

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO. 97/TT/2016

Coram:
Shri A.S. Bakshi, Member
Dr. M. K. Iyer, Member

Date of Hearing : 10.08.2016
Date of Order : 22.08.2016

In the Matter of:

Truing up of transmission tariff of 2009-14 tariff block under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 and determination of transmission tariff for 2014-19 tariff block under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2014 for 2 Nos. Line bays along with 2 Nos. 50 MVAR Line Reactors (charged as bus reactor) (Interim contingency till readiness of 400 kV D/C MB TPS (Annupur)- Jabalpur Pool Station TL covered in order dated 24.11.2015 in Petition No. 38/TT/2014 under Transmission System for connectivity of MB Power (M.P.) Ltd. in Western Region

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 Limited,
Shakti Bhawan, Rampur, Jabalpur-482 008
2. MB Power (Madhya Pradesh) Limited,
Corporate Office, 235, Okhla Industrial Estate,
Phase-III, New Delhi-110 020
3. Maharashtra State Electricity Distribution Company Limited,
Prakashgad, 4th floor,
Andheri (East), Mumbai-400052
4. Gujarat Urja Vikas Nigam Limited,
Sardar Patel Vidyut Bhawan,
Race Course Road,
Vadodara-390007



5. Electricity Department,
Government of Goa,
Vidyut Bhawan, Panaji,
Near Mandvi Hotel,
Goa-403001
6. Electricity Department,
Administration of Daman and Diu,
Daman-396210 7
7. Electricity Department,
Administration of Dadra Nagar Haveli,
U.T., Silvassa-396230
8. Chhattisgarh State Electricity Board,
P.O. Sunder Nagar, Dangania, Raipur
Chhattisgarh-492013
9. Madhya Pradesh Audyogik Kendra
Vikas Nigam (Indore) Limited,
3/54, Press Complex, Agra-Bombay Road
Indore-452008

....Respondent(s)

The following were present:

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

For Respondents: None

ORDER

The petition has been preferred by Power Grid Corporation of India Limited (hereinafter referred to as “the petitioner”), a transmission licensee, for revision of tariff under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 Tariff Regulations”) based on truing up of capital expenditure for the period from date of commercial operation (COD) to 31.3.2014 and 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 1.4.2014 to 31.3.2019 in respect of 2 Nos. Line bays along with 2 Nos. 50 MVAR Line Reactors (charged as bus reactor) (Interim contingency till readiness of 400 kV D/C MB TPS (Annupur)- Jabalpur Pool Station TL (hereinafter referred to as “asset”).

2. The respondents are distribution licensees, who are procuring transmission service from the petitioner, mainly beneficiaries of Western Region.

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

a) The investment approval of the project was accorded by the Board of Directors of PGCIL vide Memorandum No. C/CP/MB Power dated 5.8.2011 at an estimated cost of ₹42551.00 lakh, including IDC of ₹1759.00 lakh, based on 1st Quarter, 2011 price level. The Revised Cost Estimate (RCE) has been approved by the Board of Directors of the petitioner’s Company vide Memorandum No. C/CP/RCE-MB Power dated 9.12.2014 at cost of ₹44764.00 lakh, including IDC of ₹3840.00 lakh, based on April, 2014 price level. The petitioner, vide affidavit dated 20.6.2016, has submitted the apportioned approved cost for the instant asset as ₹2404.39 lakh. The scope of work is as under:-

Transmission Lines:

- i. MB TPS (Anuppur)-Jabalpur Pooling Station 400 kV D/C (Triple Snowbird) line
- ii. Jabalpur Pooling Station-Jabalpur (existing) sub-station 400 kV D/C (Triple Snowbird) line

Sub-stations:



- i. Extension of 765/400 kV Jabalpur Pooling Station
 - ii. Extension of 400 kV Jabalpur Sub-station (for interim arrangement)
- b) The instant assets were scheduled to be commissioned on 1.10.2013 and they were commissioned on 1.1.2014, i.e. after a time over-run of three months. The time over-run of three months was condoned vide order dated 24.11.2015 in Petition No. 38/TT/2014.
- c) The transmission tariff allowed for the instant asset vide order dated 24.11.2015 in Petition No. 38/TT/2014 is as follows:-

(₹ in lakh)

Particulars	2013-14 (Pro-rata)
Depreciation	22.53
Interest on Loan	29.25
Return on Equity	25.11
Interest on Working Capital	3.50
O & M Expenses	32.73
Total	113.12

- d) The revised transmission tariff claimed by the petitioner is as follows:-

(₹ in lakh)

Particulars	2013-14 (Pro-rata)
Depreciation	23.16
Interest on Loan	25.35
Return on Equity	25.80
Interest on Working Capital	3.44
O & M Expenses	32.73
Total	110.48

4. As per Regulation 6 of the 2009 Tariff Regulations, 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. Further, as per Regulation 15 of the 2009 Tariff Regulations, the petitioner is required to adjust the yearly impact of MAT rate in the truing up petition for 2009-14 tariff period and the change in interest rate on loan. The petitioner has filed the this petition for revision of tariff for the tariff period 2009-14 in accordance with Regulation 6



of the 2009 Tariff Regulations based on actual capital expenditure, actual MAT rate and interest rate of loan.

5. The petitioner has served the petition on 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. None of the respondents have filed reply to the petition. The hearing in this matter was held on 10.8.2016.

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

TRUING UP OF ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

7. Clause (3) of the Regulation 6 of the 2009 Tariff Regulations provides as under:-

“(3) The generating company or the transmission licensee, as the case may be, shall submit for the purpose of truing up, details of capital expenditure and additional capital expenditure incurred for the period from 1.4.2009 to 31.3.2014, duly audited and certified by the auditors”.

8. The petitioner has submitted the information as required under the 2009 Tariff Regulations for truing up of annual fixed charges for 2009-14 tariff period. The tariff for 2009-14 tariff period has been revised on account of true up of expenditure as discussed in the subsequent paragraphs.

Capital Cost

9. The capital cost as on COD claimed by the petitioner for the purpose of tariff determination is as follows:-

(₹ in lakh)				
Apportioned approved cost (RCE)	Particulars	Capital cost approved as on COD	Addition capital expenditure	Total capital cost as on 31.3.2014
			2013-14	
2404.39	Approved in Petition No. 38/TT/2014	1689.92	34.45	1724.37
	Actual (Claimed)	1736.73	132.53	1869.26



10. Clause (1) of Regulation 7 of the 2009 Tariff Regulations provides that:-

“(1) Capital cost for a project shall include:

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

(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.”

11. The petitioner has submitted the Auditor’s Certificate dated 9.10.2015 in support of the claim of the capital expenditure incurred for the transmission assets. The capital cost of the transmission assets has been worked out in the subsequent paragraphs taking into consideration the IEDC, IDC and initial spares.

IDC and IEDC

12. The petitioner has claimed IDC of ₹82.53 lakh and IEDC of ₹6.22 lakh. The petitioner, in its petition, has submitted that IDC and IEDC discharged on cash basis are as follows:-

(₹ in lakh)

IDC discharged upto COD	IDC discharged during 2013-14	IDC discharged during 2014-15
28.50	10.50	43.52

Treatment of Initial Spares

The petitioner has claimed initial spares of ₹51.43 towards sub-station.



13. Regulation 8 of the 2009 Tariff Regulations provide for ceiling norms for capitalization of initial spares in respect of sub-station at 2.50%. The “cut-off” date of the subject assets falls beyond 31.3.2014. However, the petitioner has claimed additional capital expenditure during 2014-15 and 2015-16. Hence, admissible initial spares have been worked out by considering additional capital expenditure upto “cut-off” date of 31.3.2017. The initial spares claimed by the petitioner for the instant asset are within ceiling limits specified under the 2009 Tariff Regulations.

14. Accordingly, the capital cost of the instant asset as on COD considered for truing up after adjustment of IDC, IEDC and initial spares is as follows:-

(₹ in lakh)			
Capital cost as on COD (As per Auditor’s Certificate dated 9.10.2015)	IDC and IEDC after COD	Excess initial spares	Capital cost as on COD considered for tariff determination
(1)	(2)	(3)	(4=1-2-3)
1736.73	54.02	0.00	1682.71

Additional Capital Expenditure

15. Regulation 6(1) of the 2009 Regulations provides that:-

“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”

16. The petitioner has submitted actual additional capital expenditure during 2009-14 towards balance and retention payments for the works completed before the “cut-off” date. The petitioner has claimed the admissibility of additional capital expenditure before the “cut-off” date under Regulation 9(1)(i) of 2009 Tariff Regulations.

17. The additional capital expenditure claimed by the petitioner is towards actual balance and retention payments and the same has been certified by the Auditor vide certificates dated 9.10.2015. Further, the total capital expenditure during 2009-14 is within the total approved capital expenditure and the total cost as on 31.3.2014 is within the RCE submitted by the petitioner. Thus, the same is considered for the purpose of revision of tariff in accordance with Regulation 9(1)(i) and Regulation 6 of the 2009 Tariff Regulations.

18. The capital expenditure as on COD and additional capital expenditure from COD to 31.3.2014 allowed is as depicted below:-

(₹ in lakh)

Particulars	Capital cost as on COD	Addition capital expenditure	Total capital cost as on 31.3.2014
		2013-14	
Approved in Petition No. 38/TT/2014	1689.92	34.45	1724.37
Actual (Claimed)	1736.73	132.53	1869.26
Allowed in this Order	1682.71	143.03	1825.74

Debt: Equity

19. The debt:equity ratio of 70:30 for additional capital expenditure as claimed by the petitioner is in accordance with the Regulation 12 (3) of the 2009 Tariff Regulations and hence, same has been considered towards financing of the additional capital expenditure.

20. 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:

(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.”

21. In respect of the additional capitalization, debt: equity ratio of 70:30 has been considered in line with Regulation 12 of the 2009 Tariff Regulations. The details of the debt: equity considered for the purpose of tariff for 2009-14 tariff period is as follows:-

(₹ in lakh)

Funding	Capital cost as on COD	(%)	Additional capital expenditure during 2009-14	(%)	Total Cost as on 31.3.2014	(%)
Debt	1177.90	70.00	100.12	70.00	1278.02	70.00
Equity	504.81	30.00	42.91	30.00	547.72	30.00
Total	1682.71	100.00	143.03	100.00	1825.74	100.00

Return on Equity (“ROE”)

22. Clause (3), (4) and (5) of the Regulation 15 of the 2009 Tariff Regulations provide that :-

“(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:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

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 maybe, shall recover the shortfall or refund the excess Annual Fixed Charge on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission:



Provided further that Annual Fixed Charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations.”

23. The variation in the tax rate during the 2009-14 tariff period applicable to the petitioner as per the Finance Act of the relevant year for the purpose of grossing up of return on equity (ROE) has been furnished as follows:-

Year	MAT Rate claimed in the current petition	Grossed up ROE (Base Rate/(1-t)) claimed in the current petition
2013-14	20.961%	19.610%

24. The ROE as trued up and allowed is as follows:-

Particulars	(₹ in lakh)	
	2013-14 (pro-rata)	
Approved in Petition No. 38/TT/2014	25.11	
Claimed by the petitioner	25.80	
Allowed after true up in this order	25.80	

Interest on Loan (“IoL”)

25. The petitioner has submitted the weighted average rate of IoL, based on its actual loan portfolio and rate of interest. Accordingly, the IoL has been calculated based on actual interest rate submitted by the petitioner, in accordance with the Regulation 16 of the 2009 Tariff Regulations. The details of weighted average rate of interest is placed in Annexure-1. The IoL worked out is as follows:-

Particulars	(₹ in lakh)	
	2013-14 (pro-rata)	
Approved in Petition No. 38/TT/2014	29.25	
Claimed by the petitioner	25.35	
Allowed after true up in this order	25.35	



Depreciation

26. The depreciation has been worked out as per the methodology provided in the Regulation 17 of the 2009 Tariff Regulations. The depreciation allowed is as follows:-

(₹ in lakh)	
Particulars	2013-14 (Pro-rata)
Approved in Petition No. 38/TT/2014	22.53
Claimed by the petitioner	23.16
Allowed after true up in this order	23.16

Operation & Maintenance Expenses (O&M Expenses)

27. Clause (g) of Regulation 19 of the 2009 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The normative O&M Expenses are not required to be trued up. Accordingly, the total allowable O&M Expenses for the instant assets have been worked out based on norms of O&M Expenses and the details are as follows:-

(₹ in lakh)	
Particulars	2013-14 (pro-rata)
Approved in Petition No. 38/TT/2014	32.73
Claimed by the petitioner	32.73
Allowed after true up in this order	32.73

Interest on Working Capital (IWC)

28. The IWC has been worked out as per the methodology provided in the Regulation 18 of the 2009 Tariff Regulations and allowed as under:-

(₹ in lakh)	
Particulars	2013-14 (pro-rata)
Approved in Petition No. 38/TT/2014	3.50
Claimed by the petitioner	3.44
Allowed after true up in this order	3.44



APPROVED ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

29. The detailed computation of the various components of the trued up annual fixed charges for the instant transmission assets for the tariff period 2009-14 is summarised below:-

(₹ in lakh)

Particulars	2013-14 (pro-rata)
Depreciation	
Opening Gross Block	1682.71
Additional Capitalisation	143.03
Closing Gross Block	1825.74
Average Gross Block	1754.23
Rate of Depreciation (%)	5.28
Depreciable Value	1578.80
Balance useful life of the asset	25.00
Elapsed life	0.00
Remaining Depreciable Value	1578.80
Depreciation during the year	23.16
Cumulative depreciation	23.16
Interest on Loan	
Gross Normative Loan	1177.90
Cumulative Repayments upto Previous Year	0.00
Net Loan-Opening	1177.90
Additions	100.12
Repayment during the year	23.16
Net Loan-Closing	1254.86
Average Loan	1216.38
Weighted Average Rate of Interest on Loan (%)	8.3366
Interest on Loan	25.35
Return on Equity	
Opening Equity	504.81
Additions	42.91
Closing Equity	547.72
Average Equity	526.27
Return on Equity (Base Rate) (%)	15.500
MAT Rate for respective year (%)	20.961
Rate of Return on Equity (%)	19.610



Particulars	2013-14 (pro-rata)
Return on Equity	25.80
Interest on Working Capital	
O & M Expenses	10.91
Maintenance Spares	19.64
Receivables	73.65
Total Working Capital	104.20
Rate of Interest (%)	13.20
Interest of working capital	3.44
Annual Transmission Charges	
Depreciation	23.16
Interest on Loan	25.35
Return on Equity	25.80
Interest on Working Capital	3.44
O & M Expenses	32.73
Total	110.48

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

30. The tariff claimed by the petitioner for 2014-19 tariff period is as follows:-

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	102.69	111.40	113.80	113.80	113.80
Interest on Loan	107.67	108.17	101.35	91.81	82.35
Return on Equity	114.42	124.72	127.41	127.41	127.41
Interest on Working Capital	14.14	14.81	15.00	15.01	15.04
O & M Expenses	120.60	124.60	128.74	133.02	137.42
Total	459.52	483.70	486.30	481.05	476.02

Capital Cost

31. Clause (3) and (6) of Regulation 9 of 2014 Tariff Regulation provide as follows:-

- “(3) The Capital cost of an existing project shall include the following:
(a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;
(b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and
(c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15.”



“(6) The following shall be excluded or removed from the capital cost of the existing and new project:
(a) The assets forming part of the project, but not in use; (b) Decapitalisation of Asset;”

32. The capital cost was restricted to ₹1724.37 lakh as on 31.3.2014 as per approved apportioned cost given in investment approval. The petitioner has submitted RCE according to which apportioned approved cost has been increased to ₹2404.39 lakh. The petitioner has claimed capital cost of ₹1869.26 lakh as on 31.3.2014 and the same has been considered as opening capital cost as on 1.4.2014 for determination of tariff in accordance with Regulation 9 of the 2014 Tariff Regulations. The petitioner has claimed total estimated capital cost ₹2155.33 lakh as on 31.3.2019 which is within the apportioned approved cost as per RCE.

Additional Capital Expenditure

33. 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 13;
(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.”

34. Clause 13 of Regulation 3 of the 2014 Tariff Regulations defines “cut-off” as follows:-

“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.”



35. The “cut-off” date for the assets works out to be 31.3.2017. The petitioner has claimed additional capital expenditure for 2014-19 as per Regulation 14(1)(i) of the 2014 Tariff Regulation as shown below:-

(₹ in lakh)

Particulars	Capital cost as on 1.4.2014	Addition capital expenditure 2014-19			Total capital cost as on 31.3.2019
		2014-15	2015-16	Total	
Claimed	1869.26	194.96	91.11	286.07	2155.33
Approved in this order	1825.74	238.48*	91.11	329.59	2155.33

*includes undischarged liability of ₹43.52 lakh on cash basis for 2014-15

36. The petitioner’s claim of additional capital expenditure on account of undischarged liabilities falls within the meaning of clause 14(1)(i) of the 2014 Tariff Regulations and hence, the same has been consider to work out the tariff. The total capital cost as on 31.3.2019 is within the approved apportioned cost of ₹2404.39 lakh. Thus, the same is allowed for the purpose of revision of tariff.

Debt: Equity

37. Clause (1) and (3) of Regulation 19 of the 2014 Tariff Regulations provide 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:”

“(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2014, debt equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered.”

“(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as maybe 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.”



38. 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 1.4.2014	(%)	Additional capital expenditure during 2014-19	(%)	Total Cost as on 31.3.2019	(%)
Debt	1278.02	70.00	230.71	70.00	1508.73	70.00
Equity	547.72	30.00	98.88	30.00	646.60	30.00
Total	1825.74	100.00	329.59	100.00	2155.33	100.00

Return on Equity (ROE)

39. 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.”

40. 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 has been worked out and allowed as follows:-



(₹ in lakh)

Return on Equity	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	547.72	619.27	646.60	646.60	646.60
Additions	71.54	27.33	0.00	0.00	0.00
Closing Equity	619.27	646.60	646.60	646.60	646.60
Average Equity	583.49	632.93	646.60	646.60	646.60
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.342
Rate of Return on Equity (%)	19.610	19.705	19.705	19.705	19.705
Return on Equity	114.43	124.72	127.42	127.42	127.42

Interest on Loan (“IoL”)

41. Clause 5 and Clause 6 of Regulation 26 of the 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.”

42. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2014. 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 in Annexure-2 and the IoL has been worked out and allowed as follows:-



(₹ in lakh)

Interest on Loan	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	1278.02	1444.95	1508.73	1508.73	1508.73
Cumulative Repayment upto Previous Year	23.16	125.85	237.25	351.05	464.85
Net Loan-Opening	1254.86	1319.10	1271.48	1157.68	1043.88
Additions	166.94	63.78	0.00	0.00	0.00
Repayment during the year	102.69	111.40	113.80	113.80	113.80
Net Loan-Closing	1319.10	1271.48	1157.68	1043.88	930.08
Average Loan	1286.98	1295.29	1214.58	1100.78	986.98
Weighted Average Rate of Interest on Loan (%)	8.3664	8.3506	8.3446	8.3407	8.3433
Interest on Loan	107.67	108.17	101.35	91.81	82.35

Depreciation

43. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations provide that:-

"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."

44. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2014 and accumulated depreciation up to 31.3.2014. The detailed calculations for depreciation for the transmission asset are worked out and allowed as follows:-



(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	1825.74	2064.22	2155.33	2155.33	2155.33
Additional Capitalisation	238.48	91.11	0.00	0.00	0.00
Closing Gross Block	2064.22	2155.33	2155.33	2155.33	2155.33
Average Gross Block	1944.98	2109.78	2155.33	2155.33	2155.33
Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Depreciable Value	1750.48	1898.80	1939.80	1939.80	1939.80
Balance useful life of the asset	24	23	22	21	20
Elapsed life	1	2	3	4	5
Remaining Depreciable Value	1727.33	1772.95	1702.55	1588.75	1474.95
Depreciation during the year	102.69	111.40	113.80	113.80	113.80
Cumulative depreciation	125.85	237.25	351.05	464.85	578.65

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

45. Clause 3(a) of Regulation 29 of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The total allowable O&M Expenses for the instant asset have been worked out and allowed are as follows:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
400 kV Bays:					
No. of Bays	02	02	02	02	02
Norms(₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
Total O&M Expenses	120.60	124.60	128.74	133.02	137.42

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

47. We have considered the submissions of the petitioner. We would like to clarify that any application filed by the petitioner for revision of O&M Expenses on account of wage

revision will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations. The O&M Expenses are allowed for the instant transmission assets as per the prevailing norms.

Interest on Working Capital (“IWC”)

48. 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;”

49. The petitioner has submitted that it has computed interest on working capital for the tariff block 2014-19 considering the SBI Base Rate plus 350 basis points as on 1.4.2014. The rate of interest on working capital considered is 13.50%.

50. 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	10.05	10.38	10.73	11.09	11.45
Maintenance Spares	18.09	18.69	19.31	19.95	20.61
Receivables	76.59	80.62	81.05	80.18	79.34
Total	104.73	109.69	111.09	111.22	111.40
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	14.14	14.81	15.00	15.01	15.04



ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

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

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	1825.74	2064.22	2155.33	2155.33	2155.33
Additional Capitalisation	238.48	91.11	0.00	0.00	0.00
Closing Gross Block	2064.22	2155.33	2155.33	2155.33	2155.33
Average Gross Block	1944.98	2109.78	2155.33	2155.33	2155.33
Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Depreciable Value	1750.48	1898.80	1939.80	1939.80	1939.80
Balance useful life of the asset	24	23	22	21	20
Elapsed life	1	2	3	4	5
Remaining Depreciable Value	1727.33	1772.95	1702.55	1588.75	1474.95
Depreciation during the year	102.69	111.40	113.80	113.80	113.80
Cumulative depreciation (incl. of AAD)	125.85	237.25	351.05	464.85	578.65
Interest on Loan					
Gross Normative Loan	1278.02	1444.95	1508.73	1508.73	1508.73
Cumulative Repayments upto Previous Year	23.16	125.85	237.25	351.05	464.85
Net Loan-Opening	1254.86	1319.10	1271.48	1157.68	1043.88
Additions	166.94	63.78	0.00	0.00	0.00
Repayment during the year	102.69	111.40	113.80	113.80	113.80
Net Loan-Closing	1319.10	1271.48	1157.68	1043.88	930.08
Average Loan	1286.98	1295.29	1214.58	1100.78	986.98
Weighted Average Rate of Interest on Loan (%)	8.3664	8.3506	8.3446	8.3407	8.3433
Interest on Loan	107.67	108.17	101.35	91.81	82.35
Return on Equity					
Opening Equity	547.72	619.27	646.60	646.60	646.60
Additions	71.54	27.33	0.00	0.00	0.00
Closing Equity	619.27	646.60	646.60	646.60	646.60



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Average Equity	583.49	632.93	646.60	646.60	646.60
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.342
Rate of Return on Equity (%)	19.610	19.705	19.705	19.705	19.705
Return on Equity	114.43	124.72	127.42	127.42	127.42
Interest on Working Capital					
O & M Expenses	10.05	10.38	10.73	11.09	11.45
Maintenance Spares	18.09	18.69	19.31	19.95	20.61
Receivables	76.59	80.62	81.05	80.18	79.34
Total Working Capital	104.73	109.69	111.09	111.22	111.40
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	14.14	14.81	15.00	15.01	15.04
Annual Transmission Charges					
Depreciation	102.69	111.40	113.80	113.80	113.80
Interest on Loan	107.67	108.17	101.35	91.81	82.35
Return on Equity	114.43	124.72	127.42	127.42	127.42
Interest on Working Capital	14.14	14.81	15.00	15.01	15.04
O & M Expenses	120.60	124.60	128.74	133.02	137.42
Total	459.53	483.69	486.31	481.06	476.02

Deferred Tax Liability

52. The petitioner has sought recovery of deferred tax liability before 1.4.2009 from the beneficiaries or long term consumers/ DICs as and when materialized. The deferred tax liability shall be dealt as per Regulations 49 of the 2014 Tariff Regulations, as amended. Accordingly, the petitioner is entitled to recover the deferred tax liability upto 31.3.2009 whenever the same gets materialized directly from the beneficiaries or long term transmission customers /DICs.



Filing Fee and the Publication Expenses

53. 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

54. 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

55. 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

56. 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.

57. This order disposes of Petition No. 97/TT/2016.

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

Sd/-
(A.S. Bakshi)
Member



ANNEXURE-I**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO 2009-14**

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND-XXXVII-Loan-4-	9.25	35.00	0.00	35.00
BOND-XXXVIII-Loan-1-	9.25	33.00	0.00	33.00
BOND XL-Loan-5-	9.30	85.00	0.00	85.00
BOND XLI-Loan-3-	8.85	125.00	0.00	125.00
BOND XLII-Loan-2-	8.80	113.00	0.00	113.00
Bond XLIII ADDCAP FOR 2013-14 Add Cap-II	7.93	0.00	7.35	7.35
BOND XLIII DOCO	7.93	786.89	0.00	786.89
BOND XLV ADD CAP FOR 2013-14 Add Cap - I	9.65	0.00	92.77	92.77
Total		1177.89	100.12	1278.01

DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO 2014-19

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXXVII - DOCO Loan 4	9.25	35.00	0.00	35.00
BOND XXXVIII Loan 1-	9.25	33.00	0.00	33.00
BOND XL Loan 5-	9.30	85.00	0.00	85.00
BOND XLI - Loan 3-	8.85	125.00	0.00	125.00
BOND XLII Loan 2-	8.80	113.00	0.00	113.00
BOND XLIII -ADDCAP FOR 2013-14 Add Cap - II-	7.93	7.35	0.00	7.35
BOND XLIII ADDCAP FOR 2014-15	7.93	0.00	30.47	30.47
BOND XLIII DOCO	7.93	786.89	0.00	786.89
BOND - XLV - ADDCAP FOR 2013-14 Add Cap-I	9.65	92.77	0.00	92.77
BOND XLIX ADDCAP FOR 2014-15 Add Cap-II	8.15	0.00	136.47	136.47
Total		1278.01	166.94	1444.95



CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN FOR TARIFF PERIOD 2009-14

(₹ in lakh)

Summary	2013-14
Gross Opening Loan	1177.89
Cumulative Repayments of Loans upto Previous Year	0.00
Net Loans Opening	1177.89
Add: Draw(s) during the Year	100.12
Less: Repayments of Loan during the year	0.00
Net Closing Loan	1278.01
Average Net Loan	1227.95
Rate of Interest on Loan (%)	8.3366%
Interest on Loan	102.37

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN FOR TARIFF PERIOD 2014-19

Summary	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	1278.01	1444.95	1444.95	1444.95	1444.95
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	2.92	23.34	120.21
Net Loans Opening	1278.01	1444.95	1442.03	1421.61	1324.74
Add: Draw(s) during the Year	166.94	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	0.00	2.92	20.42	96.87	96.87
Net Closing Loan	1444.95	1442.03	1421.61	1324.74	1227.87
Average Net Loan	1361.48	1443.49	1431.82	1373.18	1276.31
Rate of Interest on Loan (%)	8.3664%	8.3506%	8.3446%	8.3407%	8.3433%
Interest on Loan	113.91	120.54	119.48	114.53	106.49

