

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO. 124/TT/2016

Coram:

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

**Date of Hearing: 5.10.2016
Date of Order : 26.10.2016**

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 of 315 MVA, 400/220 kV ICT at Bhiwadi in Northern Region (under provision of spare ICT's and reactors in Eastern, Northern, Southern and Western Regions) under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

And in the Matter of:

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

.....Petitioner

Versus

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd.,
Vidyut Bhawan, Vidyut Marg,
Jaipur - 302 005.
2. Ajmer Vidyut Vitran Nigam Ltd.,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.
3. Jaipur Vidyut Vitran Nigam Ltd.,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.



4. Jodhpur Vidyut Vitran Nigam Ltd.,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur
5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla - 171 004.
6. Punjab State Electricity Board,
The Mall, Patiala - 147 001.
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector - 6
Panchkula (Haryana) - 134 109
8. Power Development Department,
Govt. of Jammu and Kashmir
Mini Secretariat, Jammu .
9. Uttar Pradesh Power Corporation Ltd.,
Shakti Bhawan, 14, Ashok Marg,
Lucknow - 226 001.
10. Delhi Transco Ltd.,
Shakti Sadan, Kotla Road,
New Delhi - 110 002
11. BSES Yamuna Power Ltd.,
Shakti Kiran Building, Karkardooma,
Delhi – 110 092.
12. BSES Rajdhani Power Ltd.,
BSES Bhawan, Nehru Place,
New Delhi.
13. North Delhi Power Ltd.,
Power Trading & Load Dispatch Group,
Cennet Building,
Adjacent to 66/11kV Pitampura - ,
Grid Building, Near PP Jewellers,
Pitampura, New Delhi - 110 034
14. Chandigarh Administration,
Sector - 9, Chandigarh
15. Uttarakhand Power Corporation Ltd.,
Urja Bhawan, Kanwali Road,
Dehradun



16. North Central Railway,
Allahabad

17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi - 110 002

.....Respondents

The following were present:

For Petitioner: Shri Rakesh Prasad, PGCIL
Shri M.M. Mondal, PGCIL
Shri S.S. Raju, PGCIL
Shri Jasbir Singh, PGCIL
Shri S.K. Venkatasan, PGCIL
Shri T. Vinodh Kumar, PGCIL

For respondents: Shri. S.K. Agarwal, Advocate, Rajasthan Discom
Shri. A.P. Sinha, Advocate, Rajasthan Discom
Shri. S.P. Das, Advocate, Rajasthan Discom

ORDER

This instant petition is filed by Power Grid Corporation of India Limited (hereinafter referred to as “the petitioner”) 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 from the date of commercial operation 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 for 315 MVA, 400/220 kV ICT at Bhiwadi in Northern Region (under provision of spare ICT's and reactors in Eastern, Northern, Southern and Western Regions) (hereinafter referred to as “the transmission assets”).



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

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

a) The Investment Approval (IA) for the project of Provision of Spare Transformers in Northern Region was accorded by the Board of Directors of the petitioner company vide letter No. C/CP/Spare ICTs & Reactors dated 4.8.2011 for ₹3843 lakh including IDC of ₹104 lakh, based on 1st Quarter, 2011 price level. The project was scheduled to be commissioned within 16 months from the date of IA i.e. by 3.12.2012 say 1.1.2013. The asset was commissioned on 1.2.2013. Thus there was time over-run of one month.

b) The annual transmission charges for 2009-14 tariff period for the instant transmission asset was determined vide order dated 15.10.2015 in Petition No. 98/TT/2013 based on admitted capital cost given as under:-

(₹in lakh)		
Capital cost approved as on COD as per order 98/TT/2013	IDC and IEDC disallowed	Excess initial spares disallowed
602.51* (612.97-10.46)	10.46	0.00

The IDC of ₹10.46 lakh was disallowed by the commission on account of non-availability of information pertaining of IDC discharged on cash basis. However the petitioner was directed to submit all relevant information at the time of truing-up.

c) The debt:equity ratio is 70:30 as on COD for all the assets. The estimated additional capital expenditure approved was towards balance and retention payments for determination of tariff for 2009-14 tariff period is as follows:



(₹in lakh)

Apportioned approved cost	Capital cost as on COD*	Allowed additional capital expenditure during 2009-14		Cost as on 31.3.2014
		2012-13	2013-14	
1311.04	602.51	215.28	195.24	1013.03

d) The annual fixed charges were determined vide order dated 15.10.2015 in Petition No. 98/TT/2013 based the above capital cost and estimated additional capital expenditure during 2009-14 and is given below:-

(₹in lakh)

Particulars		
	2012-13 (pro-rata)	2013-14
Depreciation	6.25	48.33
Interest on Loan	7.41	55.64
Return on Equity	6.88	53.85
Interest on Working Capital	0.47	3.63
O & M Expenses	0.00	0.00
Total	21.02	161.46

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 actual capital expenditure including additional capital expenditure incurred up to 31.3.2014, 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. In this context, the petitioner has filed the instant petition for revision of tariff for the tariff period 2009-14 in accordance with Regulation 6 of the 2009 Tariff Regulations.

5. The petitioner has served the petition on the respondents and notice of this application has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003 ("the Act"). No comments/objections have been received from the



public in response to the notice in newspaper. The hearing in this matter was held on 5.10.2016. Ajmer Vidyut Vitran Nigam Limited (AVVNL), Respondent No. 2, Jaipur Vidyut Vitran Nigam Limited (JVVNL), Respondent No. 3, and Jodhpur Vidyut Vitran Nigam Limited (JdVVNL) Respondent No. 4, (hereinafter collectively referred to as "Rajasthan Discoms") have filed their reply vide a common affidavit dated 4.10.2016, Rajasthan Discoms have raised issues regarding the Additional Capital Expenditure, MAT rate and GST. The petitioner has not filed the rejoinder for the reply. The issues raised by the Rajasthan Discoms are dealt in relevant paras of this order.

6. Having heard the representatives of the parties 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 trued up in the subsequent paragraphs.

Capital Cost

9. The petitioner has claimed actual capital cost of ₹612.98 lakh as on COD. The claim is supported by Auditor's Certificates dated 14.6.2016.

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 admissible capital cost of the transmission asset as on COD for the purpose of computation of tariff for 2009-14 tariff period is worked out in the subsequent paragraphs taking into consideration the time over-run, IEDC and IDC and initial spares claimed and allowed.

Time over-run and IDC

12. Due to absence of the details pertaining to IDC discharged on cash basis, the IDC corresponding to time over-run could not be ascertained for the time over-run of 1 month, not condoned in order dated 15.10.2015 in Petition No. 98/TT/2013. Accordingly, the Commission had disallowed the accrued IDC of ₹10.46 lakh and directed the petitioner to submit all relevant information at the time of truing-up. The petitioner vide affidavit dated 14.10.2015 has submitted the details of IDC discharged from SCOD to COD and COD to thereafter as given hereunder:-

(₹ in lakh)

Total IDC claimed	IDC discharged till SCOD i.e. 1.1.2013	IDC discharged from SCOD to COD (1.1.2013 to 1.2.2013)	IDC discharged during 2012-13
12.33	1.88	0.00	10.45



13. In the view of the time over-run of 1 month the IDC has been deducted from the capital cost on COD as mentioned in the table given hereunder:

(₹ in lakh)				
Accrual IDC claimed	No. of months (form IA to SCOD)	No. of months (form IA to COD)	Pro-rata IDC for 1 month	IDC disallowed as on COD due to time overrun
12.33	16	17	0.73	0.73

14. Accordingly the IDC allowed on cash basis is given hereunder:-

(₹in lakh)			
Total IDC claimed	IDC allowed till COD i.e. 1.1.2013	IDC allowed during 2012-13	Total IDC allowed
12.33	1.15 (1.88-0.73)	10.45	11.60

Initial Spares

15. The petitioner has claimed the actual initial spares pertaining to sub-station as stated in Auditor's Certificates dated 14.6.2016. The petitioner has claimed initial spares of ₹24.17 lakh . We have worked out the admissible initial spares by considering capital cost till cut-off date i.e., 31.3.2016 as per Auditor`s Certificate in accordance with the 2009 Tariff Regulations.

16. Regulation 8 of the 2009 Tariff Regulations provides for ceiling norms for capitalization of initial spares in respect of sub-station at 2.50%. Accordingly, the initial spares claimed by the petitioner are within the norms specified in the 2009 Tariff Regulations and hence allowed for the capitalization.

17. Accordingly, the capital cost of the instant assets as on COD considered for truing up of tariff of 2009-14 is as follows:-



				(₹in lakh)
Capital cost on COD	Less: IDC deducted on account of time over-run	Less: IDC discharged after COD	Less: Excess initial spares	Capital cost as on COD considered for tariff determination
612.98	0.73	10.45	0.00	601.80

Additional Capital Expenditure

18. 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”

19. Regulation 9(1)(i) of the 2009 Regulations provides that:-

“(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. 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.

21. 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 14.6.2016. Further, the total capital expenditure during 2009-14 is within the limits of the total approved capital expenditure and the total cost as on 31.3.2014 is within the approved cost. Thus, the same is allowed for the purpose of



revision of tariff in accordance with Regulation 9(1)(i) and Regulation 6 of the 2009 Tariff Regulations.

22. The respondent, Rajasthan Discom in his reply pointed out that the petitioner has not submitted any details of the additional capital expenditure claimed during 2012-14. We have considered the matter and it was observed that the additional capital expenditure claimed by the petitioner in 2012-14 is same as was allowed in order dated 15.10.2015 in Petition No. 98/TT/2013. The additional capital expenditure is towards the balance and retention payment for the works completed before the cut-off date. In the view of the above additional capital expenditure claimed by the petitioner during 2012-14 is allowed.

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

(₹ in lakh)

Apportioned approved cost		Capital cost as on COD	Additional capital expenditure		Capital cost as on 31.3.2014
			2012-13	2013-14	
1311.04	Approved in Order dated 15.10.2015	602.51 (612.97-10.46)	215.28	195.24	1013.03
	Claimed by the petitioner	*602.53 (612.98-10.45)	*225.73 (215.28+10.45)	195.24	1023.50
	Allowed in this Order	*601.80 (612.98-10.45-0.73)	*225.73 (215.28+10.45)	195.24	1022.77

*IDC discharged on cash basis and IDC disallowed due to time overrun adjusted.

Debt: Equity

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:



(2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.

(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”

25. The debt:equity ratio admitted by the Commission vide order dated 15.10.2015 in Petition No. 98/TT/2013 as on COD was 70:30, for determination of tariff in accordance with the Regulation 12 of the 2009 Tariff Regulations.

26. 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	421.26	70.00	294.68	70.00	715.94	70.00
Equity	180.54	30.00	126.29	30.00	306.83	30.00
Total	601.80	100.00	420.97	100.00	1022.77	100.00

Return on Equity (“ROE”)

27. 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 may be, shall recover the shortfall or refund the excess Annual Fixed Charge on account of Return on



Equity due to change in applicable Minimum Alternate/Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission:

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

28. 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 (%)
2009-10	16.995	18.674
2010-11	19.931	19.358
2011-12	20.008	19.377
2012-13	20.008	19.377
2013-14	20.961	19.610

29. The Rajasthan Discoms has submitted that the petitioner’s claim for MAT rate is not justifiable as it does not provide the details of actual expenditure. We have considered the submission made by respondent. The MAT rate claimed by the petitioner is as per Clause (5) of the Regulation 15 of the 2009 Tariff Regulations the same is allowed. The ROE as trued up and allowed is as follows:-

(₹ in lakh)

Return on Equity	2012-13 (pro-rata)	2013-14
Approved in Order dated 15.10.2015	6.88	53.85
Claimed by the petitioner	6.93	54.47
Allowed in this Order	6.92	54.43



The difference in the approved ROE and that allowed after truing up is on account of actual grossed up ROE based on actual MAT rate and due to actual additional capital expenditure.

Interest on Loan (“IoL”)

30. Regulation 16 of the 2009 Tariff Regulations provide the methodology for working out weighted average rate of IoL. The Commission in its earlier order dated 8.6.2011 in Petition No. 238/2010 has dealt with similar issue and held that:-

“...in case of floating rate of interest, any change in the rates of interest during the tariff period will be considered at the time of true up”.

31. 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 are placed in Annexure-1. The IoL worked out is as follows:

(₹ in lakh)

Interest on Loan	2012-13 (pro-rata)	2013-14
Approved in Order dated 15.10.2015	7.41	55.64
Claimed by the petitioner	7.62	57.17
Allowed in this Order	7.61	57.12

The difference in the approved IoL and that allowed after truing up is on account of change in the weighted average rate of interest which is computed based on actual loan portfolio and rate of interest.



Depreciation

32. 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)

Depreciation	2012-13 (pro-rata)	2013-14
Approved in Order dated 15.10.2015	6.25	48.33
Claimed by the petitioner	6.30	48.89
Allowed in this Order	6.29	48.85

33. The difference in the approved depreciation and that allowed after truing up is on account of change in gross block during the 2009-14 tariff period.

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

34. The petitioner has not claimed O&M Expenses for the instant asset.

Interest on Working Capital (“IWC”)

35. 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)

Interest on Working	2012-13 (pro-rata)	2013-14
Approved in Order dated 15.10.2015	0.47	3.63
Claimed by the petitioner	0.48	3.70
Allowed in this Order	0.48	3.69

The difference in the approved IWC and that allowed after truing up is on account of change in the receivables during the 2009-14 tariff period.

APPROVED ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD



36. 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	2012-13 (pro-rata)	2013-14
	Depreciation	
Opening Gross Block	601.80	827.53
Additional Capitalisation	225.73	195.24
Closing Gross Block	827.53	1022.77
Average Gross Block	714.67	925.15
Rate of Depreciation (%)	5.28%	5.28%
Depreciable Value*	643.20	832.64
Balance useful life of the asset	25.00	24.00
Elapsed life	0.00	1.00
Remaining Depreciable Value	643.20	826.35
Depreciation during the year	6.29	48.85
Depreciation upto previous year	0.00	6.29
Cumulative depreciation (incl. of AAD)	6.29	55.14
Interest on Loan		
Gross Normative Loan	421.26	579.27
Cumulative Repayment upto Previous Year	0.00	6.29
Net Loan-Opening	421.26	572.98
Additions	158.01	136.67
Repayment during the year	6.29	48.85
Net Loan-Closing	572.98	660.80
Average Loan	497.12	616.89
Weighted Average Rate of Interest on Loan (%)	9.1840%	9.2599%
Interest on Loan	7.61	57.12
Return on Equity		
Opening Equity	180.54	248.26
Additions	67.72	58.57
Closing Equity	248.26	306.83
Average Equity	214.40	277.55
Return on Equity (Base Rate) (%)	15.500%	15.500%
MAT rate for the respective year (%)	20.008%	20.961%



Particulars	2012-13 (pro-rata)	2013-14
	Rate of Return on Equity (%)	19.377%
Return on Equity	6.92	54.43
Interest on Working Capital		
O & M expenses	0.00	0.00
Maintenance Spares	0.00	0.00
Receivables	21.30	27.35
Total	21.30	27.35
Rate of Interest(%)	13.50%	13.50%
Interest on Working Capital	0.48	3.69
Annual Transmission Charges		
Depreciation	6.29	48.85
Interest on Loan	7.61	57.12
Return on Equity	6.92	54.43
Interest on Working Capital	0.48	3.69
O & M Expenses	0.00	0.00
Total	21.30	164.09

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

37. The tariff charges claimed by the petitioner for instant asset for 2014-19 tariff period as under:-

(₹in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	55.74	57.44	58.44	59.45	59.45
Interest on Loan	61.25	57.99	53.83	49.57	44.03
Return on Equity	62.10	64.31	65.43	66.56	66.56
Interest on Working Capital	4.12	4.14	4.09	4.04	3.91
O & M Expenses	0.00	0.00	0.00	0.00	0.00
Total	183.21	183.88	181.79	179.62	173.95

38. 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	0.00	0.00	0.00	0.00	0.00
Maintenance Spares	0.00	0.00	0.00	0.00	0.00
Receivables	30.54	30.65	30.30	29.94	28.99
Total	30.54	30.65	30.30	29.94	28.99
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	4.12	4.14	4.09	4.04	3.91

Capital Cost

39. 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;”

40. The petitioner has claimed capital cost of ₹1023.50 lakh as on 31.3.2014. We have considered the capital cost of ₹1022.77 lakh, as worked out in earlier paras, as the opening capital cost on 1.4.2014 for determination of tariff in accordance with Regulation 9 of the 2014 Tariff Regulations as shown below:-

(₹ in lakh)

AppORTIONED approved cost	Capital cost as on 31.3.2014
1311.04	1022.77

Additional Capital Expenditure

41. Clause (3) of Regulation 14 of the 2014 Tariff Regulations provides as under:-

”The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the



following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:

- (i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;
- (ii) Change in law or compliance of any existing law;

XXX”

42. 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:”

43. The cut-off date is 31.3.2016 for the instant asset. The petitioner has claimed following additional capital expenditure for 2014-19 tariff period under Regulation 14(3)of the 2014 Tariff Regulations.

(₹in lakh)

Apportioned approved cost	Capital cost as on 1.3.2014	Additional capital expenditure allowed			Capital cost as on 31.3.2019
		2014-15	2015-16	2016-17	
1311.04	1022.77	64.39	0.00	38.03	1125.19

44. The petitioner has claimed the admissibility of additional capital expenditure after the cut-off date under Regulation 14(3) of 2014 Tariff Regulations. We have considered the submissions of the petitioner with regard to the estimated capital expenditure during 2014-19. The above mentioned additional capital expenditure is towards balance and retention payments and the same has been certified by the Auditor vide certificates dated 14.6.2015 for all the assets. Further, the total capital cost for all the assets as on 31.3.2019 is within the approved apportioned cost of the project. Thus, the same is allowed in accordance with Regulation 14(3)of the 2014 Tariff Regulations.



Debt: Equity

45. 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.”

46. The normative debt:equity ratio has been considered to work out the tariff in accordance with the 2014 Tariff Regulations as given below:-

(₹in lakh)

Funding	Capital cost as on 31.3.2014	(%)	Additional capital expenditure during 2014-19	(%)	Total cost as on 31.3.2019	(%)
Debt	715.94	70.00	71.69	70.00	787.63	70.00
Equity	306.83	30.00	30.73	30.00	337.56	30.00
Total	1022.77	100.00	102.42	100.00	1125.19	100.00

Return on Equity (“ROE”)

47. Clause (1) and (2) of Regulation 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.”

48. The petitioner has claimed ROE at the rate of 19.610% for 2013-14 and 19.705% for 2015-19 after grossing up the ROE of 15.50% with MAT rate as per the above said Regulation. The petitioner has further submitted that the grossed up ROE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial year. Any under-recovery or over-recovery of grossed up ROE after truing up shall be recovered or refunded to the beneficiaries on year to year basis.

49. The petitioner has further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of the tax including interest received from IT authorities shall be recoverable/ adjustable after completion of income tax assessment of the financial year.

50. The petitioner has submitted that MAT rate is applicable to the petitioner's Company. Accordingly, the MAT rate applicable during the 2014-19 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.



51. The Rajasthan Discom has submitted that the petitioner's claim for MAT rate is not justifiable as it

52. We have considered the submissions made by the petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity.

53. 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	306.83	326.15	326.15	337.56	337.56
Additions	19.32	0.00	11.41	0.00	0.00
Closing Equity	326.15	326.15	337.56	337.56	337.56
Average Equity	316.49	326.15	331.85	337.56	337.56
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	62.07	64.27	65.39	66.52	66.52

Interest on Loan ("IoL")

54. 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.”

55. 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. IoL allowed is as follows:-

(₹in lakh)					
Interest on Loan	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	715.94	761.01	761.01	787.63	787.63
Cumulative Repayment upto Previous Year	55.14	110.84	168.24	226.65	286.06
Net Loan-Opening	660.80	650.17	592.77	560.99	501.58
Additions	45.07	0.00	26.62	0.00	0.00
Repayment during the year	55.70	57.40	58.41	59.41	59.41
Net Loan-Closing	650.17	592.77	560.99	501.58	442.17
Average Loan	655.49	621.47	576.88	531.28	471.87
Weighted Average Rate of Interest on Loan (%)	9.3377%	9.3256%	9.3252%	9.3243%	9.3243%
Interest on Loan	61.21	57.96	53.80	49.54	44.00

Depreciation

56. Clause (2), (5) and (6) of Regulation 27 of the 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.”

57. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2014 and accumulated depreciation up to 31.3.2014. depreciation up to 2014-19 tariff period has been calculated annually based on Straight Line Method and at rates specified in Appendix-II of the 2014 Tariff Regulations. The detailed calculations for depreciation for the transmission asset are worked out and allowed as follows:-

(₹in lakh)					
Depreciation	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	1022.77	1087.16	1087.16	1125.19	1125.19
Additional Capitalisation	64.39	0.00	38.03	0.00	0.00
Closing Gross Block	1087.16	1087.16	1125.19	1125.19	1125.19
Average Gross Block	1054.97	1087.16	1106.18	1125.19	1125.19
Rate of Depreciation (%)	5.28%	5.28%	5.28%	5.28%	5.28%
Depreciable Value*	949.47	978.44	995.56	1029.78	1012.67
Balance useful life of the asset	23.00	22.00	21.00	20.00	19.00
Elapsed life	2.00	3.00	4.00	5.00	6.00
Remaining Depreciable Value	894.33	867.60	827.32	786.02	726.61
Depreciation during the year	55.70	57.40	58.41	59.41	59.41
Depreciation upto previous year	55.14	110.84	168.24	226.65	286.06
Cumulative depreciation	110.84	168.24	226.65	286.06	345.47

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

58. The petitioner has not claimed O&M Expenses for the instant asset. 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 wage revision increase. 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 asset as per prevailing norms.

Interest on Working Capital (IWC)

59. As per 2014 Tariff Regulations the components of the working capital and the interest thereon are discussed hereinafter:-

(i) Receivables

As per Regulation 28(1) (c) (i) of the 2014 Tariff Regulations, receivables will be equivalent to two months average billing calculated on target availability level. The petitioner has claimed the receivables on the basis of 2 months transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis of 2 months transmission charges.

(ii) Maintenance Spares

Regulation 28 (1) (c) (ii) of the 2014 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M Expenses from 1.4.2014. The petitioner has claimed maintenance spares for the instant asset and value of maintenance spares has accordingly been worked out as 15% of O&M Expenses.

(iii) O & M Expenses



Regulation 28 (1) (c) (iii) of the 2014 Tariff Regulations provides for operation and maintenance expenses for one month to be included in the working capital. The petitioner has claimed O & M Expenses for the instant asset and value of O & M Expenses has accordingly been worked out by considering 1 month O&M Expenses.

(iv) Rate of interest on working capital

Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later. Further, the 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. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points).

60. 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	0.00	0.00	0.00	0.00	0.00
Maintenance Spares	0.00	0.00	0.00	0.00	0.00
Receivables	30.52	30.63	30.28	29.92	28.97
Total	30.52	30.63	30.28	29.92	28.97
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	4.12	4.13	4.09	4.04	3.91



ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

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

	(₹in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	1022.77	1087.16	1087.16	1125.19	1125.19
Additional Capitalisation	64.39	0.00	38.03	0.00	0.00
Closing Gross Block	1087.16	1087.16	1125.19	1125.19	1125.19
Average Gross Block	1054.97	1087.16	1106.18	1125.19	1125.19
Rate of Depreciation (%)	5.28%	5.28%	5.28%	5.28%	5.28%
Depreciable Value*	949.47	978.44	995.56	1029.78	1012.67
Balance useful life of the asset	23.00	22.00	21.00	20.00	19.00
Elapsed life	2.00	3.00	4.00	5.00	6.00
Remaining Depreciable Value	894.33	867.60	827.32	786.02	726.61
Depreciation during the year	55.70	57.40	58.41	59.41	59.41
Depreciation upto previous year	55.14	110.84	168.24	226.65	286.06
Cumulative depreciation	110.84	168.24	226.65	286.06	345.47
Interest on Loan					
Gross Normative Loan	715.94	761.01	761.01	787.63	787.63
Cumulative Repayment upto Previous Year	55.14	110.84	168.24	226.65	286.06
Net Loan-Opening	660.80	650.17	592.77	560.99	501.58
Additions	45.07	0.00	26.62	0.00	0.00
Repayment during the year	55.70	57.40	58.41	59.41	59.41
Net Loan-Closing	650.17	592.77	560.99	501.58	442.17
Average Loan	655.49	621.47	576.88	531.28	471.87
Weighted Average Rate of Interest on Loan (%)	9.3377%	9.3256%	9.3252%	9.3243%	9.3243%
Interest on Loan	61.21	57.96	53.80	49.54	44.00
Return on Equity					
Opening Equity	306.83	326.15	326.15	337.56	337.56
Additions	19.32	0.00	11.41	0.00	0.00
Closing Equity	326.15	326.15	337.56	337.56	337.56
Average Equity	316.49	326.15	331.85	337.56	337.56
Return on Equity (Base Rate) (%)	15.500%	15.500%	15.500%	15.500%	15.500%
MAT rate for the 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	62.07	64.27	65.39	66.52	66.52



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Working Capital					
O & M expenses	0.00	0.00	0.00	0.00	0.00
Maintenance Spares	0.00	0.00	0.00	0.00	0.00
Receivables	30.52	30.63	30.28	29.92	28.97
Total	30.52	30.63	30.28	29.92	28.97
Rate of Interest(%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	4.12	4.13	4.09	4.04	3.91
Annual Transmission Charges					
Depreciation	55.70	57.40	58.41	59.41	59.41
Interest on Loan	61.21	57.96	53.80	49.54	44.00
Return on Equity	62.07	64.27	65.39	66.52	66.52
Interest on Working Capital	4.12	4.13	4.09	4.04	3.91
O & M Expenses	0.00	0.00	0.00	0.00	0.00
Total	183.09	183.76	181.68	179.50	173.84

Filing Fee and the Publication Expenses

62. 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

63. 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

64. 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.

GST

65. The petitioner has prayed to allow reimbursement of GST, if any, on account of the proposed implementation of GST. The impact of GST, if any, will be dealt at the time of truing up of 2014-19.

Sharing of Transmission Charges

66. 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.

67. This order disposes of Petition No.124/TT/2016.

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

Sd/-
(A.S. Bakshi)
Member



DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2009-14)

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
				(Rs in lakh)
BOND XXXVI-DOCO Loan 1-	9.35	20.00	0.00	20.00
BOND XXXIX-DOCO LOAN 2-	9.40	285.96	0.00	285.96
SBI (21.03.2012)-ADDCAP FOR 2013-2014 ADD CAP LOAN 2-	10.29	0.00	136.67	136.67
BOND - XLI-ADDCAP FOR 2012-2013 Add-cap-	8.85	0.00	158.02	158.02
BOND-XLI-DOCO loan-	8.85	115.81	0.00	115.81
Total		421.77	294.69	716.46

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

(₹in lakh)

Particulars	2012-13 (pro-rata)	2013-14
Gross Opening Loan	421.77	579.79
Cumulative Repayments of Loans up to Previous Year	0.00	0.00
Net Loans Opening	421.77	579.79
Add: Drawl(s) during the Year	158.02	136.67
Less: Repayments during the year	0.00	0.00
Net Closing Loan	579.79	716.46
Average Net Loan	500.78	648.13
Rate of Interest on Loan (%)*	9.1840%	9.2599%
Interest on Loan	45.99	60.02



DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2014-19)

(₹in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND XXXVI-DOCO Loan 1-	9.35	20.00	0.00	20.00
BOND XXXIX-DOCO LOAN 2-	9.40	285.96	0.00	285.96
SBI (21.03.2012)-ADDCAP FOR 2013-2014 ADD CAP LOAN 2-	10.25	136.67	0.00	136.67
BOND - XLI-ADDCAP FOR 2012-2013 Add-cap-	8.85	158.02	0.00	158.02
BOND - XLI-DOCO loan-	8.85	115.81	0.00	115.81
Bond XLVII-ADDCAP FOR 2014-2015 ADD CAP LOAN 3-	8.93	0.00	45.07	45.07
Total		716.46	45.07	761.53

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

(₹in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	716.46	761.53	761.53	761.53	761.53
Cumulative Repayments of Loans up to Previous Year	0.00	0.00	0.00	36.57	73.14
Net Loans Opening	716.46	761.53	761.53	724.96	688.39
Add: Drawl(s) during the Year	45.07	0.00	0.00	0.00	0.00
Less: Repayments during the year	0.00	0.00	36.57	36.57	40.33
Net Closing Loan	761.53	761.53	724.96	688.39	648.06
Average Net Loan	739.00	761.53	743.25	706.68	668.23
Rate of Interest on Loan (%)*	9.3377%	9.3256%	9.3252%	9.3243%	9.3243%
Interest on Loan	69.01	71.02	69.31	65.89	62.31

*Petitioner, in the tariff computation submitted with the petition, has considered rate of interest on loan upto two decimal points.

