

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 389/TT/2014**

**Coram:**

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

**Date of Hearing : 13.01.2016  
Date of Order : 29.01.2016**

**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 tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 of Combined Assets of 400 kV D/C Ranchi-Sipat transmission line with associated bays at Ranchi and Sipat Sub-station and 40% FSC on 400 kV Ranchi-Sipat Line at Ranchi Sub-station under Kahalgaon-II Phase-II transmission system in Western Region 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 -122 001 (Haryana).

.....**Petitioner**

**Versus**

1. Madhya Pradesh Power Management Company Ltd.  
Shakti Bhawan, Rampur, Jabalpur-482008
2. Maharashtra State Electricity Distribution Co. Ltd.  
Prakashgad, 4<sup>th</sup> Floor, Bandra (East), Mumbai-400052
3. Gujarat Urja Vikas Nigam Ltd.  
Sardar Patel Vidyut Bhawan,  
Race Course Road  
Vadodara-390007



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

.....**Respondents**

The following were present:

For Petitioner:           Shri Vivek Kumar Singh, PGCIL  
                                  Shri S.S Raju, PGCIL  
                                  Shri D.K Karma, PGCIL  
                                  Smt. Sonam Gangwar, PGCIL  
                                  Shri M.M Mondal, PGCIL  
                                  Shri S.K Venkatesan, PGCIL  
                                  Shri Rakesh Prasad, PGCIL

For Respondent:       None

### **ORDER**

The present petition has been filed by Power Grid Corporation of India Ltd. ('the petitioner') for truing up of capital expenditure for 2009-14 tariff period under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations") and determination of tariff for 2014-19 tariff period under Central



Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) for Combined Assets of 400 kV D/C Ranchi-Sipat transmission line with associated bays at Ranchi and Sipat Sub-station and 40% FSC on 400 kV Ranchi-Sipat Line at Ranchi Sub-station under Kahalgaon-II Phase-II transmission system in Western Region (hereinafter referred as “the transmission asset”).

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

3. The petitioner has served the petition to the respondents and notice of this application has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003 (“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 13.1.2016. None of the respondents have filed any reply to the petition. 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 execution of transmission asset associated with Combined Assets of 400 kV D/C Ranchi-Sipat transmission line with associated bays at Ranchi and Sipat Sub-station and 40% FSC on 400 kV Ranchi-Sipat Line at Ranchi Sub-station under Kahalgaon-II Phase-II transmission system in Western Region was accorded by Government of



India vide its letter no. 12/21/2003-PG dated 24.1.2005 at an estimated cost of ₹46402 lakh, which included IDC of ₹2898 lakh. Subsequently, Revised Cost Estimates (RCE) was accorded by the Board of Directors of the petitioner company vide Memorandum No.C/CP/RCE/Kahalgaon-II Phase-II dated 16.2.2009 for an estimated cost of ₹57283.96 lakh including IDC of ₹5770 lakh based on 3<sup>rd</sup> quarter 2008 price level. The date of commercial operation of the combined asset is 1.3.2009.

- b. The tariff from COD to 31.3.2009 was allowed vide order dated 13.5.2010 in Petition No. 247/2009 in accordance with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004.
- c. The tariff for 2009-14 tariff period was allowed vide order dated 15.2.2011 in Petition No. 226/2010 based on admitted capital cost of ₹52898.71 lakh and debt:equity ratio of 70:30 for the Combined Assets as on 31.3.2009 in accordance with the 2009 Tariff Regulations. The tariff allowed vide order dated 15.2.2011 for the tariff period 2009-14 is as under:-

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	2837.87	2896.43	2911.22	2911.22	2911.22
Interest on Loan	3338.85	3142.35	2890.65	2619.38	2348.26
Return on Equity	2817.63	2875.79	2890.49	2890.49	2890.49
Interest on WC	215.92	215.88	212.97	209.14	205.40
O&M Expenses	568.82	601.43	635.87	672.20	710.48
<b>Total</b>	<b>9779.08</b>	<b>9731.88</b>	<b>9541.20</b>	<b>9302.43</b>	<b>9065.85</b>

- d. The MAT rate applicable as on 2008-09 was considered to arrive at rate of return on equity for the 2009-14 tariff period, 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 the 2009-14 tariff period.

e. The instant petition was filed on 20.9.2014.

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

5. The truing up of tariff for 2009-14 tariff period has been determined as discussed below.

#### **Capital Cost**

6. The petitioner has claimed admitted capital cost of ₹52898.71 lakh for the Combined Assets as on 31.3.2009 for the purpose of tariff. Further, the petitioner has claimed aggregate additional capitalisation of ₹2001.22 lakh for the Combined Assets for the 2009-14 tariff period.

7. Last proviso to Clause (2) of Regulation 7 of the 2009 Tariff Regulations provides that:-

“Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2009 duly trued up by excluding un-discharged liability, if any, as on 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14, as may be admitted by the Commission, shall form the basis for determination of tariff”.

8. The capital cost admitted as on 31.3.2009 vide order dated 13.5.2010 has been considered as the opening capital cost as on 1.4.2009 for determination of tariff in accordance with Regulation 7 of the 2009 Tariff Regulations. The admitted capital cost of ₹52898.71 lakh for the Combined Assets as on 1.4.2009 has been considered to work out the trued up tariff for the 2009-14 tariff period.



### **Additional Capital Expenditure**

9. The petitioner has claimed actual additional capitalization of ₹1658.56 lakh in 2009-10, ₹169.67 lakh in 2010-11, ₹150.04 lakh in 2011-12, and ₹22.95 lakh in 2012-13 (total ₹2001.22 lakh for the 2009-14 tariff period) for the Combined Assets. The petitioner has also submitted the Auditor's Certificate for the cost incurred.

10. The petitioner has claimed that additional capitalization in 2009-10 is on account of balance and retention payments for which works have been executed within cut-off date in accordance with Clause (1) of Regulation 9 of the 2009 Tariff Regulations and towards Balance and Retention payment. The petitioner has claimed additional capitalization for 2010-14 beyond the cut-off date under Clause (2) of Regulation 9 of the 2009 Tariff Regulations.

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

“(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;...

.....

Provided that the details of works included in the original scope of work along with estimates of expenditure, undischarged liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff”

12. Clause (2) of Regulation 9 of the 2009 Tariff Regulations provides as follows:-

“(2) The capital expenditure incurred on the following counts after the cut-off date may, in its discretion, 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;



(ii) Change in law; ....

.....

(viii) Any undischarged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date, after prudence check of the details of such deferred liability, total estimated cost of package, reason for such withholding of payment and release of such payments etc.”

13. The petitioner was directed, vide ROP dated 13.1.2016, to submit the amount and nature of works against which the payments are withheld. Further, petitioner was directed to confirm whether all balance/retention payments for the instant assets have been claimed or some payments are still to be claimed. In reply, the petitioner vide affidavit dated 28.1.2016 submitted that the Commission vide order dated 15.2.2011 in Petition No. 226/2010 has already allowed the additional capital expenditure which is trued up in the instant petition. It is further submitted by the petitioner that the entire scope of the project is complete and there is no additional capitalization/ balance-retention payment for 2014-19 tariff period.

14. The total capital cost of the transmission asset including additional capitalization incurred during 2009-14, works out to ₹54899.93 lakh for the Combined Assets. The actual additional capitalization claimed by the petitioner is as per the 2009 Tariff Regulations and is within the approved cost. The actual additional capital expenditure for the purpose of true up of tariff of 2009-14 tariff period has been allowed as shown in following table:-



(₹ in lakh)

Cost as per Investment Approval is 57283.96 lakh								
Particulars	Admitted capital cost as on 31.3.2009	Additional capitalization					Total additional capitalization	Total capital cost including additional capitalization
		2009-10	2010-11	2011-12	2012-13	2013-14		
<b>Combined Assets</b>								
Approved in order dated 15.2.2011	52898.71	1657.49	560.50	0.00	0.00	0.00	2217.99	55116.70
Actual	52898.71	1658.56	169.67	150.04	22.95	0.00	2001.22	54899.93

**Debt: Equity**

15. Clause 2 of Regulation 12 of the 2009 Tariff Regulations provides that:

“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.”

16. The petitioner has claimed true up Annual Fixed Charge based on debt:equity ratio of 70:30 as on 31.3.2009 as considered by the Commission in its order dated 15.2.2011 in Petition No.226/2010. The transmission assets covered in the instant petition were commissioned prior to 1.4.2009.

17. The admitted debt:equity ratio of 70:30 as on 31.3.2009 has been considered as opening debt:equity ratio as on 1.4.2009 for the purpose of trueing up of the approved tariff for 2009-14 tariff period as given under:-

(₹ in lakh)		
Funding	Amount	(%)
<b>Combined Assets</b>		
Debt	37029.10	70.00
Equity	15869.61	30.00
<b>Total</b>	<b>52898.71</b>	<b>100.00</b>





18. With respect to additional capitalization, the petitioner has submitted that the additional capitalization has been funded through debt:equity ratio of 70:30 for 2010-11. The actual loan deployed for all the years are at 70% and balance 30% amount has been deployed as equity. The petitioner was directed to submit an undertaking mentioning the actual equity infused for additional capital in 2009-14 tariff period. The petitioner vide affidavit dated 28.1.2016, has submitted that, actual loan deployed in Form-13 is 70% of additional capitalization for 2009-14, therefore actual equity infused for additional capitalization during 2009-14 tariff period is 30% for the assets covered under the subject petition as indicated in Form-1A as per Clause (1) and (3) of Regulation 12 of the 2009 Tariff Regulations.

19. The overall debt equity as on 31.3.2014 including additional capitalization is as under:-

(₹ in lakh)		
Funding	Amount	(%)
<b>Combined Assets</b>		
Debt	38429.95	70.00
Equity	16469.98	30.00
<b>Total</b>	<b>54899.93</b>	<b>100.00</b>

### **Interest on Loan (“IOL”)**

20. Regulation 16 of the 2009 Tariff Regulations provides the methodology for working out weighted average rate of interest on loan. The petitioner has submitted the weighted average rate of interest on loan based on its actual loan portfolio and rate of interest.



21. 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)					
Interest on Loan	2009-10	2010-11	2011-12	2012-13	2013-14
<b>Combined Assets</b>					
Approved in order dated 15.2.2011	3338.85	3142.35	2890.65	2619.38	2348.26
As claimed by petitioner	3338.86	3129.92	2871.23	2606.72	2337.47
Allowed after true up	3338.88	3129.94	2871.24	2606.73	2337.47

22. The variation in IOL worked out with reference to the IOL allowed vide order 15.2.2011 is due to variation in additional capitalisation.

### **Return on Equity ("ROE")**

23. Clause (3), (4) and (5) of Regulation 15 of the 2009 Tariff Regulations provides as follows:-

“(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.”

24. The petitioner has submitted that MAT rate of 11.330% applicable for 2008-09 was considered in the order dated 15.2.2011. However, for truing up purpose, the computation of ROE for the tariff period 2009-14 has been done 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 (%)	Grossed up RoE (Base rate/(1-t)) (%)
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

25. Accordingly, the RoE as trued up is shown in the table below:-

Particulars	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 15.2.2011	2817.63	2875.79	2890.49	2890.49	2890.49
As claimed by the petitioner	3009.95	3173.29	3185.69	3190.72	3229.76
Allowed after trued up	3009.95	3173.29	3185.69	3190.72	3229.76

26. The variation in return on equity worked out with reference to the return on equity allowed vide order 15.2.2011 is due to variation in additional capitalisation and increase in the applicable MAT rate for the purpose of grossing up of base rate of return on equity.



## **Depreciation**

27. 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”

28. 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 year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.”

29. The Commission, in its order dated 15.2.2011 in Petition No. 226/2010, has worked out the depreciation in accordance with Regulation 17 of the 2009 Tariff Regulations.

30. The weighted average useful life of the transmission asset has been considered as per Regulations 17 (4) read with Regulations 3 (42) of the 2009 Tariff Regulations. For the purpose of calculation, the weighted average useful life of the asset as on COD has been considered as 33 years. 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	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 15.2.2011	2837.87	2896.43	2911.22	2911.22	2911.22
As claimed by petitioner	2837.90	2886.17	2894.61	2899.17	2899.78
Allowed after true up	2837.90	2886.16	2894.60	2899.17	2899.78

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

31. 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.

32. The O&M Expenses claimed by the petitioner for the 2009-14 tariff period are same as that approved in the tariff order dated 15.2.2011 in Petition No.226/2010. Accordingly, the O&M Expenses claimed by the petitioner, allowed and trued up are the same, and they are as follows:-

**(₹ in lakh)**

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 15.2.2011	568.82	601.43	635.87	672.20	710.48
As claimed by the petitioner	568.82	601.43	635.87	672.20	710.48
Allowed after trued up	568.82	601.43	635.87	672.20	710.48

### **Interest on working capital (“IWC”)**

33. 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 on working capital.



34. The petitioner has submitted that the rate of interest on working capital has been considered as 12.25% as per Clause (3) 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.

35. The Commission, vide order dated 15.2.2011 in Petition No. 226/2010 approved rate of interest on working capital of 12.25% applicable for 2008-09. In accordance with Clause (3) 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 prior to 1.4.2009, shall be equal to short-term Prime Lending Rate as applicable as on 1.4.2009. State Bank of India short-term Prime Lending Rate on 1.4.2009 was 12.25%. Therefore, interest rate of 12.25% has been considered to work out the interest on working capital in the instant case.

36. The IWC trued up is as under:-

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	85.32	90.21	95.38	100.83	106.57
O & M expenses	47.40	50.12	52.99	56.02	59.21
Receivables	1662.58	1668.74	1634.30	1597.28	1564.92
Total	1795.30	1809.07	1782.66	1754.13	1730.69
Rate of Interest (%)	12.25	12.25	12.25	12.25	12.25
<b>Interest</b>	<b>219.92</b>	<b>221.61</b>	<b>218.38</b>	<b>214.88</b>	<b>212.01</b>

37. The summary of IWC approved vide order dated 15.2.2011, IWC claimed by the petitioner and the IWC allowed after true up are as follows:-



(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 15.2.2011	215.92	215.88	212.97	209.14	205.40
As claimed by the petitioner	219.92	221.61	218.38	214.88	212.01
Allowed after trued up	219.92	221.61	218.38	214.88	212.01

38. The variation in IWC is on account of change in receivables due to variation in depreciation, interest and ROE on account of variation in additional capital expenditure and due to variation in ROE on account of applicable MAT rate during the 2009-14.

#### **ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD**

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

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
<b>Gross Block</b>					
Opening Gross Block	52898.71	54557.27	54726.94	54876.98	54899.93
Additional Capitalization	1658.56	169.67	150.04	22.95	0.00
Closing Gross block	54557.27	54726.94	54876.98	54899.93	54899.93
Average Gross block	53727.99	54642.11	54801.96	54888.46	54899.93
<b>Depreciation</b>					
Rate of Depreciation (%)	5.282	5.282	5.282	5.282	5.282
Depreciable Value	48355.19	49177.89	49321.76	49399.61	49409.94
Elapsed Life of the assets at beginning of the year	0	1	2	3	4
Weighted Balance Useful life of the assets	33	32	31	30	29
Remaining Depreciable Value	48015.40	48838.10	46095.81	46221.92	43333.08
Depreciation	2837.90	2886.16	2894.60	2899.17	2899.78



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
<b>Interest on Loan</b>					
Gross Normative Loan	37029.10	38190.09	38308.86	38413.89	38429.95
Cumulative Repayment upto Previous Year	339.79	3177.69	6063.85	8958.46	11857.63
Net Loan-Opening	36689.31	35012.40	32245.00	29455.43	26572.32
Additions	1160.99	118.77	105.03	16.07	0.00
Repayment during the year	2837.90	2886.16	2894.60	2899.17	2899.78
Net Loan-Closing	35012.40	32245.00	29455.43	26572.32	23672.54
Average Loan	35850.85	33628.70	30850.22	28013.88	25122.43
Weighted Average Rate of Interest on Loan (%)	9.3132	9.3073	9.3070	9.3051	9.3043
Interest	3338.88	3129.94	2871.24	2606.73	2337.47
<b>Return on Equity</b>					
Opening Equity	15869.61	16367.18	16418.08	16463.09	16469.98
Additions	497.57	50.90	45.01	6.89	0.00
Closing Equity	16367.18	16418.08	16463.09	16469.98	16469.98
Average Equity	16118.40	16392.63	16440.59	16466.54	16469.98
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT rate for the respective year (%)	16.995	19.931	20.008	20.008	20.961
Rate of Return on Equity (Pre Tax) (%)	18.674	19.358	19.377	19.377	19.610
Return on Equity (Pre Tax)	3009.95	3173.29	3185.69	3190.72	3229.76
<b>Interest on Working Capital</b>					
Maintenance Spares	85.32	90.21	95.38	100.83	106.57
O & M Expenses	47.40	50.12	52.99	56.02	59.21
Receivables	1662.58	1668.74	1634.30	1597.28	1564.92
Total	1795.30	1809.07	1782.66	1754.13	1730.69
Interest	219.92	221.61	218.38	214.88	212.01
<b>Annual Transmission Charges</b>					
Depreciation	2837.90	2886.16	2894.60	2899.17	2899.78
Interest on Loan	3338.88	3129.94	2871.24	2606.73	2337.47
Return on Equity	3009.95	3173.29	3185.69	3190.72	3229.76
Interest on Working Capital	219.92	221.61	218.38	214.88	212.01





Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
O & M Expenses	568.82	601.43	635.87	672.20	710.48
<b>Total</b>	<b>9975.47</b>	<b>10012.42</b>	<b>9805.78</b>	<b>9583.70</b>	<b>9389.50</b>

### **DETERMINATION OF ANNUAL TRANSMISSION CHARGES FOR 2014-19**

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

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	2899.78	2899.78	2899.78	2899.78	2899.78
Interest on Loan	2067.68	1797.90	1528.10	1258.30	988.52
Return on Equity	3229.76	3229.76	3229.76	3229.76	3229.76
Interest on Working Capital	224.52	219.51	214.52	209.58	204.69
O&M Expenses	648.68	670.42	692.58	715.56	739.31
<b>Total</b>	<b>9070.42</b>	<b>8817.37</b>	<b>8564.74</b>	<b>8312.98</b>	<b>8062.06</b>

41. 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
<b>Combined Assets</b>					
Maintenance Spares	97.30	100.56	103.89	107.33	110.90
O & M expenses	54.06	55.87	57.72	59.63	61.61
Receivables	1511.74	1469.56	1427.46	1385.50	1343.68
Total	1663.10	1625.99	1589.07	1552.46	1516.19
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest</b>	<b>224.52</b>	<b>219.51</b>	<b>214.52</b>	<b>209.58</b>	<b>204.69</b>

### **Capital Cost**

42. Clause (1) and (3) of Regulation 9 of the 2014 Tariff Regulations provide 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.”

43. The trued up capital cost of ₹54899.93 lakh for the Combined Assets as on 1.4.2014 is considered for the purpose of tariff for tariff period 2014-19.

#### **Additional Capital Expenditure**

44. The petitioner has not claimed any additional expenditure for the tariff period 2014-19. Accordingly, no additional capital expenditure has been considered for the 2014-19 tariff period.

#### **Debt: Equity Ratio**

45. Clause 3 and 4 of Regulation 19 of the 2014 Tariff Regulations provide 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.

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2014, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2014, the Commission shall approve the debt:equity ratio based on actual information provided by the generating company or the transmission licensee as the case may be.”

46. The petitioner has considered debt:equity ratio as 70:30. Debt equity ratio of 70:30 as on 31.3.2009 was considered by the Commission in its order dated 15.2.2011 in Petition No. 226/2010. The admitted debt equity ratio of 70:30 for the tariff period ending 31.3.2014 has been considered as opening debt:equity ratio as on 1.4.2014. The details of the debt:equity considered for the purpose of tariff for 2014-19 tariff period is as follows:-



(₹ in lakh)		
Combined Assets	Admitted as on 31.3.2014	
Funding	Amount	(%)
Debt	38429.95	70.00
Equity	16469.98	30.00
<b>Total</b>	<b>54899.93</b>	<b>100.00</b>

### **Interest on Loan (“IOL”)**

47. Clause (5) and (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.”

48. 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 Normative Loan	38429.95	38429.95	38429.95	38429.95	38429.95
Cumulative Repayment upto Previous Year	14757.41	17657.18	20556.96	23456.74	26356.52
Net Loan-Opening	23672.54	20772.77	17872.99	14973.21	12073.44



Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	2899.78	2899.78	2899.78	2899.78	2899.78
Net Loan-Closing	20772.77	17872.99	14973.21	12073.44	9173.66
Average Loan	22222.66	19322.88	16423.10	13523.32	10623.55
Weighted Average Rate of Interest on Loan (%)	9.3044	9.3045	9.3046	9.3047	9.3050
<b>Interest</b>	<b>2067.68</b>	<b>1797.89</b>	<b>1528.10</b>	<b>1258.31</b>	<b>988.52</b>

### **Return on Equity (“ROE”)**

49. 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.”

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

51. 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.

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. 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 allowing 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 determined by the Commission is given below:-

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	16469.98	16469.98	16469.98	16469.98	16469.98
Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Equity	16469.98	16469.98	16469.98	16469.98	16469.98
Average Equity	16469.98	16469.98	16469.98	16469.98	16469.98
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
Tax 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
<b>Return on Equity (Pre Tax)</b>	<b>3229.76</b>	<b>3229.76</b>	<b>3229.76</b>	<b>3229.76</b>	<b>3229.76</b>

### **Depreciation**

53. 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."

54. The petitioner has computed depreciation considering capital expenditure of ₹54899.93 lakh for Combined Assets as on 31.3.2014. We have considered the submission made by the petitioner with reference to depreciation. Depreciation is allowed as per the methodology provided 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
<b>Combined Assets</b>					
Opening Gross block	54899.93	54899.93	54899.93	54899.93	54899.93
Additions during the year due to projected additional capitalization	0.00	0.00	0.00	0.00	0.00
Closing Gross block	54899.93	54899.93	54899.93	54899.93	54899.93
Rate of Depreciation	5.282	5.282	5.282	5.282	5.282
Depreciable Value	49409.94	49409.94	49409.94	49409.94	49409.94
Remaining Depreciable Value	40433.30	37533.52	34633.74	31733.97	28834.19
<b>Depreciation</b>	<b>2899.78</b>	<b>2899.78</b>	<b>2899.78</b>	<b>2899.78</b>	<b>2899.78</b>

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

55. 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 has been worked out as given hereunder:-

Particulars		2014-15	2015-16	2016-17	2017-18	2018-19
<b>Combined Assets</b>						
Actual No of bays (nos.)	400 kV Bays	6	6	6	6	6
Norms as per Regulation	400 kV Bays (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71
Total (₹ in lakh)		361.8	373.8	386.22	399.06	412.26
Line length (km)	Double circuit/ double conductor (km)	405.77	405.77	405.77	405.77	405.77
	(₹ lakh/km)	0.707	0.731	0.755	0.78	0.806
Total (₹ in lakh)		286.88	296.62	306.36	316.50	327.05
<b>Total (₹ in lakh)</b>		<b>648.68</b>	<b>670.42</b>	<b>692.58</b>	<b>715.56</b>	<b>739.31</b>

56. The petitioner has submitted that O&M Expenses for the 2014-19 tariff period have been arrived on the basis of normalized actual O&M Expenses during the period 2008-13. The petitioner has further submitted that the wage revision of the employees of the petitioner is due during 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.

57. 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.

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

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Assets	<b>648.68</b>	<b>670.42</b>	<b>692.58</b>	<b>715.56</b>	<b>739.31</b>

### **Interest on Working Capital (“IWC”)**

59. 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;”

60. The petitioner has submitted that IWC was computed 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 for the purpose of computation of tariff is 13.50%.

61. 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 as determined is shown in the table below:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	97.30	100.56	103.89	107.33	110.90
O & M expenses	54.06	55.87	57.71	59.63	61.61
Receivables	1511.74	1469.56	1427.46	1385.50	1343.68
Total	1663.10	1625.99	1589.06	1552.46	1516.18
Rate of Interest	13.50	13.50	13.50	13.50	13.50
<b>Interest</b>	<b>224.52</b>	<b>219.51</b>	<b>214.52</b>	<b>209.58</b>	<b>204.68</b>

### Annual Transmission Charges

62. The Annual Transmission Charges allowed for the transmission asset is given hereunder:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Combined Assets</b>					
Depreciation	2899.78	2899.78	2899.78	2899.78	2899.78
Interest on Loan	2067.68	1797.89	1528.10	1258.31	988.52
Return on Equity	3229.76	3229.76	3229.76	3229.76	3229.76
Interest on Working Capital	224.52	219.51	214.52	209.58	204.68
O & M Expenses	648.68	670.42	692.58	715.56	739.31
<b>Total</b>	<b>9070.42</b>	<b>8817.36</b>	<b>8564.74</b>	<b>8313.00</b>	<b>8062.06</b>

63. The detailed computation of various components of annual fixed charges for the tariff period 2014-19 is summarized below:-



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Gross Block</b>					
Opening Gross Block	54899.93	54899.93	54899.93	54899.93	54899.93
Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	54899.93	54899.93	54899.93	54899.93	54899.93
Average Gross Block	54899.93	54899.93	54899.93	54899.93	54899.93
<b>Depreciation</b>					
Rate of Depreciation	5.282	5.282	5.282	5.282	5.282
Depreciable Value	49409.94	49409.94	49409.94	49409.94	49409.94
Elapsed Life of the assets at beginning of the year	5	6	7	8	9
Weighted Balance Useful life of the assets	28	27	26	25	24
Remaining Depreciable Value	40433.30	37533.52	34633.74	31733.97	28834.19
Depreciation	2899.78	2899.78	2899.78	2899.78	2899.78
<b>Interest on Loan</b>					
Gross Normative Loan	38429.95	38429.95	38429.95	38429.95	38429.95
Cumulative Repayment upto Previous Year	14757.41	17657.18	20556.96	23456.74	26356.52
Net Loan-Opening	23672.54	20772.77	17872.99	14973.21	12073.44
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	2899.78	2899.78	2899.78	2899.78	2899.78
Net Loan-Closing	20772.77	17872.99	14973.21	12073.44	9173.66
Average Loan	22222.66	19322.88	16423.10	13523.32	10623.55
Weighted Average Rate of Interest on Loan (%)	9.3044	9.3045	9.3046	9.3047	9.3050
Interest	2067.68	1797.89	1528.10	1258.31	988.52
<b>Return on Equity</b>					
Opening Equity	16469.98	16469.98	16469.98	16469.98	16469.98
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	16469.98	16469.98	16469.98	16469.98	16469.98
Average Equity	16469.98	16469.98	16469.98	16469.98	16469.98
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)	3229.76	3229.76	3229.76	3229.76	3229.76
<b>Interest on Working Capital</b>					
Maintenance Spares	97.30	100.56	103.89	107.33	110.90
O & M expenses	54.06	55.87	57.71	59.63	61.61
Receivables	1511.74	1469.56	1427.46	1385.50	1343.68
Total	1663.10	1625.99	1589.06	1552.46	1516.18



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest	224.52	219.51	214.52	209.58	204.68
<b>Annual Transmission Charges</b>					
Depreciation	2899.78	2899.78	2899.78	2899.78	2899.78
Interest on Loan	2067.68	1797.89	1528.10	1258.31	988.52
Return on Equity	3229.76	3229.76	3229.76	3229.76	3229.76
Interest on Working Capital	224.52	219.51	214.52	209.58	204.68
O & M Expenses	648.68	670.42	692.58	715.56	739.31
<b>Total</b>	<b>9070.42</b>	<b>8817.36</b>	<b>8564.74</b>	<b>8313.00</b>	<b>8062.06</b>

### **Filing Fee and Publication Expenses**

64. 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**

65. The petitioner has requested to allow the petitioner to bill and recover licence 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**

66. 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.

### **Deferred Tax Liability**

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

### **Sharing of Transmission Charges**

68. 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.

69. This order disposes of Petition No. 389/TT/2014.

sd/-

**(Dr. M. K. Iyer)**  
**Member**

sd/-

**(A.S. Bakshi)**  
**Member**



**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO DURING TARIFF  
PERIOD 2009-14**

**COMBINED ASSETS**

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
BOND XVIII-DOCO-01-JAN 2009-	8.15	100.00	0.00	100.00
BOND XVIII-DOCO-01-MAR-2009-	8.15	26.00	0.00	26.00
BOND XIX-DOCO- 01-JAN-2009	9.25	8704.00	0.00	8704.00
BOND XIX-DOCO-01-MAR-2009	9.25	556.00	0.00	556.00
BOND XXI-DOCO-01-JAN-2009	8.73	2852.00	0.00	2852.00
BOND XXI-DOCO-01-MARCH-2009	8.73	158.00	0.00	158.00
BOND XXII-DOCO-1-JAN-2009	8.68	3841.00	0.00	3841.00
BOND XXII-DOCO-01-MAR-2009-	8.68	232.00	0.00	232.00
BOND XXIV-DOCO-01-JAN-2009-	9.95	5504.00	0.00	5504.00
BOND XXIV-DOCO-01-MAR-2009-	9.95	363.00	0.00	363.00
BOND XXVII-DOCO-01-JAN-2009-	9.47	8831.00	0.00	8831.00
BOND XXVII-DOCO-01-MAR-2009-	9.47	769.00	0.00	769.00
BOND XXVIII-DOCO DRAWAL ON-01-JAN-2009-01-JAN-2009	9.33	4335.46	0.00	4335.46
BOND XXVIII-DOCO DRAWAL ON -01-MAR-2009-01-MAR-2009-	9.33	87.54	0.00	87.54
BOND XXX-ADD CAP FOR 2009-2010-Loan 1-	8.80	0.00	277.00	277.00
BOND XXXI-ADD CAP FOR 2009-2010-Loan 2-	8.90	0.00	883.99	883.99
BOND XXXI-ADD CAP FOR 2010-2011-Loan 3-	8.90	0.00	118.77	118.77
BOND XXXI-ADD CAP FOR 2011-2012-Loan 4-	8.90	0.00	105.03	105.03
BOND XXXI-ADD CAP FOR 2011-2012-Loan 4-	8.90	0.00	16.07	16.07
<b>Total</b>		<b>36359.00</b>	<b>1400.86</b>	<b>37759.86</b>



**WEIGHTED AVERAGE RATE OF INTEREST ON LOAN DURING TARIFF  
PERIOD2009-14**

**COMBINED ASSETS**

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	36359.00	37519.99	37638.76	37743.79	37759.86
Cumulative Repayments of Loans upto Previous Year	0.00	10.50	1871.83	4533.16	7563.08
Net Loans Opening	36359.00	37509.49	35766.93	33210.63	30196.78
Add: Drawal(s) during the year	1160.99	118.77	105.03	16.07	0.00
Less: Repayment(s) of Loan during the year	10.50	1861.33	2661.33	3029.92	3146.66
Net Closing Loan	37509.49	35766.93	33210.63	30196.78	27050.12
Average Net Loan	36934.25	36638.21	34488.78	31703.71	28623.45
Interest on Loan	3439.78	3410.04	3209.88	2950.07	2663.21
<b>Rate of Interest on Loan (%)</b>	<b>9.3132</b>	<b>9.3073</b>	<b>9.3070</b>	<b>9.3051</b>	<b>9.3043</b>



**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO DURING TARIFF  
PERIOD 2014-19**

**COMBINED ASSETS**

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND XVIII-DOCO-01-JAN 2009-	8.15	100.00	0.00	100.00
BOND XVIII-DOCO-01-MAR-2009-	8.15	26.00	0.00	26.00
BOND XIX-DOCO- 01-JAN-2009	9.25	8704.00	0.00	8704.00
BOND XIX-DOCO-01-MAR-2009	9.25	556.00	0.00	556.00
BOND XXI-DOCO-01-JAN-2009	8.73	2852.00	0.00	2852.00
BOND XXI-DOCO-01-MARCH-2009	8.73	158.00	0.00	158.00
BOND XXII-DOCO-1-JAN-2009	8.68	3841.00	0.00	3841.00
BOND XXII-DOCO-01-MAR-2009-	8.68	232.00	0.00	232.00
BOND XXIV-DOCO-01-JAN-2009-	9.95	5504.00	0.00	5504.00
BOND XXIV-DOCO-01-MAR-2009-	9.95	363.00	0.00	363.00
BOND XXVII-DOCO-01-JAN-2009-	9.47	8831.00	0.00	8831.00
BOND XXVII-DOCO-01-MAR-2009-	9.47	769.00	0.00	769.00
BOND XXVIII-DOCO DRAWAL ON-01-JAN-2009-01-JAN-2009	9.33	4335.46	0.00	4335.46
BOND XXVIII-DOCO DRAWAL ON -01-MAR-2009-01-MAR-2009-	9.33	87.54	0.00	87.54
BOND XXX-ADD CAP FOR 2009-2010-Loan 1-	8.80	277.00	0.00	277.00
BOND XXXI-ADD CAP FOR 2009-2010-Loan 2-	8.90	883.99	0.00	883.99
BOND XXXI-ADD CAP FOR 2010-2011-Loan 3-	8.90	118.77	0.00	118.77
BOND XXXI-ADD CAP FOR 2011-2012-Loan 4-	8.90	105.03	0.00	105.03
BOND XXXI-ADD CAP FOR 2011-2012-Loan 4-	8.90	16.07	0.00	16.07
<b>Total</b>	<b>171.52</b>	<b>37759.86</b>	<b>0.00</b>	<b>37759.86</b>



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

**COMBINED ASSETS**

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	37759.86	37759.86	37759.86	37759.86	37759.86
Cumulative Repayments of Loans upto Previous Year	10709.74	13856.40	17003.06	20149.72	23296.38
Net Loans Opening	27050.12	23903.46	20756.80	17610.14	14463.48
Add: Drawal(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	3146.66	3146.66	3146.66	3146.66	3146.66
Net Closing Loan	23903.46	20756.80	17610.14	14463.48	11316.82
Average Net Loan	25476.79	22330.13	19183.47	16036.81	12890.15
Interest on Loan	2370.46	2077.70	1784.94	1492.18	1199.43
<b>Rate of Interest on Loan (%)</b>	<b>9.3044</b>	<b>9.3045</b>	<b>9.3046</b>	<b>9.3047</b>	<b>9.3050</b>

