

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 544/TT/2014

Coram:

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

**Date of Hearing : 20.01.2016
Date of Order : 17.02.2016**

In the matter of:

Truing up of transmission tariff for 2009-14 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 and determination of transmission tariff for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for 400 kV D/C Gorakhpur-Lucknow transmission line along with its associated bays and 30% FSC on 400 kV D/C Gorakhpur-Lucknow transmission line at Lucknow along with bays under Northern Region System Strengthening Scheme-Xunder 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 -122 001 (Haryana).

.....**Petitioner**

Versus

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



4. Jodhpur Vidyut Vitran Nigam Limited
400 kV GSS Building (Ground Floor), Ajmer Road
Heerapura, Jaipur
5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan,
Kumar House Complex Building II
Shimla-171004
6. Punjab State Power Corporation Limited
Thermal Shed T1 A, Near 22 Phatak
Patiala-147001
7. Haryana Power Purchase Centre
Shakti Bhawan, Sector-6
Panchkula (Haryana) 134 109
8. Power Development Department
Govt. of Jammu & Kashmir
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Limited
Shakti Bhawan, 14, Ashok Marg
Lucknow- 226001
10. Delhi Transco Limited
Shakti Sadan, Kotla Road
New Delhi- 110002
11. BSES Yamuna Power Limited
BSES Bhawan, Nehru Place
New Delhi
12. BSES Rajdhani Power Limited
BSES Bhawan, Nehru Place
New Delhi
13. North Delhi Power Limited
Power Trading & Load Dispatch Group
Cennet Building
Pitampura, New Delhi-110034
14. Chandigarh Administration
Sector-9, Chandigarh
15. Uttarakhand Power Corporation Limited
UrjaBhawan, Kanwali Road
Dehradun



16. North Central Railway
Allahabad

17. New Delhi Municipal Council
Palika Kendra, Sansad Marg
New Delhi-110002

.....Respondents

The following were present:-

For Petitioner: Shri M. M. Mondal, PGCIL
Shri S. K. Venkatesan, PGCIL
Smt. Sangeeta Edwards, PGCIL
Shri S. C. Taneja, PGCIL
Shri Y. K. Sehgal, PGCIL
Shri Nitish Kumar, PGCIL
Shri G. C. Dhal, PGCIL
Shri Amit Yadav, PGCIL
Shri Rakesh Prasad, PGCIL
Shri S. S. Raju, PGCIL
Shri Jasbir Singh, PGCIL
Shri AnshulGarg, PGCIL

For Respondent: Shri Vinod Kumar Yadav, Rajasthan Discoms

ORDER

The present petition has been filed by Power Grid Corporation of India Ltd. ("the petitioner"), for truing up of capital expenditure 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 actual capital expenditure for the period 1.11.2010 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 400 kV D/C Gorakhpur-Lucknow transmission line along with its associated bays (**Asset-I**)



and 30% FSC on 400 kV D/C Gorakhpur-Lucknow transmission line at Lucknow along with bays **(Asset-II)** under Northern Region System Strengthening Scheme-X (hereinafter referred as “transmission asset”).

2. The respondents are mostly distribution licensees who are procuring transmission service from the petitioner, mainly beneficiaries of the Northern Region, transmission licensees and central power purchase entities of States

3. The petitioner has served the petition to 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 have been received from the public in response to the notices published by the petitioner under Section 64 of the Act. The hearing in this matter was held on 20.1.2016. None of the respondents have filed their reply. The petitioner has submitted the information sought vide letter dated 18.1.2016 through affidavit dated 9.2.2016. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

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

(a) The investment approval for the project was accorded by Board of Directors of the petitioner company vide C/CP/NRSS-X dated 26.12.2007 at an estimated cost of ₹40836 lakh, which included IDC of ₹3531 lakh.

The petitioner has built the transmission asset in the Northern Region.

(b) As per investment approval, accorded on 26.12.2007, the transmission project was to be commissioned within 36 months from the date of investment approval i.e. by 26.12.2010. The Asset I was put under the



commercial operation of 1.11.2010 and commissioned within the time. However, Asset II was put under commercial operation on 1.4.2011 and there was delay of 3 months in commissioning the transmission assets.

- (c) The time over-run of 3 months in commissioning of the Asset II was not condoned as it was due to bilateral issue between the petitioner and the contractor and hence, the corresponding IDC and IEDC for these three months were not allowed for the instant transmission asset. Further, it was held that if the LD amount recovered from the contractor exceeds the IDC and IEDC disallowed in the order, the difference shall be adjusted in capital cost at the time of truing up.
- (d) The tariff from 1.11.2010 to 31.3.2014 for Asset-I was allowed vide order dated 19.1.2012 in Petition No. 345/2010 in accordance with the 2009 Tariff Regulations. The tariff allowed for Asset-I for the tariff period 2009-14 is as under:-

Particulars (Asset-I)	(₹ in lakh)			
	2010-11 (Pro-rata)	2011-12	2012-13	2013-14
Depreciation	699.27	1767.26	1824.12	1824.12
Interest on Loan	833.22	2000.33	1910.03	1742.98
Return on equity	697.97	1768.02	1828.94	1828.94
Interest on Working Capital	53.20	132.68	134.86	133.51
O & M Expenses	257.58	653.58	690.93	730.34
Total	2541.23	6321.87	6388.89	6259.90

- (e) The tariff from 1.4.2011 to 31.3.2014 for Combined Asset-I & II was allowed vide order dated 25.4.2012 in Petition No. 87/2011 in accordance with the 2009 Tariff Regulations. The Asset-II was clubbed with Asset-I as on 1.4.2011. The tariff allowed for Combined Asset-I & II for the tariff period 2009-14 is as under:-

(₹ in lakh)			
Combined Asset-I & II	2011-12	2012-13	2013-14
Depreciation	1900.54	1972.29	1972.29
Interest on Loan	2151.04	2065.92	1885.51
Return on Equity	1900.40	1976.10	1976.10
Interest on working capital	155.84	159.19	157.82
O&M Expenses	770.72	814.77	861.26
Total	6878.54	6988.27	6852.98

- (f) In order dated 19.1.2012 in Petition No. 345/2010, tariff for Asset-I was allowed for the 2009-14 tariff period after considering the capital cost of ₹31332.04 lakh (excluding excess initial spares of ₹33.53 lakh) as on COD.
- (g) Further, in order dated 25.4.2012 in Petition No. 87/2011, tariff for Combined Asset-I & II was allowed for the 2009-14 tariff period considering the capital cost of ₹34794.08 lakh (excluding excess initial spares of ₹77.40 lakh) as on 1.4.2011.
- (h) The MAT rate applicable as on 2008-09 was considered to arrive at rate of return on equity for the tariff period 2009-14, which is required to be adjusted as per the actual MAT rate applicable for the respective year at the time of truing up of tariff for 2009-14 tariff period.

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

5. 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”.



6. 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.

IDC and IEDC

7. In order dated 25.4.2012 in Petition No. 87/2011, IDC and IEDC was disallowed for 3 months in case of Asset-II on account of time over-run and further directed if the LD amount recovered from the contractor exceeds IDC and IEDC disallowed, the difference shall be adjusted in capital cost at the time of truing up. In this regard the petitioner vide affidavit dated 16.2.2016 submitted that it has deducted entire LD amount of ₹28.59 lakh from the capital cost in the Auditor's Certificate.

8. It is observed that the proportionate IDC and IEDC for 3 months works out to be ₹25.17 lakh which is lower than the LD amount. In view of above, the LD amount as deducted by the petitioner from the capital cost has been considered for the purpose of truing up tariff.

Capital Cost

9. The petitioner has claimed capital cost of ₹31338.94 lakh for Asset-I and ₹2242.46 lakh for Asset-II as on COD after deducting excess initial spares of ₹26.63 lakh and ₹77.44 lakh from ₹31365.57 lakh and ₹2319.90 lakh, respectively, for the purpose of truing up of tariff.



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

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

(a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan - (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the 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 certifying the capital cost and additional capitalization claimed. The revised capital cost of ₹31329.33 lakh excluding excess initial spares of ₹ 36.24 lakh has been considered as on COD, i.e., 1.11.2010, for tariff computation from 1.11.2010 to 31.3.2011 for Asset-I.

Initial Spares

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

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



13. Regulation 3(29) of the 2009 Tariff Regulations provides that:-

“(29) ‘original project cost’ means the capital expenditure incurred by the generating company or the transmission licensee, as the case may be, within the original scope of the project up to the cut-off date as admitted by the Commission;”

14. The petitioner has deducted excess initial spares of ₹26.63 lakh and ₹77.44 lakh for Asset-I and Asset-II, respectively, from the capital cost of Asset-I & II as on COD. The petitioner has not claimed any initial spares for transmission line. Further, it is observed that the petitioner has considered the capital cost including additional capitalization beyond the cut-off date for computation of allowable initial spares, which is not in accordance with the above regulation. We have considered capital cost as on cut-off date for computation of allowable initial spares. The excess initial spares worked out for sub-station as per above regulation is shown in the table below:-

(₹ in lakh)					
Description	Capital cost as on cut off date	Initial Spares claimed	Ceiling limit as per Regulation 8 of 2009 regulations	Initial spares worked out	Excess initial spares claimed
	(a)	(b)	(c)	$(d) = ((a - b) * c) / (100 - c)\%$	$(e) = (b) - (d)$
Asset-I	4684.13	152.44	2.50%	116.20	36.24
Asset-II	2764.29	175.60	3.50%	93.89	81.71

15. Accordingly, the capital cost has been considered excluding excess initial spares of ₹36.24 lakh and ₹81.71 lakh as on COD for Asset I and Asset II respectively for truing of tariff. The initial spares approved and allowed are as under:-



(₹ in lakh)

Asset I	Capital cost upto cut-off date	Cost of the initial spares for sub-station	
		Allowed	Disallowed
Approved in order dated 19.1.2012	4789.98	118.91	33.53
Claimed by the petitioner	4789.98	118.91	33.53
Allowed in this order	4684.13	116.20	36.24

(₹ in lakh)

Asset II	Capital cost upto cut-off date	Cost of the initial spares for sub-station	
		Allowed	Disallowed
Approved in order dated 19.1.2012	2883.48	98.21	77.40
Claimed by the petitioner	2881.93*	98.16	77.44
Allowed in this order	2764.29	93.89	81.71

*Petitioner has considered capital cost beyond cut-off date

Additional Capital Expenditure

16. The petitioner has claimed additional capitalization under Regulation 9(1)(i) of the 2009 Tariff Regulations.

17. Clause (1)(i) of Regulation 9 of the 2009 Tariff Regulations provides that:-

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

(i)Undischarged liabilities; “

18. The petitioner has claimed additional capitalization of ₹1219.54 lakh for Asset-I from COD to 31.3.2011 and ₹733.03 lakh for 2011-12, ₹194.01 lakh for 2012-13 and ₹210.43 lakh for Combined Asset-I & II towards balance and retention payment.



19. The total capital cost of ₹35924.53 lakh for Combined Asset-I & II including actual additional capitalisation claimed by the petitioner is within the overall approved cost of ₹40836 lakh. Hence, considering the submissions made by the petitioner, total capital cost including additional capitalization is allowed under Regulation 9(1)(i) of the 2009 Tariff Regulations, as shown in the table below:-

(₹ in lakh)

Cost as per Investment Approval is ₹40836 lakh								
Particulars	Name of the asset	Capital cost upto COD	2010-11	2011-12	2012-13	2013-14	Total add cap	Total capital cost as on 31.3.2014
Approved in order dated 19.1.2012	Asset-I	31332.04	1219.54					
Allowed in this order		31329.33	1219.54					
Approved in order dated 25.4.2012	Asset-II	2242.50						
Allowed in this order		2238.19						
Approved in order dated 25.4.2012	Combined Asset-I & II	34794.08		2886.84	0.00	0.00	2886.84	37680.92
Allowed in this order		34787.06		733.03	194.01	210.43	1137.47	35924.53

Debt: Equity

20. Clause 1 & 3 of Regulation 12 of the 2009 Tariff Regulations provides that:-

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

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

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

.....



(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. The petitioner has claimed true up Annual Fixed Charge based on admitted debt-equity ratio of 70:30 admitted as on 1.11.2010 and 1.4.2011 in its order dated 19.1.2012 and 25.4.2012 in Petition No. 345/2010 and 87/2011 respectively. The admitted debt:equity ratio of 70:30 as on 1.11.2010 for Asset-I and 1.4.2011 for Combined Asset-I & II has been considered for the purpose of trueing up of the approved tariff of tariff period 2009-14, as given under:-

Funding (Asset-I)	Amount (in ₹ lakh)	(%)
Debt	21930.53	70.00
Equity	9398.80	30.00
Total	31329.33	100.00

Funding (Combined Asset-I & II)	Amount (in ₹ lakh)	(%)
Debt	24350.94	70.00
Equity	10436.12	30.00
Total	34787.06	100.00

22. As regards additional capitalization, the petitioner has submitted that the debt:equity ratio in case of Asset-I is 70:30 for 2010-11. Further, the petitioner has also submitted that the debt:equity ratio for Combined Asset-I & II is 70:30 for 2011-12, 2012-13 and 2013-14. The petitioner was directed to confirm that the actual equity infused for additional capitalization during the 2009-14 tariff period is not less than 30%. In response, the petitioner vide affidavit dated 9.2.2016 has submitted debt:equity ratio of 20:80 for Asset-I for 2010-11. Further, the petitioner submitted that it has considered debt:equity ratio as per Regulation 12(1) and 12(3) of the 2009 Tariff Regulations wherein equity actually deployed

more than 30% of the capital cost will be considered as normative loan. The petitioner has submitted that it has claimed ROE only for 30% of the additional capitalization on normative basis. The petitioner has submitted that actual equity infused is 30% for additional capitalization during 2011-12, 2012-13 and 2013-14 for Combined Asset-I & II. The overall debt equity as on 31.3.2011 for Asset-I and 31.3.2014 for Combined Asset-I & II including additional capitalization is as under:-

Funding (Asset-I)	Amount (in ₹ lakh)	(%)
Debt	22784.21	70.00
Equity	9764.66	30.00
Total	32548.87	100.00

Funding (Combined Asset-I & II)	Amount (in ₹ lakh)	(%)
Debt	25147.17	70.00
Equity	10777.36	30.00
Total	35924.53	100.00

Interest on Loan (“IOL”)

23. Regulation 16 of the 2009 Tariff Regulations provides the methodology for working out weighted average rate of interest on loan. The Commission in its earlier order dated 8.6.2011 in Petition No. 238/2010 has 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”.

24. The petitioner has submitted the weighted average rate of interest on loan based on its actual loan portfolio and rate of interest.

25. We have considered the submissions of the petitioner and accordingly calculated the IOL based on actual interest rate submitted by the petitioner, in accordance with Regulation 16 of the 2009 Tariff Regulations. The details of

weighted average rate of interest are placed at **Annexure-I** and the IOL has been worked out and allowed as follows:-

(₹ in lakh)	
Particulars	2010-11 (Pro-rata)
Approved vide order dated 19.1.2012	833.22
As claimed by petitioner	833.32
Allowed after true up	833.01

(₹ in lakh)			
Particulars	2011-12	2012-13	2013-14
Approved vide order dated 25.4.2012	2151.04	2065.92	1885.51
As claimed by petitioner	2085.81	1946.20	1787.49
Allowed after true up	2084.97	1945.43	1786.80

26. The interest on loan has decreased due to lower additional capitalization against the approved additional capitalization during the 2009-14 tariff period.

Return on Equity (“ROE”)

27. Clause (3), (4) and (5) of 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 trueed up in accordance with Regulation 6 of these regulations.”

28. The petitioner has submitted that MAT rate of 11.330% applicable for 2008-09 was considered in the order dated 25.4.2012. However, for trueing up purpose, the RoE for the 2009-14 tariff period has been computed of on the basis of actual MAT rate applicable during 2009-14. The petitioner has submitted the variation in the MAT rate during 2009-14 as per the Finance Act of the relevant year for the purpose of grossing up of ROE, as below:-

Particulars	MAT Rate (t) %	Grossed up ROE (Base rate/(1-t)) %
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. Accordingly, ROE as allowed for Asset-I and Combined Asset-I & II is shown in the table below:-

(₹ in lakh)	
Particulars	2010-11 (Pro-rata)
Approved vide order dated 19.1.2012	697.97
As claimed by petitioner	773.02
Allowed after true up	772.82

(₹ in lakh)			
Particulars	2011-12	2012-13	2013-14
Approved vide order dated 25.4.2012	1900.40	1976.10	1976.10
As claimed by petitioner	2044.32	2071.26	2108.07
Allowed after true up	2043.51	2070.46	2107.25

30. The variation in return on equity is on account of increase in the applicable MAT rate for the purpose of grossing up of base rate of return on equity.

Depreciation

31. Clause (42) of Regulation 3 of the 2009 Tariff Regulations defines useful life as follows:-

“‘**useful life**’ in relation to a unit of a generating station and transmission system from the COD shall mean the following, namely:-

.....	
(c) AC and DC sub-station	25 years
(d) Hydro generating station	35 years
(e) Transmission line	35 years”

32. Clause (4) of Regulation 17 of the 2009 Tariff Regulations provides as follows:-

"17. Depreciation:

...
(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the assets of the generating station and transmission system:

Provided that, the remaining depreciable value as on 31st March of the yearclosing after a period of 12 years from date of commercial operation shall bespread over the balance useful life of the assets.”

33. The Commission, in its order dated 19.1.2012 and 25.4.2012 in Petition No. 345/2010 and 87/2011, respectively, has worked out the depreciation in accordance with Regulation 17 of the 2009 Tariff Regulations.

34. The weighted average useful life of the transmission asset has been considered as per Regulations 3 (42) and 17 (4) of the 2009 Tariff Regulations. For the purpose of calculation, the weighted average useful life of the asset has been considered as 33 years for Combined Asset-I & II. The depreciation for the tariff period 2009-14 has been worked out in accordance with Regulation 17 of the 2009 Tariff Regulations based on admitted capital expenditure as under:-



(₹ in lakh)	
Particulars	2010-11 (Pro-rata)
Approved vide order dated 19.1.2012	699.27
As claimed by petitioner	699.42
Allowed after true up	699.15

(₹ in lakh)			
Particulars	2011-12	2012-13	2013-14
Approved vide order dated 25.4.2012	1900.54	1972.29	1972.29
As claimed by petitioner	1848.42	1872.79	1883.47
Allowed after true up	1847.69	1872.06	1882.74

The variation in depreciation is on account of variation in additional capitalization for 2009-14 tariff period.

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

35. The petitioner has computed O&M Expenses for the assets mentioned in the petition and in accordance with the O&M norms for lines and bays specified in Regulation 19(g) of the 2009 Tariff Regulations. The O&M Expenses claimed for 2010-11 by the petitioner for Asset-I is lower than what has been approved in the tariff order dated 19.1.2012 in Petition No. 345/2010, as the petitioner in the instant petition has claimed O&M Expenses for 4 number of bays whereas the number of bays considered in the order dated 19.1.2012 in Petition No. 345/2010 was 8. The O&M Expenses claimed by the petitioner for Combined Asset-I & II from 1.4.2011 to 31.3.2014 are same as that approved in the tariff order dated 25.4.2012 in Petition No. 87/TT/2011. Accordingly, the O&M Expenses claimed by the petitioner, allowed and trued up are as follows:-

(₹ in lakh)	
Particulars	2010-11 (Pro-rata)
Approved vide order dated 19.1.2012	257.58
As claimed by petitioner	165.24
Allowed after true up	165.24

(₹ in lakh)			
Particulars	2011-12	2012-13	2013-14
Approved vide order dated 25.4.2012	770.72	814.77	861.26
As claimed by petitioner	770.72	814.77	861.26
Allowed after true up	770.72	814.77	861.26

Interest on working capital("IWC")

36. Sub-clause (c) of clause (1) of Regulation 18 of the 2009 Tariff Regulations provides the components of the working capital for the transmission system and clause (3) of Regulation 18 of the 2009 Tariff Regulations provides for the rate of interest of working capital.

37. The petitioner has submitted that the rate of interest on working capital has been considered as 11.00% for Asset-I and 11.75% for Combined Asset-I & II as per clause (3)(ii) of Regulation 18 of the 2009 Tariff Regulations, and the components of working capital are also considered in accordance with Sub-clause (c) of clause (1) of Regulation 18 of the 2009 Tariff Regulations.

38. In accordance with Clause (3)(ii) of Regulation 18 of the 2009 Tariff Regulations, rate of interest on working capital shall be on normative basis and in case of transmission assets declared under commercial operation after 1.7.2010 shall be equal to SBI Base Rate plus 350 basis points as on 1st April of the year in which the transmission asset was declared under commercial operation. State Bank of India Base Rate was 7.50% and 8.25% on 1.7.2010 and 1.4.2011 respectively. Therefore, interest rate of 11.00% for Asset-I and 11.75% for Combined Asset-I & II has been considered to work out the interest on working capital in the instant case.



39. The IWC trued up is as under:-

(₹ in lakh)

Particulars(Asset-I)	2010-11 (Pro-rata)	2011-12	2012-13	2013-14
	Asset-I	Combined Asset-I & II		
Maintenance Spares	24.79	115.61	122.22	129.19
O & M expenses	13.77	64.23	67.90	71.77
Receivables	420.11	1150.53	1143.23	1132.45
Total	458.67	1330.37	1333.35	1333.41
Rate of Interest (%)	11.00	11.75	11.75	11.75
Interest	50.45	156.32	156.67	156.68

(₹ in lakh)

Particulars	2010-11 (Pro-rata)
Approved vide order dated 19.1.2012	53.20
As claimed by petitioner	50.47
Allowed after true up	50.45

(₹ in lakh)

Particulars (Combined Asset-I & II)	2011-12	2012-13	2013-14
Approved vide order dated 25.4.2012	155.84	159.19	157.82
As claimed by petitioner	156.37	156.71	156.72
Allowed after true up	156.32	156.67	156.68

40. The variation in IWC is on account of variation in IOL, depreciation and ROE due to variation in additional capitalisation and further increase in ROE on account of applicable MAT rate during 2009-14 tariff period.

ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

41. The detailed computation of the various components of the trued up annual fixed charges for Asset-I and Combined Asset-I & II for the tariff period 2009-14 is summarised below:-

(₹ in lakh)

Particulars (Asset-I)	2010-11 (Pro-rata)
Gross Block	
Gross Opening Block	31329.33
Additional Capitalisation	1219.54
Gross Closing Block	32548.87
Average Gross Block	31939.10

Particulars (Asset-I)	2010-11 (Pro-rata)
Depreciation	
Rate of Depreciation (%)	5.254
Depreciable Value	28745.19
Elapsed Life (Beginning of the year)	0
Weighted Balance Useful life of the assets	34
Remaining Depreciable Value	28745.19
Depreciation	699.15
Interest on Loan	
Gross Normative Loan	21930.53
Cumulative Repayment upto Previous Year	0.00
Net Loan-Opening	21930.53
Additional Capitalisation	853.68
Repayment during the year	699.15
Net Loan-Closing	22085.06
Average Loan	22007.80
Weighted Average Rate of Interest on Loan (%)	9.0845
Interest	833.01
Return on Equity	
Opening Equity	9398.80
Additional Capitalisation	365.86
Closing Equity	9764.66
Average Equity	9581.73
Return on Equity (Base Rate) (%)	15.50
MAT rate for the year (%)	19.931
Rate of Return on Equity (Pre Tax) (%)	19.358
Return on Equity (Pre Tax)	772.82
Interest on Working Capital	
Maintenance Spares	24.79
O & M expenses	13.77
Receivables	420.11
Total	458.67
Interest	50.45
Annual Transmission Charges	
Depreciation	699.15
Interest on Loan	833.01
Return on Equity	772.82
Interest on Working Capital	50.45
O & M Expenses	165.24
Total	2520.67

(₹ in lakh)

Particulars (Combined Asset-I & II)	2011-12	2012-13	2013-14
Gross Block			
Gross Opening Block	34787.06	35520.09	35714.10
Additional Capitalisation	733.03	194.01	210.43
Gross Closing Block	35520.09	35714.10	35924.53
Average Gross Block	35153.57	35617.09	35819.31
Depreciation			
Rate of Depreciation (%)	5.256	5.256	5.256
Depreciable Value	31638.22	32055.38	32237.38
Elapsed Life (Beginning of the year)	0	1	2
Weighted Balance Useful life of the assets	33	32	31
Remaining Depreciable Value	31638.22	29508.55	27818.48
Depreciation	1847.69	1872.06	1882.74
Interest on Loan			
Gross Normative Loan	24350.94	24864.06	24999.87
Cumulative Repayment upto Previous Year	699.15	2546.83	4418.90
Net Loan-Opening	23651.79	22317.23	20580.97
Additional Capitalisation	513.12	135.81	147.30
Repayment during the year	1847.69	1872.06	1882.74
Net Loan-Closing	22317.23	20580.97	18845.53
Average Loan	22984.51	21449.10	19713.25
Weighted Average Rate of Interest on Loan (%)	9.0712	9.0700	9.0639
Interest	2084.97	1945.43	1786.80
Return on Equity			
Opening Equity	10436.12	10656.03	10714.23
Additional Capitalisation	219.91	58.20	63.13
Closing Equity	10656.03	10714.23	10777.36
Average Equity	10546.07	10685.13	10745.79
Return on Equity (Base Rate) (%)	15.50	15.50	15.50
Tax rate for the year (%)	20.008	20.008	20.961
Rate of Return on Equity (Pre Tax) (%)	19.377	19.377	19.610
Return on Equity (Pre Tax)	2043.51	2070.46	2107.25
Interest on Working Capital			
Maintenance Spares	115.61	122.22	129.19
O & M expenses	64.23	67.90	71.77
Receivables	1150.53	1143.23	1132.45
Total	1330.37	1333.35	1333.41



Particulars (Combined Asset-I & II)	2011-12	2012-13	2013-14
Interest	156.32	156.67	156.68
Annual Transmission Charges			
Depreciation	1847.69	1872.06	1882.74
Interest on Loan	2084.97	1945.43	1786.80
Return on Equity	2043.51	2070.46	2107.25
Interest on Working Capital	156.32	156.67	156.68
O & M Expenses	770.72	814.77	861.26
Total	6903.20	6859.39	6794.72

DETERMINATION OF ANNUAL TRANSMISSION CHARGES FOR 2014-19

42. The petitioner has claimed the transmission charges as under:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1897.55	1906.09	1906.09	1906.09	1906.09
Interest on Loan	1632.71	1470.48	1297.56	1124.60	951.66
Return on equity	2123.77	2133.28	2133.28	2133.28	2133.28
Interest on Working Capital	173.76	171.90	169.41	166.98	164.59
O & M Expenses	789.60	815.94	842.97	870.97	899.83
Total	6617.39	6497.69	6349.31	6201.92	6055.45

43. 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
Maintenance Spares	118.44	122.39	126.45	130.65	134.97
O & M expenses	65.80	68.00	70.25	72.58	74.99
Receivables	1102.90	1082.95	1058.22	1033.65	1009.24
Total	1287.14	1273.34	1254.92	1236.88	1219.20
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	173.76	171.90	169.41	166.98	164.59

Capital Cost

44. Clause (1) & (3) of Regulation 9 of the 2014 Tariff Regulations specify as follows:-



“(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.”

“(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.”

45. The petitioner has claimed capital expenditure of ₹35931.51 lakh as on 31.3.2014 for the tariff period 2014-19. The trued up capital cost of ₹35924.53 lakh as on 31.3.2014 is considered to workout the tariff for tariff period 2014-19.

Additional Capital Expenditure

46. The petitioner has projected additional capitalization of ₹323.34 lakh for 2014-19 tariff period towards balance and retention payments under Regulation 14(3)(i) of the 2014 Tariff Regulations. The petitioner was directed vide letter dated 18.1.2016 to submit the amount of balance and retention payment yet to be made along with the details of contract for which the payment has been retained. In response, the petitioner vide affidavit dated 9.2.2016 has submitted the contractor-wise details of balance and retention payment to be made during 2014-19.

47. Further, the petitioner submitted that actual additional capitalization for 2014-19 will be submitted at the time of truing up of 2014-19 tariff period. We have allowed additional capitalization of ₹323.34 lakh for 2014-19 tariff period towards balance and retention payments under Regulation 14(3)(i) of 2014 Tariff Regulations and have considered the same for tariff computation.



(₹ in lakh)

Admitted capital cost as on 31.3.2014	Additional capitalisation projected					Total additional capitalisation	Total capital cost including additional capitalisation as on 31.3.2019
	2014-15	2015-16	2016-17	2017-18	2018-19		
35924.53	323.34	0.00	0.00	0.00	0.00	323.34	36247.87

Debt:EquityRatio

48. Clause 3 of Regulation 19 of the 2014 Tariff Regulations specifies as under:-

“(3) In case of the generating station and the transmission 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.”

49. The petitioner has considered debt:equity ratio as 70:30 as on 31.3.2014. The admitted debt:equity ratio of 70:30 after true-up for the tariff period ending 31.3.2014 has been considered as opening debt:equity ratio as on 1.4.2014. Further, we have considered debt:equity ratio of 70:30 for additional capitalization during 2014-15. The details of the debt:equity considered for the purpose of tariff for 2014-19 tariff period is as follows:-

(in ₹ lakh)

Particulars	As on 1.4.2014		Additional capitalization during 2014-15		As on 31.3.2019	
	Amount	(%)	Amount	(%)	Amount	(%)
Debt	25147.17	70.00	226.34	70.00	25373.51	70.00
Equity	10777.36	30.00	97.00	30.00	10874.36	30.00
Total	35924.53	100.00	323.34	100.00	36247.87	100.00

Interest on Loan (“IOL”)

50. Clause (5) & (6) of Regulation 26 of the 2014 Tariff Regulations are reproduced as under:-



“(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.”

51. The weighted average rate of IOL has been considered on the basis of rate prevailing as on 1.4.2014. The IOL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of weighted average rate of interest are placed at **Annexure-II** and the IOL has been worked out and allowed as follows:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross loan opening	25147.17	25373.51	25373.51	25373.51	25373.51
Cumulative Repayment upto COD/previous year	6301.64	8198.47	10103.84	12009.20	13914.57
Net Loan-Opening	18845.53	17175.04	15269.67	13364.31	11458.94
Additions during the year	226.34	0.00	0.00	0.00	0.00
Repayment during the year	1896.83	1905.37	1905.37	1905.37	1905.37
Net Loan-Closing	17175.04	15269.67	13364.31	11458.94	9553.57
Average Loan	18010.29	16222.36	14316.99	12411.62	10506.26
Rate of Interest (%)	9.0619	9.0610	9.0595	9.0572	9.0544
Interest	1632.08	1469.91	1297.04	1124.15	951.28

Return on Equity(“ROE”)

52. Clause (1)& (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.”

53. The petitioner has computed ROE at the rate of 19.610% after grossing up the ROE of 15.50% with MAT rate as per the above 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.

54. 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.

55. 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. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the ROE has been worked out. The details are given below:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	10777.36	10874.36	10874.36	10874.36	10874.36
Addition to Equity during the year	97.00	0.00	0.00	0.00	0.00
Closing Equity	10874.36	10874.36	10874.36	10874.36	10874.36
Average Equity	10825.86	10874.36	10874.36	10874.36	10874.36
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT rate for the year (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity (Pre Tax)	2122.95	2132.46	2132.46	2132.46	2132.46

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 petitioner has computed depreciation considering capital expenditure of ₹35931.51 lakh as on 31.3.2014 for Combined Asset-I & II for the 2014-19 tariff period.

58. We have considered the submissions of the petitioner and have allowed depreciation under Regulation 27 of the 2014 Tariff Regulations. The details of the depreciation allowed are given hereunder:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross block	35924.53	36247.87	36247.87	36247.87	36247.87
Additional Capitalisation	323.34	0.00	0.00	0.00	0.00
Gross block at the end of the year	36247.87	36247.87	36247.87	36247.87	36247.87
Average gross block	36086.20	36247.87	36247.87	36247.87	36247.87
Rate of Depreciation (%)	5.256	5.256	5.256	5.256	5.256
Depreciable Value	32477.58	32623.08	32623.08	32623.08	32623.08
Elapsed Life of the assets at beginning of the year	3	4	5	6	7
Weighted Balance Useful life of the assets	30	29	28	27	26
Remaining Depreciable Value	26175.94	24424.61	22519.25	20613.88	18708.51
Depreciation	1896.83	1905.37	1905.37	1905.37	1905.37

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

59. The petitioner has computed normative O&M Expenses as per sub-clause (a) of clause (3) of Regulation 29 of the 2014 Tariff Regulations. Accordingly, the

petitioner's entitlement to O&M Expenses have been worked out as given hereunder:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expense for line					
Norm (₹lakh/km)					
Double Circuit (Twin & Triple Conductor)	0.707	0.731	0.755	0.780	0.806
Line (km)					
400 kV D/C Gorakhpur-Lucknow line	263.933	263.933	263.933	263.933	263.933
Total O&M Expense (line) (₹lakh)	186.60	192.94	199.27	205.87	212.73
O&M Expense for Bay					
Norm (₹lakh/Bay)					
400 kV	60.30	62.30	64.37	66.51	68.71
Bays					
400 kV	10	10	10	10	10
Total O&M Expense (Bay) (₹lakh)	603.00	623.00	643.70	665.10	687.10
Total O&M Expense (line & Bay) (₹lakh)	789.60	815.94	842.97	870.97	899.83

60. 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 Company is due during 2014-19 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.

61. 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, we would like to clarify that any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.

62. The details of O&M Expenses allowed are given hereunder:-

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses Allowed	789.60	815.94	842.97	870.97	899.83

Interest on Working Capital (“IWC”)

63. Clause 1 (c) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specify 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;”

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

65. 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 interest on working capital allowed is as follows:-



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	118.44	122.39	126.45	130.65	134.97
O & M Expenses	65.80	67.99	70.25	72.58	74.99
Receivables	1102.53	1082.59	1057.87	1033.31	1008.91
Total	1286.77	1272.97	1254.56	1236.54	1218.87
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	173.71	171.85	169.37	166.93	164.55

Annual Transmission Charges

66. The detailed computation of the various components of the annual fixed charges for the transmission asset for the tariff period 2014-19 is summarised below:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Block					
Opening Gross Block	35924.53	36247.87	36247.87	36247.87	36247.87
Additional Capitalisation	323.34	0.00	0.00	0.00	0.00
Closing Gross Block	36247.87	36247.87	36247.87	36247.87	36247.87
Average Gross Block	36086.20	36247.87	36247.87	36247.87	36247.87
Depreciation					
Rate of Depreciation (%)	5.256	5.256	5.256	5.256	5.256
Depreciable Value	32477.58	32623.08	32623.08	32623.08	32623.08
Elapsed Life (Beginning of the year)	3	4	5	6	7
Weighted Balance Useful life of the assets	30	29	28	27	26
Remaining Depreciable Value	26175.94	24424.61	22519.25	20613.88	18708.51
Depreciation	1896.83	1905.37	1905.37	1905.37	1905.37
Interest on Loan					
Gross Normative Loan	25147.17	25373.51	25373.51	25373.51	25373.51
Cumulative Repayment upto Previous Year	6301.64	8198.47	10103.84	12009.20	13914.57
Net Loan-Opening	18845.53	17175.04	15269.67	13364.31	11458.94
Additions	226.34	0.00	0.00	0.00	0.00
Repayment during the year	1896.83	1905.37	1905.37	1905.37	1905.37
Net Loan-Closing	17175.04	15269.67	13364.31	11458.94	9553.57
Average Loan	18010.29	16222.36	14316.99	12411.62	10506.26
Weighted Average Rate of	9.0619	9.0610	9.0595	9.0572	9.0544



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Loan (%)					
Interest	1632.08	1469.91	1297.04	1124.15	951.28
Return on Equity					
Opening Equity	10777.36	10874.36	10874.36	10874.36	10874.36
Additions	97.00	0.00	0.00	0.00	0.00
Closing Equity	10874.36	10874.36	10874.36	10874.36	10874.36
Average Equity	10825.86	10874.36	10874.36	10874.36	10874.36
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT Rate for the year 2013-14 (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity (Pre Tax)	2122.95	2132.46	2132.46	2132.46	2132.46
Interest on Working Capital					
Maintenance Spares	118.44	122.39	126.45	130.65	134.97
O & M expenses	65.80	67.99	70.25	72.58	74.99
Receivables	1102.53	1082.59	1057.87	1033.31	1008.91
Total	1286.77	1272.97	1254.56	1236.54	1218.87
Interest	173.71	171.85	169.37	166.93	164.55
Annual Transmission Charges					
Depreciation	1896.83	1905.37	1905.37	1905.37	1905.37
Interest on Loan	1632.08	1469.91	1297.04	1124.15	951.28
Return on Equity	2122.95	2132.46	2132.46	2132.46	2132.46
Interest on Working Capital	173.71	171.85	169.37	166.93	164.55
O & M Expenses	789.60	815.94	842.97	870.97	899.83
Total	6615.17	6495.53	6347.21	6199.88	6053.48

Filing Fee and Publication Expenses

67. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 52 of the 2014 Tariff Regulations. 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 clause (1) of Regulation 52 of the 2014 Tariff Regulations.

Licence Fee and RLDC Fees and Charges

68. The petitioner has requested to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a), respectively, of Regulation 52 of the 2014 Tariff Regulations.

Service Tax

69. The petitioner has sought to recover Service Tax on Transmission Charges separately from the Respondents, if at any time service tax on transmission is withdrawn from negative list in future. We are of the view that the petitioner's prayer is premature.

Sharing of Transmission Charges

70. 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.

71. This Order disposes of Petition No. 544/TT/2014.

Sd/-

(Dr. M. K. Iyer)
Member

Sd/-

(A.S. Bakshi)
Member



ANNEXURE-I**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO****(₹ in lakh)**

Particulars-Asset I	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXVIII-S.No.1 DOCO-	9.33%	7816.00	0.00	7816.00
BOND XXIX-S.No.1 DOCO-	9.20%	5233.00	0.00	5233.00
BOND XXX-S.No.1 DOCO-	8.80%	4028.00	0.00	4028.00
BOND XXXI-S.No.4 DOCO-	8.90%	2753.00	0.00	2753.00
BOND XXXIII-S.No.5 DOCO-	8.64%	1621.00	0.00	1621.00
BOND XXXIV-ADDCAP FOR 2010-2011 Add Cap-	8.84%	0.00	242.20	242.20
BOND-XXXIV-Loan 6	8.84%	487.00	0.00	487.00
BOND-XXXV-ADDCAPFOR 2011-2012 Add Cap-	0.00%	0.00	0.00	0.00
BOND XXXVI-ADDCAP FOR 2011-2012 Add Cap-	0.00%	0.00	0.00	0.00
BOND XXXVII-ADDCAP FOR 2012-2013 Add Cap-	0.00%	0.00	0.00	0.00
BOND XXXVII-ADDCAP FOR 2013-2014 Add Cap-	0.00%	0.00	0.00	0.00
Total		21938.00	242.20	22180.20

(₹ in lakh)

Particulars – Combined Assets I & II	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXVIII-Loan 1-	9.33%	7900.00	0.00	7900.00
BOND XXIX-Loan 2	9.20%	5298.00	0.00	5298.00
BOND XXX-Loan 3-	8.80%	4135.00	0.00	4135.00
BOND XXXI-Loan 4-	8.90%	2898.00	0.00	2898.00
BOND XXXIII-Loan 5-	8.64%	1850.00	0.00	1850.00
BOND XXXIV-Add Cap for TL-	8.84%	242.20	0.00	242.20
BOND-XXXIV-Loan 6	8.84%	1426.80	0.00	1426.80
BOND-XXXV-ADDCAPFOR 2011-2012 Add Cap-	9.64%	0.00	48.00	48.00
BOND XXXVI-ADDCAP FOR 2011-2012 Add Cap-	9.35%	0.00	364.00	364.00
BOND XXXVII-ADDCAP FOR 2011-2012 Add Cap-	9.25%	0.00	101.12	101.12



Particulars – Combined Assets I & II	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXXVII-ADDCAP FOR 2012-2013 Add Cap-	9.25%	0.00	0.00	0.00
BOND XXXVII-ADDCAP FOR 2013-2014 Add Cap-	0.00%	0.00	0.00	0.00
Total		23750.00	513.12	24263.12



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

(₹ in lakh)

Details of Loan (Asset-I)	2010-11
Gross Opening Loan	21938.00
Cumulative Repayment of loan upto previous year	0.00
Net Loan Opening	21938.00
Additions during the year	242.20
Repayment during the year	0.00
Net Loan Closing	22180.20
Average Loan	22059.10
Weighted Average Rate of Interest (%)	9.08%
Interest	2003.96

(₹ in lakh)

Details of Loan (Combined Asset-I & II)	2011-12	2012-13	2013-14
Gross Opening Loan	23750.00	24263.12	24398.93
Cumulative Repayment of loan upto previous year	0.00	0.00	1099.83
Net Loan Opening	23750.00	24263.12	23299.10
Additions during the year	513.12	135.81	147.30
Repayment during the year	0.00	1099.83	1685.91
Net Loan Closing	24263.12	23299.10	21760.49
Average Loan	24006.56	23781.11	22529.80
Weighted Average Rate of Interest (%)	9.07	9.07	9.06
Interest	2177.68	2156.94	2042.09



ANNEXURE-II**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO****(₹ in lakh)**

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXVIII-Loan 1-	9.33%	7900.00	0.00	7900.00
BOND XXIX-Loan 2	9.20%	5298.00	0.00	5298.00
BOND XXX-Loan 3-	8.80%	4135.00	0.00	4135.00
BOND XXXI-Loan 4-	8.90%	2898.00	0.00	2898.00
BOND XXXIII-Loan 5-	8.64%	1850.00	0.00	1850.00
BOND XXXIV-Add Cap for TL-	8.84%	242.20	0.00	242.20
BOND-XXXIV-Loan 6	8.84%	1426.80	0.00	1426.80
BOND-XXXV-ADDCAPFOR 2011-2012 Add Cap-	9.64%	48.00	0.00	48.00
BOND XXXVI-ADDCAP FOR 2011-2012 Add Cap-	9.35%	364.00	0.00	364.00
BOND XXXVII-ADDCAP FOR 2011-2012 Add Cap-	9.25%	101.12	0.00	101.12
BOND XXXVII-ADDCAP FOR 2012-2013 Add Cap-	9.25%	135.81	0.00	135.81
BOND XXXVII-ADDCAP FOR 2013-2014 Add Cap-	9.25%	146.07	0.00	146.07
BOND XXXVII-ADDCAP FOR 2013-2014 Add Cap-	9.25%	1.23	0.00	1.23
Total		24546.23	0.00	24546.23



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

(₹ in lakh)

Details of Loan (Combined Asset-I & II)	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	24546.23	24546.23	24546.23	24546.23	24546.23
Cumulative Repayment of loan upto previous year	2785.75	4764.91	6779.99	8819.34	10858.69
Net Loan Opening	21760.48	19781.32	17766.24	15726.89	13687.54
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	1979.16	2015.08	2039.35	2039.35	2039.35
Net Loan Closing	19781.32	17766.24	15726.89	13687.54	11648.19
Average Loan	20770.90	18773.78	16746.57	14707.22	12667.87
Weighted Average Rate of Interest (%)	9.06	9.06%	9.06%	9.06%	9.05%
Interest	1882.24	1701.10	1517.15	1332.07	1147.00

