

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO. 412/TT/2014

Coram:

**Shri A.S. Bakshi, Member
Dr. M. K. Iyer, Member**

**Date of Hearing : 14.03.2016
Date of Order : 22.03.2016**

In the matter of:

Determination of transmission tariff for 2014-19 tariff block for 400/220 kV New GIS Sub-station at Navi Mumbai along with LILO of Lonikhand-Kalwa Transmission Line (Anticipated COD: 1.1.2015) and 400 kV D/C Vapi-Navi Mumbai Transmission Line, WR1 portion from AP18 to AP38 (Part of 400 kV D/C Vapi-Navi Mumbai Transmission Line) (COD: 1.4.2014) under "Western Region System Strengthening Scheme-V" in Western Region, under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

And in the Matter of:

Power Grid Corporation of India Ltd,
SAUDAMINI, Plot No. 2,
Sector-29, Gurgaon-122001 (Haryana)

.....Petitioner

Versus

1. Madhya Pradesh Power Trading Company Ltd.
Shakti Bhawan, Rampur
Jabalpur - 482 008
2. Maharashtra State Electricity Distribution Co. Ltd.
Prakashgad, 4th Floor
Andheri (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,
Ner Mandvi Hotel, Goa - 403 001
5. Electricity Department
Administration Of Daman & 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
Chhatisgaarh-492013
8. Madhya Pradesh Audyogik Kendra
Vikas Nigam (Indore) Ltd.
3/54, Press Complex, Agra-Bombay Road,
Indore-452 008

....Respondent(s)

The following were present:

For Petitioner: Shri A. M. Pavgi, PGCIL
Shri P. V. Nath, PGCIL
Smt. Archana Kumari, PGCIL
Shri Amit Yadav, PGCIL
Shri S.S. Raju, PGCIL
Shri Jasbir Singh, PGCIL
Shri Rakesh Prasad, PGCIL
Shri Aryaman Saxena, PGCIL
Shri M.M. Mondal, PGCIL
Shri Piyush Awasthi, PGCIL

For Respondents: None

ORDER

The petition has been preferred by Power Grid Corporation of India Limited (“the petitioner”) for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) for the period from COD to 31.3.2019 in respect of 400/220 kV New GIS Sub-station at Navi Mumbai along with LILO of

Lonikhand-Kalwa Transmission Line (Anticipated COD: 1.1.2015) and 400 kV D/C Vapi-Navi Mumbai Transmission Line, WR1 portion from AP18 to AP38 (Part of 400 kV D/C Vapi-Navi Mumbai Transmission Line) (COD: 1.4.2014) under “Western Region System Strengthening Scheme-V” in Western Region.

2. The transmission assets covered in the instant petition are as follows:-

Assets	Description	COD
Asset 1	400/220 kV New GIS Sub-station at Navi Mumbai along with LILO of Lonikhand-Kalwa Transmission Line .	1.1.2015 (Anticipated)
Asset 2	400kV D/C Vapi-Navi Mumbai Transmission Line, WR1 portion from AP18 to AP38 (Part of 400 kV D/C Vapi-Navi Mumbai Transmission Line)	1.4.2014 (Actual)

3. The petitioner has been entrusted with the implementation of Western Region System Strengthening Scheme – V (WRSS-V). The scope of work covered in the WRSS-V is as follows:-

Transmission Lines:

- a) Vapi-Navi Mumbai 400 kV D/C line;
- b) LILO of Lonikhand (MSEB)-Kalwa (MSEB) 400kV S/C line at Navi Mumbai;
- c) Vapi-Khadoli (UT of DNH) 220kV D/C line;

Sub-stations:

- a) Establishment of 400/220 kV, 2x315 MVA New Substation (GIS) at Navi Mumbai;
- b) Extension of 400/220 kV Vapi Sub-station;
- c) Extension of 220/66 kV Khadoli (UT of DNH) Sub-station;
- d) Extension of 400/220 kV Kudus (MSETCL) Sub-station.

4. The respondents in the instant petition are distribution licensees, who are procuring transmission service from the petitioner, mainly beneficiaries of Western Region.

5. The brief facts of the case are as follows:-

a) The investment approval and expenditure sanction to the transmission project was accorded by Board of Directors of POWERGRID, vide letter dated 26.12.2007 at an estimated cost of ₹47769.00 lakh including IDC of ₹3497.00 lakh (based on 3rd Quarter, 2007 price level). The Revised Cost Estimate (RCE) of ₹72181 lakh including IDC of ₹9162 lakh for the project was approved in November, 2012.

b) Subsequently, the petitioner has submitted the RCE vide Memorandum dated 20.1.2016 vide its affidavit dated 11.3.2016. As per the RCE, the estimated cost for the project is ₹73848.00 lakh including an IDC of ₹15287.00 lakh based on the June 2015 price levels.

c) The transmission asset was scheduled to be commissioned within 33 months from the date of IA in a progressive manner. Thus, the scheduled date of commissioning of the transmission asset was 24.9.2010. The Asset 2 was put under commercial operation on 1.4.2014, and there is a time-overrun of 42 months. In case of Asset 1, the petitioner has submitted the anticipated COD as 1.1.2015 according to which there is a delay of 51 months.

d) The petitioner has submitted that the delay in commissioning of the transmission assets is mainly on account of RoW issues and forest clearance.

e) Annual Fixed Charges was allowed , vide order dated 24.12.2014, for the years 2014-15 and 2015-16 for inclusion in PoC charges as per Regulation 7(7)(i) of the 2014 Tariff Regulations. The provisional tariff approved in the said order is as follows:-

(₹ in lakh)

Assets	2014-15	2015-16
Asset 1	887.56	3640.16
Asset 2	1319.49	1342.91

f) The petitioner has claimed a capital cost of ₹34950.81 lakh for Asset 1 and ₹8794.53 lakh for Asset 2 as on COD and an estimated additional capital expenditure of ₹2963.54 lakh for Asset 1 and ₹832.49 lakh for Asset 2 in the 2014-19 tariff period.

6. The petitioner has served the petition to the respondents and notice of this application has been published in the newspaper in accordance with Section 64 of the Electricity Act 2003. No comments/objections have been received from the public in response to the notice in newspaper. No submissions have been made by the respondents. The hearing in this matter was held on 14.3.2016.

7. The petitioner was directed, vide ROP dated 24.11.2014, to submit the status of commissioning of Asset 1, RLDC certificate for the assets, computation of IEDC and IDC and detailed reasons for the delay in commissioning of the transmission assets. The petitioner has submitted the anticipated COD of Asset 1 was 1.1.2015, however it is yet to be commissioned. The petitioner had submitted that Asset 2 was commissioned on 1.1.2014 and has submitted the COD certificate dated 2.4.2014 certifying its commissioning. During the hearing on 14.3.2016, the petitioner has submitted that Asset 1 has not been commissioned

and petition claiming the tariff for the Asset 1 will be filed afresh after its commissioning. Thus, in view of the above, the petitioner is directed to file a fresh petition as and when the Asset 1 is commissioned. In this order, tariff is allowed only for 400 kV D/C Vapi-Navi Mumbai Transmission Line, WR1 portion from AP18 to AP38 (Part of 400 kV D/C Vapi-Navi Mumbai Transmission Line) (hereinafter referred to as "the transmission assets"). The Annual Fixed Charges allowed for Asset 1 for inclusion in POC changes stands withdrawn and the petitioner is directed to ensure that the same is excluded from POC tariff computation.

8. Having heard the representatives of the petitioner and respondents, and perused the material on record, we proceed to determine the tariff in accordance with the Tariff Regulations, 2014.

9. The transmission charges claimed by the petitioner are as below:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	486.33	508.31	508.31	508.31	508.31
Interest on Loan	570.41	552.10	505.55	458.67	411.89
Return on Equity	541.87	566.36	566.36	566.36	566.36
Interest on Working Capital	37.53	38.20	37.15	36.10	35.05
O & M Expenses	13.22	13.67	14.12	14.59	15.07
Total	1649.36	1678.64	1631.49	1584.03	1536.68

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	1.10	1.14	1.18	1.22	1.26
Maintenance Spares	1.98	2.05	2.12	2.19	2.26

Receivables	274.89	279.77	271.92	264.01	256.11
Total working capital	277.97	282.96	275.22	267.42	259.63
Rate of Interest	13.50	13.50	13.50	13.50	13.50
Interest on working capital	37.53	38.20	37.15	36.10	35.05

Capital Cost

11. The petitioner has claimed a capital cost of ₹8794.53 lakh for the instant asset as on COD (1.4.2014) and the same is certified by Auditor's Certificate dated 22.7.2014. The details of the approved apportioned cost and the capital cost are as follows:-

(₹ in lakh)			
Apportioned approved cost (as per RCE)	Capital cost as on COD	Estimated additional capital expenditure	Estimated completion cost
9627.02	8794.53	832.49	9627.02

12. Regulation 9 (1) and (2) and 10 (1) of the 2014 Tariff Regulations specify as follows:-

“9. Capital Cost: (1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects.

(2) The Capital Cost of a new project shall include the following:

- a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
- b) Interest during construction and financing charges, on the loans (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;
- c) Increase in cost in contract packages as approved by the Commission;
- d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;
- e) capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;
- f) expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;
- g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and

h) adjustment of any revenue earned by the transmission licensee by using the assets before COD.”

“10. Prudence Check of Capital Expenditure: The following principles shall be adopted for prudence check of capital cost of the existing or new projects:

(1) In case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out taking into consideration the benchmark norms specified/to be specified by the Commission from time to time:

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

13. The petitioner has not claimed any initial spares for the instant. We have considered the submission of the petitioner and have admitted the capital cost of ₹8794.53 lakh as on COD (1.4.2014), as certified by Auditor’s Certificate dated 22.7.2014.

Time Over-run

14. As per the investment approval, the transmission asset was scheduled to be commissioned within 33 months of the sanction i.e. on 26.12.2007. However, the instant asset was commissioned on 1.4.2014. Thus, there is a time over-run of 42 months.

15. The petitioner has submitted that the delay in commissioning of the instant asset is on account of Right of Way (Row) issues and forest clearance in the Vapi–Navi Mumbai Transmission Line and its different portions. The petitioner has submitted that the Vapi-Navi Mumbai Transmission Line is being developed in phased manner because of severe Row constraints. Initially, under interim contingency arrangement, part of 400 kV D/C Vapi-Navi Mumbai Transmission Line (under WRSS-V from Vapi Gantry up to AP-18 along with bay extension at

VAPI Sub-station) and its interconnection with Naysari-Boisar transmission line (being constructed under MUNDRA UMPP) was commissioned w.e.f. 1.4.2013 and tariff filed under Petition No. 60/TT/2013 in line with the approval accorded in the 34th Standing Committee meeting held on 9.5.2012. Subsequently, the RoW issues and forest clearance in portion from AP-18/0 to AP38 (part of Vapi-Navi Mumbai D/C under WRSS-V) and AP38 to AP-45A/0 (under Mundra UMPP) were resolved and the line was made ready up to AP-45N0.

16. The petitioner has further submitted that there was severe RoW problems in 400 kV D/C Naysari-Boisar Transmission Line due to forest involvement of 12.40 km (57.04 Ha). Around 101 Nos. of locations and approximately 40 km of stringing in 400 kV D/C Naysari-Boisar Transmission Line is affected on account of forest clearance. Due to severe RoW problems the forest proposal for 400 kV D/C Vapi-Navi Mumbai Transmission Line under WRSS-V has been divided in three parts as Vapi-Kala, Kala- Kudus and Kudus-Navi Mumbai. The RoW constraint is also noted in the 36th SCM on Power System Planning held on 26.9.2013. The petitioner has also submitted a copy of the same along with the petition.

17. The petitioner has submitted that the forest approval for 400 kV D/C Vapi-Kala part of Vapi-Navi Mumbai Transmission Line has been accorded on 23.10.2013. The 400 kV D/C Vapi-Kala portion (AP18-AP38) has been charged in March, 2014 (COD: 1.4.2014) through D/C portion of 400 kV Naysari-Boisar Transmission Line from AP 38 to AP 44 and M/C portion from AP 44 to AP 45 A/0 so as to establish direct connection from Vapi Sub-station to Kala GIS.

18. We have considered the submission of the petitioner and documents placed in support of the time over-run. The time taken for resolving the RoW issues was beyond the control of the petitioner and hence it is not attributable to the petitioner. Therefore, the time over-run of 42 months in respect of the instant has been condoned.

Additional Capital Expenditure

19. Clause (1) of Regulation 14 of the 2014 Tariff Regulations provides as under:-

“(1) The capital expenditure in respect of the new project or an existing project 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 recognized to be payable at a future date;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and
- (v) Change in law or compliance of any existing law.”

20. Clause 13 of Regulation 3 of the 2014 Tariff Regulations defines

“Cut - off Date” means 31st March of the year closing after two years of the year of commercial operation of whole or part of the project, and in case the whole or part of the project is declared under commercial operation in the last quarter of a year, the cut - off date shall be 31st March of the year closing after three years of the year of commercial operation.”

21. The petitioner has claimed an estimated additional capital expenditure of ₹832.49 lakh in 2014-15 for the instant asset towards balance and retention payments and the same is certified by Auditor’s Certificate dated 22.7.2014.

22. We have considered the submission of the petitioner w.r.t estimated additional capital expenditure in case of asset during 2014-19 tariff period. We

allow the same under Regulation 14(1) of 2104 Tariff Regulations subject to true up on actual basis. Thus the additional capital expenditure allowed for the 2014-19 tariff period is as follows:-

(₹ in lakh)

Capital cost as on COD	Estimated Additional Capital Expenditure					Estimated Completion Cost
	2014-15	2015-16	2016-17	2017-18	2018-19	
8794.53	832.49	-	-	-	-	9627.02

Debt: Equity

23. Clause (1) of Regulation 19 of the 2014 Tariff Regulations provides as under:-

“19. Debt-Equity Ratio: (1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. 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:

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt : equity ratio.”

24. The petitioner has considered the debt: equity ratio of 70:30, which is in line with the 2014 Tariff Regulations, hence same is considered for calculation of tariff. Accordingly, the details of the debt:equity considered for the purpose of tariff for 2014-19 tariff period is as follows:-

(₹ in lakh)

Funding	Capital cost as on COD	(%)	Additional capital expenditure during 2014-19	(%)	Total Cost as on 31.3.2019	(%)
Debt	6156.17	70.00	582.74	70.00	6738.91	70.00



Equity	2638.36	30.00	249.75	30.00	2888.11	30.00
Total	8794.53	100.00	832.49	100.00	9627.02	100.00

Return on Equity (“ROE”)

25. Clause (1) and (2) of Regulations 24 and Clause (2) of Regulation 25 of the 2014 Tariff Regulations specify as under:-

“24. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system....”

“25. Tax on Return on Equity:

..(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where “t” is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.”

26. It further provides that in case the generating company or transmission licensee paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of ROE. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during the 2013-14 has been considered for the purpose of ROE, which shall be trued up with actual tax rate in accordance with Clause (3) of Regulation 25 of the 2014 Tariff Regulations. The ROE allowed is as follows:-

(₹ in lakh)

Return on Equity	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	2638.36	2888.11	2888.11	2888.11	2888.11
Additions	249.75	0.00	0.00	0.00	0.00
Closing Equity	2888.11	2888.11	2888.11	2888.11	2888.11



Return on Equity	2014-15	2015-16	2016-17	2017-18	2018-19
Average Equity	2763.23	2888.11	2888.11	2888.11	2888.11
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity	541.88	566.37	566.37	566.37	566.37

Interest on Loan (“IoL”)

27. Clause 5 and 6 of Regulation 26 of 2014 Tariff Regulations provides that:-

“(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

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.”

28. The weighted average rate of IoL has been considered on the basis of rate prevailing as on COD. The petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2014-19 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up or next revision of tariff. By considering above, the IoL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of weighted average rate of interest for 2014-19 tariff period are placed at Annexure-1, IoL allowed is as follows:-

(₹ in lakh)

Interest on Loan	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	6156.17	6738.91	6738.91	6738.91	6738.91
Cumulative Repayment upto Previous Year	0.00	486.33	994.64	1502.94	2011.25
Net Loan-Opening	6156.17	6252.59	5744.28	5235.97	4727.67

Additions	582.74	0.00	0.00	0.00	0.00
Repayment during the year	486.33	508.31	508.31	508.31	508.31
Net Loan-Closing	6252.59	5744.28	5235.97	4727.67	4219.36
Average Loan	6204.38	5998.43	5490.13	4981.82	4473.51
Weighted Average Rate of Interest on Loan (%)	9.1936	9.2040	9.2083	9.2069	9.2073
Interest on Loan	570.40	552.10	505.55	458.67	411.89

Depreciation

29. Clause (2), (5) and (6) of Regulation 27 of 2014 Tariff Regulations provide as follows:-

"27. Depreciation:

...(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. 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

...

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-II 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 the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets."

30. Clause (67) of Regulation 3 of the 2014 Tariff Regulations defines useful life as follows:-

"(67) '**Useful life**' in relation to a unit of a generating station and transmission system from the COD shall mean the following, namely:

- (a) Coal/Lignite based thermal generating station 25 years
- (b) Gas/Liquid fuel based thermal generating station 25 years
- (c) AC and DC sub-station 25 years
- (d) Gas Insulated Substation (GIS) 25 years
- (d) Hydro generating station including pumped Storage hydro generating stations
35 years
- (e) Transmission line (including HVAC & HVDC) 35 years
- (f) Communication system 15 years"

31. The petitioner has claimed depreciation considering capital expenditure of ₹8794.53 lakh as on COD with additional capitalization of ₹832.49 lakh for the 2014-19 tariff period.

32. The depreciation has been worked out considering the admitted capital expenditure as on COD. The depreciation allowed for the instant transmission asset are as follows:-

(₹ in lakh)

Depreciation	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	8794.53	9627.02	9627.02	9627.02	9627.02
Additional Capitalization	832.49	0.00	0.00	0.00	0.00
Closing Gross Block	9627.02	9627.02	9627.02	9627.02	9627.02
Average Gross Block	9210.78	9627.02	9627.02	9627.02	9627.02
Freehold Land (Av. Cost)	0.00	0.00	0.00	0.00	0.00
Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Elapsed life	0	1	2	3	4
Balance Useful life of the asset	35	34	33	32	31
Remaining Depreciable Value	8289.70	8177.99	7669.68	7161.38	6653.07
Depreciation during the year	486.33	508.31	508.31	508.31	508.31
Cumulative depreciation	486.33	994.64	1502.94	2011.25	2519.56

Operation & Maintenance Expenses (“O&M Expenses”)

33. The petitioner has claimed O&M Expenses as specified in sub-clause (a) of clause (3) of Regulation 29 of the 2014 Tariff Regulations. The details of O&M Expenses allowed are given hereunder:-

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Line: D/C (Twin Conductor):					
Line Length (km)	18.700	18.700	18.700	18.700	18.700
Norms (₹ lakh/km)	0.707	0.731	0.755	0.780	0.806
Total O&M Expenses (₹ lakh)	13.22	13.67	14.12	14.59	15.07

34. The petitioner has submitted that norms for O&M Expenses for the tariff period 2014-19 have been arrived on the basis of normalized actual O&M

Expenses during the period 2008-13. The petitioner has further submitted that the wage revision of the employees of the petitioner is due during the 2014-19 tariff period and actual impact of wage hike, which will be effective at a future date, has not been factored in fixation of the normative O&M rate specified for the tariff period 2014-19. The petitioner has prayed to be allowed to approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase.

35. The O&M Expenses have been worked out as per the norms of O&M Expenses specified in the 2014 Tariff Regulations. As regards impact of wage revision, any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.

Interest on Working Capital

36. Clause 1 (c) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specifies as follows:

“28. Interest on Working Capital

- (c).(i) Receivables equivalent to two months of fixed cost;
(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and
(iii) Operation and maintenance expenses for one month”

“(5) ‘Bank Rate’ means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;”

37. The petitioner has considered the rate of interest on working capital to be 13.50%.

38. The interest on working capital is worked out in accordance with Regulation 28 of the 2014 Tariff Regulations. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points). The components of the working capital and interest thereon have been worked as follows:-

(₹ in lakh)

Interest on Working Capital	2014-15	2015-16	2016-17	2017-18	2018-19
O & M expenses	1.10	1.14	1.18	1.22	1.26
Maintenance Spares	1.98	2.05	2.12	2.19	2.26
Receivables	274.89	279.77	271.92	264.01	256.11
Total	277.98	282.96	275.21	267.41	259.63
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	37.53	38.20	37.15	36.10	35.05

39. The transmission charges allowed for the instant transmission assets for the 2014-19 tariff period are summarised below:-

(₹ in lakh)

Asset 2					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	8794.53	9627.02	9627.02	9627.02	9627.02
Additional Capitalisation	832.49	0.00	0.00	0.00	0.00
Closing Gross Block	9627.02	9627.02	9627.02	9627.02	9627.02
Average Gross Block	9210.78	9627.02	9627.02	9627.02	9627.02
Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Depreciable Value	8289.70	9038.94	8664.32	8664.32	8664.32
Balance useful life of the asset	35	34	33	32	31
Elapsed life	0	1	2	3	4
Remaining Depreciable Value	8289.70	8177.99	7669.68	7161.38	6653.07
Depreciation during the year	486.33	508.31	508.31	508.31	508.31
Cumulative depreciation (incl. of AAD)	486.33	994.64	1502.94	2011.25	2519.56
Interest on Loan					
Gross Normative Loan	6156.17	6738.91	6738.91	6738.91	6738.91
Cumulative Repayments upto Previous Year	0.00	486.33	994.64	1502.94	2011.25
Net Loan-Opening	6156.17	6252.59	5744.28	5235.97	4727.67
Additions	582.74	0.00	0.00	0.00	0.00
Repayment during the year	486.33	508.31	508.31	508.31	508.31
Net Loan-Closing	6252.59	5744.28	5235.97	4727.67	4219.36
Average Loan	6204.38	5998.43	5490.13	4981.82	4473.51



Asset 2					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Weighted Average Rate of Interest on Loan (%)	9.1936	9.2040	9.2083	9.2069	9.2073
Interest on Loan	570.40	552.10	505.55	458.67	411.89
Return on Equity					
Opening Equity	2638.36	2888.11	2888.11	2888.11	2888.11
Additions	249.75	0.00	0.00	0.00	0.00
Closing Equity	2888.11	2888.11	2888.11	2888.11	2888.11
Average Equity	2763.23	2888.11	2888.11	2888.11	2888.11
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity	541.88	566.37	566.37	566.37	566.37
Interest on Working Capital					
O & M Expenses	1.10	1.14	1.18	1.22	1.26
Maintenance Spares	1.98	2.05	2.12	2.19	2.26
Receivables	274.89	279.77	271.92	264.01	256.11
Total Working Capital	277.98	282.96	275.21	267.41	259.63
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	37.53	38.20	37.15	36.10	35.05
Annual Transmission Charges					
Depreciation	486.33	508.31	508.31	508.31	508.31
Interest on Loan	570.40	552.10	505.55	458.67	411.89
Return on Equity	541.88	566.37	566.37	566.37	566.37
Interest on Working Capital	37.53	38.20	37.15	36.10	35.05
O & M Expenses	13.22	13.67	14.12	14.59	15.07
Total	1649.36	1678.64	1631.50	1584.03	1536.69

Filing Fee and the Publication Expenses

40. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 52 (1) of the 2014 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

41. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 52 (2) (b) of the 2014 Tariff Regulations for 2014-19 tariff period. The petitioner shall also be entitled for recovery of RLDC fee & charges in accordance with Regulations 52 (2) (a) of the 2014 Tariff Regulations for 2014-19 tariff period.

Service Tax

42. The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future. We are of the view that the petitioner's prayer is premature.

Sharing of Transmission Charges

43. 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 as provided in Regulation 43 of the 2014 Tariff Regulations.

44. As stated in Para No. 5 of this order the AFC allowed under Regulation 7(7) of 2014 Tariff Regulation for Asset 1 (400/220 kV New GIS Sub-station at Navi

Mumbai along with LILO of Lonikhand-Kalwa Transmission Line) vide order dated 24.12.2014 is withdrawn and POSOCO is directed to exclude the same from computation of the POC charges. A copy of this order shall be issued to the POSOCO for information and compliance.

45. This order disposes of Petition No. 412/TT/2014.

Sd/-
(Dr. M.K. Iyer)
Member

Sd/-
(A.S. Bakshi)
Member

ASSET 2 - DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2014-19

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXVIII-Loan 1-	9.33	1190.00	0.00	1190.00
BOND XXIX-Loan 2-	9.20	601.00	0.00	601.00
BOND XXX-Loan 3-	8.80	1539.00	0.00	1539.00
BOND XXXI-Loan 4-	8.90	50.00	0.00	50.00
BOND XXXIII-Loan 5-	8.64	296.23	0.00	296.23
BOND-XXXIV-Loan 6-	8.84	113.17	0.00	113.17
SBI (21.03.2012)-Loan 7-	10.25	800.00	0.00	800.00
BOND XL-Loan 8-	9.30	550.00	0.00	550.00
BOND -XLI-Loan 9-	8.85	200.00	0.00	200.00
BOND - XLII-Loan 10-	8.80	100.00	0.00	100.00
BOND - XLIII-Loan 11-	7.93	300.00	0.00	300.00
BOND -XLV-Loan 12-	9.65	416.77	0.00	416.77
Total		6156.17	0.00	6156.17

ASSET 2 - WEIGHTED AVERAGE RATE OF INTEREST ON LOAN DURING 2014-19 TARIFF PERIOD

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	6156.17	6156.17	6156.17	6156.17	6156.17
Cumulative Repayments of Loans upto Previous Year	430.92	746.71	1062.50	1513.52	2024.27
Net Loans Opening	5725.25	5409.46	5093.67	4642.65	4131.90
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	315.79	315.79	451.02	510.75	510.75
Net Closing Loan	5409.46	5093.67	4642.65	4131.90	3621.15
Average Net Loan	5567.36	5251.57	4868.16	4387.28	3876.53
Rate of Interest on Loan (%)	9.1936	9.2040	9.2083	9.2069	9.2073
Interest on Loan	511.84	483.36	448.27	403.93	356.92