	22.06	156.55	21.38	280.50
Equipments					
PLCC	0.00	0.00	0.00	0.00	0.00
Total	133.48	87.71	207.12	144.87	573.18

22. MSEDCL has submitted that the petitioner's has claim of total additional capital expenditure of ₹556.49 lakh under Regulation 9(1) of 2009 Tariff Regulations may be allowed after prudence check.

23. The additional capital expenditure claimed by the petitioner has been considered for the purpose of revision of tariff as per Regulation 9(1) of 2009 Tariff Regulations.

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. Details of debt-equity in respect of the asset as on the date of commercial

operation are as follows:-

		(₹ in lakh)
Particulars	Amount	%
Debt	1813.20	70.00
Equity	777.09	30.00
Total	2590.29	100.00

26. Detail of debt-equity ratio of asset for additional capital expenditure are given

overleaf:-

				(₹ i	n lakh)	
	Additional capital expenditure					
Particulars	2010-11	2011-12	2012-13	2013-14	%	
Debt	93.44	61.40	144.98	101.41	70.00	
Equity	40.04	26.31	62.14	43.46	30.00	
Total	133.48	87.71	207.12	144.87	100.00	

27. Detail of debt-equity ratio of asset as on 31.3.2014 is as per details given

hereunder:-

		(₹ in lakh)		
Capital cost as on 31.3.2014				
Particulars	Amount	%		
Debt	2214.43	70.00		
Equity	949.04	30.00		
Total	3163.47	100.00		

Return on equity

28. 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".

Particulars	2010-11	2011-12	2012-13	2013-14
Opening Equity	795.26	835.31	861.62	923.75
Addition due to Additional Capitalisation	40.04	26.31	62.14	43.46
Closing Equity	835.31	861.62	923.75	967.22
Average Equity	815.28	848.46	892.69	945.48
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%
Tax rate for the year (MAT)	19.93%	20.01%	20.01%	20.96%
Rate of Return on Equity (Pre Tax)	19.358%	19.377%	19.377%	19.611%
Return on Equity (Pre Tax)	78.91	164.41	172.98	185.42

29. Based on the above, the return on equity considered are given hereunder:-

(₹ in lakh)

30. The petitioner has submitted that it may be allowed to recover the shortfall or refund the excess Annual Fixed Charges, on account of 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 from the beneficiaries without making any application before the Commission under Regulation 15(5) of the 2009 Tariff Regulations. MSEDCL has submitted that Return on Equity may be allowed in such a way that it avoids unnecessary burden on the beneficiaries and ultimately on end consumers and the Commission needs to

conduct prudence check on loans availed by the petitioner and the average interest rate considered for computation of Return on Equity. We would like to clarify that the petitioner is allowed to recover the shortfall or refund the excess annual transmission charges under Regulation 15(5) of the 2009 Tariff Regulations.

Interest on loan

31. 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."

32. MSEDCL has submitted that there is a need to conduct prudence check on loans availed by the petitioner and the average interest rate considered for calculation of interest on long term basis. We would like to clarify that as formulated under Regulation 16(5) actual loans have been considered for computation of weighted average rate of interest.

33. 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:-

- (i) Gross amount of loan, repayment of instalments ,rate of interest on loan and weighted average rate of interest on actual average loan have been considered as per petition ;
- (ii) The repayment for the tariff period 2009-14 has been considered to be equal to the depreciation allowed for that period;

(iii)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; and

(iv) 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.

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

35. Based on the above, interest on loan has been calculated are given hereunder:-

				(₹ in lakh)
Particulars	2010-10	2011-12	2012-13	2013-14
	4055.04	4040.05	0040.44	0455.40
Gross Normative Loan	1855.61	1949.05	2010.44	2155.43
Cumulative Repayment upto Previous	0.00	71.07	219.05	374.81
Year				
Net Loan-Opening	1855.61	1877.98	1791.40	1780.62
Addition due to Additional	93.44	61.40	144.98	101.41
capitalisation				
Repayment during the year	71.07	147.98	155.76	165.06
Net Loan-Closing	1877.98	1791.40	1780.62	1716.97
Average Loan	1866.79	1834.69	1786.01	1748.79
Weighted Average Rate of Interest on	8.80%	8.80%	8.82%	8.82%
Loan				
Interest	82.16	161.53	157.56	154.19

Depreciation

36. Regulation 17 of the 2009 Tariff Regulations provides as under:-

"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."

37. The instant asset has been put under commercial operation as on 1.10.2010.

The asset in the instant petition 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. Based on the above, the depreciation has been considered are given overleaf:-

(₹ in lakh)

Particulars	2010-11	2011-12	2012-13	2013-14
Opening Gross Block	2590.29	2723.77	2811.48	3018.60
Addition during 2009-14 due to	133.48	87.71	207.12	144.87
Projected Additional Capitalisation				
Closing Gross Block	2723.77	2811.48	3018.60	3163.47
Average Gross Block	2657.03	2767.62	2915.04	3091.03
Rate of Depreciation	5.3495%	5.3468%	5.3434%	5.3399%
Depreciable Value	2445.85	4876.65	5009.32	5167.71
Remaining Depreciable Value	2445.85	4805.58	4790.27	4792.90
Depreciation	71.07	147.98	155.76	165.06

Operation & Maintenance Expenses (O&M Expenses)

39. As per the norms specified in the 2009 Tariff Regulations O&M Expenses as allowed vide order dated 30.12.2011 in Petition No. 321/2010 have been considered.

Interest on working capital

40. 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 fixed cost. The petitioner has claimed the receivables on the basis of 2 months' annual transmission charges. 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

The SBI Base rate (7.5%) as on 1.7.2010 plus 350 Bps i.e. 11% has been considered as the rate of interest on working capital.

41. Necessary computations in support of interest on working capital are as follows:-

				(₹ in lakh)
Particulars	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	24.48	25.89	27.37	28.93
O & M expenses	13.60	14.38	15.20	16.07
Receivables	53.13	110.52	114.33	119.27
Total	91.21	150.79	156.90	164.27
Interest	5.02	16.59	17.26	18.07

Transmission charges

42. The transmission charges being allowed for the assets are given overleaf:-

			(₹ in lakh)		
Particulars	2010-11	2011-12	2012-13	2013-14	
Depreciation	71.07	147.98	155.76	165.06	
Interest on Loan	82.16	161.53	157.56	154.19	
Return on equity	78.91	164.41	172.98	185.42	
Interest on Working Capital	5.02	16.59	17.26	18.07	
O & M Expenses	81.61	172.59	182.44	192.87	
Total	318.77	663.09	686.00	715.61	

Licence fee

43. 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 Commission may pass such orders in respect to petitioner's request for reimbursement for licence fee, as it thinks just and proper to avoid unnecessary burden on beneficiaries and ultimately on end consumers. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42 A (1) (b) of the 2009 Tariff Regulations.

Service tax

44. 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 as the petitioner itself submitted that service tax on transmission has been put in the negative list it will be too early to make any comment on such an issue. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.



Sharing of Transmission Charges

45. MSEDCL has submitted that details about sharing of transmission charges by the beneficiaries should be clearly specified.

46. The transmission charges allowed shall be recovered on monthly basis in accordance with Regulation 23 and shared by the beneficiaries in accordance with Regulation 33 of the 2009 regulation up to 30.6.2011. With effect from 1.7.2011, 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.

47. This order disposes of Petition No. 241/TT/2013.

-sd-(Dr. M.K. lyer) Member -sd-(A.S. Bakshi) Member -sd-(A.K. Singhal) Member -sd-(Gireesh B. Pradhan) Chairperson

<u>Annexure</u>

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(₹ in lakh)

					(₹ in lakh)
	Details of Loan	2010-11	2011-12	2012-13	2013-14
1	Bond-XXXIII				
	Gross loan opening	166.16	166.16	166.16	166.16
	Cumulative Repayment upto	0.00	0.00	0.00	0.00
	DOCO/previous year				
	Net Loan-Opening	166.16	166.16	166.16	166.16
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	166.16	166.16	166.16	166.16
	Average Loan	166.16	166.16	166.16	166.16
	Rate of Interest	8.64%	8.64%	8.64%	8.64%
	Interest	14.36	14.36	14.36	14.36
	Rep Schedule	12 Annu	al installme	ents from 8.	7.2014
2	Bond-XXXI				
	Gross loan opening	300.00	300.00	300.00	300.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	300.00	300.00	300.00	300.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	25.00
	Net Loan-Closing	300.00	300.00	300.00	275.00
	Average Loan	300.00	300.00	300.00	287.50
	Rate of Interest	8.90%	8.90%	8.90%	8.90%
	Interest	26.70	26.70	26.70	25.59
	Rep Schedule	12 Annual installments from 25.2.20			
3	Bond-XXXIV Add cap for 2010-11				
-	Gross loan opening	0.00	93.44	154.84	154.84
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	93.44	154.84	154.84
	Additions during the year	93.44	61.40	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	93.44	154.84	154.84	154.84
	Average Loan	46.72	124.14	154.84	154.84
	Rate of Interest	8.84%	8.84%	8.84%	8.84%
	Interest	4.13	10.97	13.69	13.69
	Rep Schedule	12 Annual installments from 21.10.2014			
3	Bond- XXX				



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Gross loan opening	1400.00	1400.00	1400.00	1400.00	
Cumulative Repayment upto	0.00	0.00	0.00	0.00	
DOCO/previous year					
Net Loan-Opening	1400.00	1400.00	1400.00	1400.00	
Additions during the year	0.00	0.00	0.00	0.00	
Repayment during the year	0.00	0.00	0.00	116.67	
Net Loan-Closing	1400.00	1400.00	1400.00	1283.33	
Average Loan	1400.00	1400.00	1400.00	1341.67	
Rate of Interest	8.80%	8.80%	8.80%	8.80%	
Interest	123.20	123.20	123.20	118.07	
Rep Schedule	12 Annua	al installme	nts from 29	.9.2013	
Bond- XL Add Cap For 2012-13					
Gross loan opening	0.00	0.00	0.00	144.98	
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	
Net Loan-Opening	0.00	0.00	0.00	144.98	
Additions during the year	0.00	0.00	144.98	0.00	
Repayment during the year	0.00	0.00	0.00	0.00	
Net Loan-Closing	0.00	0.00	144.98	144.98	
Average Loan	0.00	0.00	72.49	144.98	
Rate of Interest	0.00	0.00	9.30%	9.30%	
Interest	0.00	0.00	6.74	13.48	
Rep Schedule		al installme	nts from 28	.6.2016	
Bond- XLIII Add Cap For 2013-14					
Gross loan opening	0.00	0.00	0.00	0.00	
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	
Net Loan-Opening	0.00	0.00	0.00	0.00	
Additions during the year	0.00	0.00	0.00	101.41	
Repayment during the year	0.00	0.00	0.00	0.00	
Net Loan-Closing	0.00	0.00	0.00	101.41	
Average Loan	0.00	0.00	0.00	50.71	
Rate of Interest	0.00	0.00	0.00	7.93%	
Interest	0.00	0.00	0.00	4.02	
Rep Schedule	12 Annual installments from 20.5.2017				
Total Loan	Total Loan				
Gross loan opening	1866.16	1959.60	2021.00	2165.98	
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	
Net Loan-Opening					
Additions during the year	1866.16 93.44	<u>1959.6</u> 61.40	2021 144.98	2165.98 101.41	
	33.44	01.40	14.30	101.41	

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Repayment during the year	0.00	0.00	0.00	141.67
Net Loan-Closing	1959.6	2021	2165.98	2125.72
Average Loan	1912.88	1990.3	2093.49	2145.85
Rate of Interest	8.80%	8.80%	8.82%	8.82%
Interest	168.39	175.23	184.69	189.20