

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 507/TT/2014**

**Coram:**

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

**Date of Hearing : 02.12.2015  
Date of Order : 22.12.2015**

**In the matter of:**

Truing up of transmission tariff for 2009-14 tariff period and determination of transmission tariff for 2014-19 tariff period for 400 KV S/C Meramundali-Jeypore Transmission line along with extension of Meramundali and Jeypore Sub-station in Eastern Region under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999, Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

**And in the matter of:**

Power Grid Corporation of India Ltd.  
'SAUDAMINI', Plot No-2,  
Sector-29, Gurgaon-122 001(Haryana)

.....**Petitioner**

**Versus**

1. Bihar State Electricity Board,  
Vidyut Bhawan, Bailey Road  
Patna- 800 001
2. West Bengal State Electricity Distribution Company Limited  
Bidyut Bhawan, Bidhan Nagar  
Kolkata-700 091
3. Grid Corporation of Orissa Ltd.  
Shahid Nagar,



Bhubaneswar- 751 007

4. Damodar Valley Corporation  
DVC Tower, Maniktala, Civic Centre, VIP Road,  
Kolkata- 700 054
5. Power Department  
Govt. of Sikkim, Gangtok- 737 101
6. Jharkhand State Electricity Board  
In front of Main Secretariat,  
Doranda, Ranchi- 834002

**....Respondents**

The following were present:

For Petitioner:        Shri Jasbir Singh, PGCIL  
                              Shri Anshul Garg, PGCIL  
                              Shri Angaru Naresh Kumar, PGCIL  
                              Shri S.S.Raju, PGCIL  
                              Shri S.K.Niranjan, PGCIL  
                              Shri M.M.Mondal, PGCIL  
                              Shri S.K.Venkatesan, PGCIL  
                              Shri Shashi Bhushan, PGCIL  
                              Shri J.Mazumder, PGCIL  
                              Shri R.Prasad,PGCIL  
                              Shri Sunil Kumar, PGCIL

For Respondent:        None

**ORDER**

The present petition has been preferred by Power Grid Corporation of India Ltd. ('the petitioner'), a transmission licensee, for truing up of capital expenditure and tariff for 400 KV S/C Meramundali-Jeypore Transmission line along with extension of Meramundali and Jeypore Sub-station in Eastern Region



(hereinafter referred as “transmission asset”) 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 expenditure for the period 1.4.2009 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.

2. The respondents are distribution licensees or long term transmission customers, who are procuring transmission service from the petitioner, mainly beneficiaries of Eastern 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. None of the respondents have filed reply to the petition. The hearing in this matter was held on 2.12.2015. 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 400 KV S/C Meramundali-Jeypore Transmission Line along with extension of Meramundali and Jeypore Sub-



station in Eastern Region was accorded by Board of Directors of the petitioner company vide letter dated 22.11.2000 at an estimated cost of ₹16651 lakh, including IDC of ₹1826 lakh. The asset was put under commercial operation w.e.f. 1.6.2004.

- b) The transmission assets are under commercial operation from 1.6.2004. The transmission tariff for the period 1.6.2004 to 31.3.2009 in accordance with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004, was allowed vide order dated 13.5.2009 in Petition No: 18/2009 for the transmission asset taking into account the additional capital expenditure during 2004-05 and 2005-06.
- c) The Commission, in its order dated 15.3.2011 in Petition No. 185/2010, has determined the tariff for the tariff period 2009-14 based on admitted capital cost of ₹16106.88 lakh as on 31.3.2009 and additional capital expenditure of ₹320.82 lakh for 2011-12 in accordance with the 2009 Tariff Regulations. The tariff allowed for the tariff period 2009-14 is as under:-

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	850.90	850.90	859.37	867.84	867.84
Interest on Loan	759.57	683.05	615.92	547.81	469.36
Return on Equity	601.98	601.98	610.39	618.80	618.80
Interest on working capital	62.14	61.45	61.38	61.34	60.79
O&M expenses	320.45	338.57	358.11	378.65	400.21
<b>Total</b>	<b>2595.04</b>	<b>2535.95</b>	<b>2505.17</b>	<b>2474.44</b>	<b>2417.00</b>



- d) The MAT rate applicable during 2008-09 was considered to arrive at the 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.
- e) The instant petition was filed on 26.11.2014 for true up tariff for 2009-14 period based on actual capital expenditure incurred and determination of transmission tariff for 2014-19 tariff period.

### **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 ₹16106.88 lakh as on 31.3.2009 for the purpose of tariff. In addition to this, the petitioner has claimed additional capitalisation of ₹140.44 lakh during 2013-14 for tower strengthening work.

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 13.5.2009 in Petition No. 18/2009, 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 ₹16106.88 lakh as on 1.4.2009 has been considered to work out the trued up tariff for the tariff period 2009-14.

### **Additional Capital Expenditure**

9. The petitioner has claimed ₹140.44 lakh as additional capital expenditure against the approved additional capital expenditure of ₹320.82 lakh for tower strengthening work under Clause (2)(v) of Regulation 9 of the 2009 Tariff Regulations.

10. Clause 2(v) 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:

...

(v) In case of transmission system any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement of switchyard equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system:

...

Provided that in respect sub-clauses (iv) and (v) above, any expenditure on acquiring the minor items or the assets like tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2009.”



11. The total actual additional capitalisation of ₹140.44 lakh claimed during the tariff period 2009-14 is within the additional capitalisation of ₹320.82 lakh for the tariff period 2009-14 approved by the Commission vide order dated 15.3.2011 in Petition No. 185/2010 for the tower strengthening work. The actual additional capital expenditure of ₹140.44 lakh is certified by the Auditor has been considered to work out the true up tariff for 2009-14 tariff period in accordance with Clause 2(v) of Regulation 9 of the 2009 Tariff Regulations. The summary of capital cost including additional capitalization is shown in the table below:-

(₹ in lakh)

Cost as per Investment Approval is:- ₹16651.00 lakh								
Particulars	Admitted capital cost as on 31.3.2009	Additional Capitalisation					Total additional capitalisation	Total capital cost including additional capitalisation
		2009-10	2010-11	2011-12	2012-13	2013-14		
Approved vide Order dated 15.3.2011	16108.88	0.00	0.00	320.82	0.00	0.00	320.82	16427.70
Actual	16108.88	0.00	0.00	0.00	0.00	140.44	140.44	16247.32

### **Debt: Equity**

12. 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.”

13. The petitioner has claimed trued up Annual Fixed Charge based on debt:equity ratio of 78.62:21.38 as on 31.3.2009 considered by the Commission



in its order dated 15.3.2011 in Petition No. 185/2010. The transmission assets covered in the instant petition were commissioned prior to 1.4.2009. The Commission had admitted debt:equity ratio of of 78.62:21.38 as on 31.3.2009 vide order dated 13.5.2009 in Petition No. 18/2009. The admitted debt:equity ratio of 78.62:21.38 as on 31.3.2009 has been considered as opening debt:equity ratio as on 1.4.2009 for the purpose of truing up of the approved tariff for the tariff period 2009-14, as given under:-

(₹ in lakh)		
Funding	Admitted as on 31.3.2009	(%)
Debt	12663.26	78.62
Equity	3443.62	21.38
<b>Total</b>	<b>16106.88</b>	<b>100.00</b>

The debt:equity ratio of 70:30 has been considered for the purpose of additional capital expenditure claimed for 2013-14.

14. Debt-equity ratio is allowed in accordance with Clause 2 of Regulation 12 of the 2009 Tariff Regulations. The overall debt:equity admitted as on 31.03.2014 including additional capitalization is as under:-

(₹ in lakh)		
Funding	Admitted as on 31.3.2014	(%)
Debt	12761.57	78.55
Equity	3485.75	21.45
<b>Total</b>	<b>16247.32</b>	<b>100.00</b>





### **Interest on Loan (“IOL”)**

15. 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”.

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

17. 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 approved as follows:-

Particulars	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 15.3.2011	759.57	683.05	615.92	547.81	469.36
As claimed by the petitioner	758.22	685.15	616.64	538.12	463.04
Allowed after trued up	758.21	685.14	616.65	538.12	463.04

### **Return on Equity (“ROE”)**

18. 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:

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

Where “t” is the applicable tax rate in accordance with Clause (3) of this regulation.

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

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

19. The petitioner has submitted that MAT rate of 11.330% applicable for 2008-09 was considered in the order dated 15.3.2011. 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



20. Accordingly, the ROE as trued up is worked out by considering actual MAT rate for grossing up of ROE as shown in the table below:-

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 15.3.2011	601.98	601.98	610.39	618.80	618.80
As claimed by the petitioner	643.06	666.62	667.27	667.27	679.43
Allowed after trued up	643.06	666.62	667.27	667.27	679.42

The return on equity allowed in the instant order is more than the ROE allowed vide order dated 15.3.2011 due to increase in the applicable MAT rate for the purpose of grossing up of base rate of return on equity.

### **Depreciation**

21. 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”

22. Further, 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.”

23. Regulation 17 of the 2009 Tariff Regulations provides the methodology to workout the depreciation. The Commission, in its order dated 15.3.2011, has worked out the depreciation in accordance with Regulation 17 of the 2009 Tariff Regulations based on estimated capital expenditure. There is variation in actual capital expenditure incurred during the tariff period 2009-14 with that admitted vide order dated 15.3.2011 in Petition No. 185/ 2011.

24. As per Regulation 17 (4) of the 2009 Tariff Regulations, useful life for transmission line, sub-station and PLCC is 35 years, 25 years, and 15 years, respectively. In the present case, weighted average value of asset as on COD (1.6.2004) has been considered to work out the weighted average life of the transmission system as 34 years.

25. 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 and additional capitalisation as under:-



(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 15.3.2011	850.90	850.90	859.37	867.84	867.84
As claimed by petitioner	850.90	850.90	850.90	850.90	854.60
Allowed after true up	850.90	850.90	850.90	850.90	854.60

The depreciation allowed in the instant order is less than the depreciation allowed vide order dated 15.3.2011 due to reduction in actual additional capitalisation vis-à-vis that of approved vide order dated 15.3.2011.

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

26. The petitioner has computed O&M Expenses for the assets mentioned in the petition in accordance with the O&M norms for 400 kV S/C twin conductor transmission line and 400 kV bay specified in Regulation 19(g) of the 2009 Tariff Regulations. Accordingly, the O&M Expenses have been worked out as given below:-



(₹ in lakh)

Particulars		2009-10	2010-11	2011-12	2012-13	2013-14
Norms as per Regulation	400 kV, 2 conductors, AC Lines(₹ lakh/km)	0.358	0.378	0.400	0.423	0.447
	400 kV Sub-station(₹ lakh/bay)	52.40	55.40	58.57	61.92	65.46
Actual line length (km)	400 kV, 2 conductors, AC Lines	456	456	456	456	456
Actual (No. of Sub-stations)	400 kV Sub-stations	3	3	3	3	3
O&M expenses	400 kV, 2 conductors, AC Lines(₹ lakh)	163.25	172.37	182.40	192.89	203.83
	400 kV Sub-station (₹ lakh)	157.2	166.2	175.71	185.76	196.38
<b>Total(₹ in lakh)</b>		<b>320.45</b>	<b>338.57</b>	<b>358.11</b>	<b>378.65</b>	<b>400.21</b>

27. The O&M Expenses claimed by the petitioner for tariff period 2009-14 are same as that approved in the tariff order dated 15.3.2011 in Petition No. 185/2010. Accordingly, the O&M Expenses claimed by the petitioner, allowed and trued up are the same, and are as follows:-

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 15.3.2011	320.45	338.57	358.11	378.65	400.21
As claimed by petitioner	320.45	338.57	358.11	378.65	400.21
Allowed after true up	320.45	338.57	358.11	378.65	400.21



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

28. 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.

29. 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.

30. The Commission in its order dated 15.3.2011 in Petition No. 185/2010 approved rate of interest on working capital as 12.25% as 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.

31. The IWC trued up is as under:-



(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	48.07	50.79	53.72	56.80	60.03
O & M expenses	26.70	28.21	29.84	31.55	33.35
Receivables	439.27	434.01	425.89	416.12	409.82
Total	514.04	513.01	509.45	504.47	503.20
Rate of Interest (%)	12.25	12.25	12.25	12.25	12.25
<b>Interest</b>	<b>62.97</b>	<b>62.84</b>	<b>62.41</b>	<b>61.80</b>	<b>61.64</b>

32. The IWC claimed by the petitioner, allowed and trued up are as shown in the table below:-

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 15.3.2011	62.14	61.45	61.38	61.34	60.79
As claimed by petitioner	62.97	62.84	62.41	61.80	61.64
Allowed after true up	62.97	62.84	62.41	61.80	61.64

33. The IWC has increased on account of increase in receivables due to variation in ROE on account of applicable MAT rate during the 2009-14 tariff period.

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

34. 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	16106.88	16106.88	16106.88	16106.88	16106.88
Addition during 2009-14 due to Additional Capitalization	0.00	0.00	0.00	0.00	140.44
Closing Gross block	16106.88	16106.88	16106.88	16106.88	16247.32
Average Gross block	16106.88	16106.88	16106.88	16106.88	16177.10
<b>Depreciation</b>					
Rate of Depreciation (%)	5.283	5.283	5.283	5.283	5.283
Depreciable Value	14496.19	14496.19	14496.19	14496.19	14559.39
Elapsed Life (Beginning of the year)	4	5	6	7	8
Weighted Balance Useful life of the assets (yrs)	30	29	28	27	26
Remaining Depreciable Value	10874.77	10023.87	9172.98	8322.08	7534.38
Depreciation	850.90	850.90	850.90	850.90	854.60
Cumulative Depreciation	4472.32	5323.21	6174.11	7025.01	7879.61
<b>Interest on Loan</b>					
Gross Normative Loan	12663.26	12663.26	12663.26	12663.26	12663.26
Cumulative Repayment upto COD/Previous Year	3629.63	4480.53	5331.42	6182.32	7033.22
Net Loan-Opening	9033.63	8182.73	7331.84	6480.94	5630.04
Addition due to Additional Capitalisation	0.00	0.00	0.00	0.00	98.31
Repayment during the year	850.90	850.90	850.90	850.90	854.60
Net Loan-Closing	8182.73	7331.84	6480.94	5630.04	4873.74
Average Loan	8608.18	7757.28	6906.39	6055.49	5251.89
Weighted Average Rate of Interest on Loan (%)	8.81	8.83	8.93	8.89	8.82
Interest	758.21	685.14	616.65	538.12	463.04
<b>Return on Equity</b>					
Opening Equity	3443.62	3443.62	3443.62	3443.62	3443.62
Additional Capitalisation	0.00	0.00	0.00	0.00	42.13
Closing Equity	3443.62	3443.62	3443.62	3443.62	3485.75
Average Equity	3443.62	3443.62	3443.62	3443.62	3464.69
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
MAT rate for respective year (%)	17.00	19.93	20.01	20.01	20.96
Rate of Return on Equity (Pre Tax)(%)	18.674	19.358	19.377	19.377	19.610
Return on Equity (Pre Tax)	643.06	666.62	667.27	667.27	679.42
<b>Interest on Working Capital</b>					
Maintenance Spares	48.07	50.79	53.72	56.80	60.03
O & M expenses	26.70	28.21	29.84	31.55	33.35
Receivables	439.27	434.01	425.89	416.12	409.82
Total	514.04	513.01	509.45	504.47	503.20
Interest	62.97	62.84	62.41	61.80	61.64
<b>Annual Transmission Charges</b>					
Depreciation	850.90	850.90	850.90	850.90	854.60
Interest on Loan	758.21	685.14	616.65	538.12	463.04
Return on Equity	643.06	666.62	667.27	667.27	679.42
Interest on Working Capital	62.97	62.84	62.41	61.80	61.64
O & M Expenses	320.45	338.57	358.11	378.65	400.21
<b>Total</b>	<b>2635.59</b>	<b>2604.07</b>	<b>2555.34</b>	<b>2496.73</b>	<b>2458.92</b>

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

35. The petitioner has claimed the transmission charges as under:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	863.05*	863.05	863.05	192.48	192.48
Interest on Loan **	390.07	310.81	229.22	178.38	159.82
Return on Equity	686.20	688.83	688.83	688.83	688.83
Interest on Working Capital	64.81	63.73	62.55	46.65	46.97
O & M Expenses	365.12	377.51	390.10	402.91	416.35
<b>Total</b>	<b>2369.25</b>	<b>2303.93</b>	<b>2233.75</b>	<b>1509.25</b>	<b>1504.45</b>

\* Petitioner in Form 10 has submitted depreciation during 2014-15 as ₹860.68lakh while in computation of IOL (Repayment of loan=Depreciation during the year) for 2014-15 in Form 9E it has wrongly considered ₹863.05 lakh. \*\*Petitioner has considered weighted average interest rate of loan upto two decimal in tariff.



36. 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	54.77	56.63	58.52	60.44	62.45
O & M Expenses	30.43	31.46	32.51	33.58	34.70
Receivables	394.88	383.99	372.29	251.54	250.74
Total	480.07	472.07	463.32	345.55	347.89
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest</b>	<b>64.81</b>	<b>63.73</b>	<b>62.55</b>	<b>46.65</b>	<b>46.97</b>

### **Capital Cost**

37. 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.”

38. The petitioner has claimed capital expenditure of ₹16247.32 lakh as on 31.3.2014 including additional capitalisation during the tariff period 2009-14. Further, the petitioner has also projected additional capital expenditure of ₹ 89.73 lakh during the tariff period 2014-19.



39. The trued up capital cost of ₹16247.32 lakh as on 31.3.2014 has been considered as opening capital cost as on 1.4.2014 to work out the tariff for tariff period 2014-19.

### **Additional Capital Expenditure**

40. The petitioner has claimed additional expenditure of ₹89.73 lakh in 2014-15 towards balance and retention payment for Sub-station against final bill and price variation under Clause (3)(v) of Regulation 14 of the 2014 Tariff Regulations within cut-off date.

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

“(3) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:

...

(v) Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.,”

42. The petitioner was directed to submit the details/bifurcation of the additional capitalization of ₹89.73 lakh for 2014-15. In response, the petitioner, vide affidavit dated 9.12.2015, has submitted that capitalization for an amount of ₹89.73 lakh in petition for 2014-15 is towards balance and retention payment for Sub-station against adjustment/settlement of final bill and release of retention money for works, which have been executed within cut-off date. Further, the petitioner submitted that estimated capitalisation of ₹89.73 lakh has not been



incurred during 2014-15 as projected in petition and it is expected to be incurred in 2015-16.

43. As the additional capitalisation proposed by the petitioner during 2014-19 is against adjustment/settlement of final bill and release of retention money for works, which have been executed within cut-off date, additional capitalisation proposed by the petitioner is allowed. However, as per submission made by the petitioner, the additional capitalisation is considered in 2015-16 instead of 2014-15 as submitted in the petition. The summary of total capital cost including additional capitalisation considered for the determination of tariff is given below:-

**(₹ in lakh)**

Particulars	Admitted Capital Cost as on 31.3.2014	Additional Capitalisation					Total Additional capitalisation	Total Capital cost including Additional capitalisation
		2014-15	2015-16*	2016-17	2017-18	2018-19		
Amount	16247.32	0.00	89.73	0.00	0.00	0.00	89.73	16337.05

(\*Petitioner has submitted tariff computation by considering estimated additional capitalization during 2014-15.)

### **Debt:Equity Ratio**

44. Clause 3 of Regulation 19 of the 2014 Tariff Regulations specifies as follows:-

“(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.”

45. The admitted debt:equity ratio of 78.55:21.45 for the tariff period ending 31.3.2014 has been considered as opening debt:equity ratio as on 1.4.2014 for determination of tariff for the period 2014-19. The admitted debt:equity ratio as on 1.4.2014 for the purpose of determination of tariff is as follows:-

Particulars	Amount	(in ₹lakh)
		(%)
Debt	12761.57	78.55
Equity	3485.75	21.45
Total	<b>16247.32</b>	<b>100.00</b>

46. The normative debt:equity ratio of 70:30 has been considered for additional capitalisation proposed during the tariff period 2014-19.

#### **Interest on Loan (“IOL”)**

47. 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.”



48. The weighted average rate of IOL has been considered on the basis of rate prevailing as on 1.4.2014. The petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2014-19 tariff period will be adjusted at the time of truing up. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up or next revision of tariff. By considering above, the IOL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of weighted average rate of interest 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	12761.57	12761.57	12824.38	12824.38	12824.38
Cumulative Repayment upto previous year	7887.82	8746.14	9606.82	10469.87	10662.67
Net Loan-Opening	4873.74	4015.43	3217.56	2354.51	2161.71
Additions during the year	0.00	62.81	0.00	0.00	0.00
Repayment during the year	858.31	860.68	863.05	192.80	192.80
Net Loan-Closing	4015.43	3217.56	2354.51	2161.71	1968.90
Average Loan	4444.59	3616.50	2786.04	2258.11	2065.30
Rate of Interest (%)	8.7194	8.5341	8.2485	7.9238	7.7626
<b>Interest on Loan</b>	<b>387.54</b>	<b>308.63</b>	<b>229.81</b>	<b>178.93</b>	<b>160.32</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 for 2013-14 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.

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, 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 is worked out as given below:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	3485.75	3485.75	3512.67	3512.67	3512.67
Addition due to additional capitalization	0.00	26.92	0.00	0.00	0.00
Closing Equity	3485.75	3512.67	3512.67	3512.67	3512.67
Average Equity	3485.75	3499.21	3512.67	3512.67	3512.67
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
<b>Return on Equity (Pre Tax)</b>	<b>683.56</b>	<b>686.20</b>	<b>688.83</b>	<b>688.83</b>	<b>688.83</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 ₹16247.32 lakh as on 31.3.2014. It is observed that the petitioner in Form 10 has submitted depreciation during 2014-15 as ₹860.68 lakh while during computation of IOL (Repayment of loan=Depreciation during the year) in Form-9E, it has wrongly considered the repayment of loan as ₹863.05 lakh. Depreciation is allowed as 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
Opening Gross block	16247.32	16247.32	16337.05	16337.05	16337.05
Addition during the year due to projected additional capitalization	0.00	89.73	0.00	0.00	0.00
Closing Gross block	16247.32	16337.05	16337.05	16337.05	16337.05
Rate of Depreciation (%)	5.283	5.283	5.283	1.180	1.180
Depreciable Value	14622.59	14662.97	14703.35	14703.35	14703.35
Elapsed Life (Beginning of the year)	9	10	11	12	13



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Weighted Balance Useful life of the assets	25	24	23	22	21
Remaining Depreciable Value	6742.97	5925.04	5104.74	4241.69	4048.88
<b>Depreciation</b>	<b>858.31</b>	<b>860.68</b>	<b>863.05</b>	<b>192.80</b>	<b>192.80</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:-

**(₹ in lakh)**

Particulars		2014-15	2015-16	2016-17	2017-18	2018-19
Actual line length (km)	400 kV, 2 conductors, AC Lines	456	456	456	456	456
Actual (No. of Sub-stations)	400 kV Sub-stations	3	3	3	3	3
Norms as per Regulation	400 kV, 2 conductors, AC Lines (₹ lakh/km)	0.404	0.418	0.432	0.446	0.461
	400 kV Sub-station (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71
O&M expense	400 kV, 2 conductors, AC Lines (₹ lakh)	184.22	190.61	196.99	203.38	210.22
	400 kV Sub-station (₹ lakh)	180.90	186.90	193.11	199.53	206.13
<b>Total</b>		<b>365.12</b>	<b>377.51</b>	<b>390.10</b>	<b>402.91</b>	<b>416.35</b>



56. The petitioner has submitted that 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.

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
O&M Expenses allowed	365.12	377.51	390.10	402.91	416.35

### **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 it has computed IWC 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	54.77	56.63	58.52	60.44	62.45
O & M Expenses	30.43	31.46	32.51	33.58	34.70
Receivables	393.19	382.76	372.39	251.69	250.88
Total	478.38	470.85	463.42	345.70	348.03
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	64.58	63.56	62.56	46.67	46.98

### **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
Depreciation	858.31	860.68	863.05	192.80	192.80
Interest on Loan	387.54	308.63	229.81	178.93	160.32
Return on Equity	683.56	686.20	688.83	688.83	688.83
Interest on WC	64.58	63.56	62.56	46.67	46.98
O&M Expenses	365.12	377.51	390.10	402.91	416.35
<b>Total</b>	<b>2359.12</b>	<b>2296.58</b>	<b>2234.36</b>	<b>1510.14</b>	<b>1505.29</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	16247.32	16247.32	16337.05	16337.05	16337.05
Additional Capitalization during 2014-19	0.00	89.73	0.00	0.00	0.00
Closing Gross block	16247.32	16337.05	16337.05	16337.05	16337.05
Average Gross block	16247.32	16292.19	16337.05	16337.05	16337.05
<b>Depreciation</b>					
Rate of Depreciation(%)	5.283	5.283	5.283	1.180	1.180
Depreciable Value	14622.59	14662.97	14703.35	14703.35	14703.35
Elapsed Life (Beginning of the year)	9	10	11	12	13
Weighted Balance Useful life of the assets	25	24	23	22	21
Remaining Depreciable Value	6742.97	5925.04	5104.74	4241.69	4048.88
Depreciation	858.31	860.68	863.05	192.80	192.80
Cumulative Depreciation	8737.93	9598.61	10461.66	10654.46	10847.27
<b>Interest on Loan</b>					
Net Loan-Opening	4873.74	4015.43	3217.56	2354.51	2161.71



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Addition due to Additional Capitalization	0.00	62.81	0.00	0.00	0.00
Repayment during the year	858.31	860.68	863.05	192.80	192.80
Net Loan-Closing	4015.43	3217.56	2354.51	2161.71	1968.90
Average Loan	4444.59	3616.50	2786.04	2258.11	2065.30
Weighted Average Rate of Interest on Loan (%)	8.72	8.53	8.25	7.92	7.76
Interest	387.54	308.63	229.81	178.93	160.32
<b>Return on Equity</b>					
Opening Equity	3485.75	3485.75	3512.67	3512.67	3512.67
Additions	0.00	26.92	0.00	0.00	0.00
Closing Equity	3485.75	3512.67	3512.67	3512.67	3512.67
Average Equity	3485.75	3499.21	3512.67	3512.67	3512.67
Return on Equity (Base Rate)(%)	15.50	15.50	15.50	15.50	15.50
MAT rate for the respective year (%)	20.96	20.96	20.96	20.96	20.96
Rate of Return on Equity (Pre Tax)(%)	19.61	19.61	19.61	19.61	19.61
Return on Equity (Pre Tax)	683.56	686.20	688.83	688.83	688.83
<b>Interest on Working Capital</b>					
Maintenance Spares	54.77	56.63	58.52	60.44	62.45
O & M expenses	30.43	31.46	32.51	33.58	34.70
Receivables	393.19	382.76	372.39	251.69	250.88
Total	478.38	470.85	463.42	345.70	348.03
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	64.58	63.56	62.56	46.67	46.98
<b>Annual Transmission Charges</b>					
Depreciation	858.31	860.68	863.05	192.80	192.80
Interest on Loan	387.54	308.63	229.81	178.93	160.32
Return on Equity	683.56	686.20	688.83	688.83	688.83
Interest on Working Capital	64.58	63.56	62.56	46.67	46.98
O & M Expenses	365.12	377.51	390.10	402.91	416.35
<b>Total</b>	<b>2359.12</b>	<b>2296.58</b>	<b>2234.36</b>	<b>1510.14</b>	<b>1505.29</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 Regulation 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. 507/TT/2014.

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

Sd/-  
**(A.S. Bakshi)**  
**Member**



**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO**

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
BOND XI	12.25	82.00	0.00	82.00
BOND X	10.90	971.00	0.00	971.00
BOND XI-Option-I	9.80	974.00	0.00	974.00
BOND XII-DOCO	9.70	2268.00	0.00	2268.00
BOND XIII-Option-I	8.63	5200.00	0.00	5200.00
BOND XV	6.68	1290.00	0.00	1290.00
BOND XVIII-ADDCAP for 2005-06	8.15	720.00	0.00	720.00
Oriental Bank of Commerce	9.60	448.00	0.00	448.00
Punjab National Bank-II	8.89	538.00	0.00	538.00
Total Loan		12491.00	0.00	12491.00

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

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	12,491.00	12,491.00	12,491.00	12,491.00	12,491.00
Cumulative Repayments of Loans upto Previous Year	3460.28	4502.56	5544.84	6587.12	7629.40
Net Loans Opening	9030.72	7988.44	6946.16	5903.88	4861.60
Add: Drawl(s) during year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	1042.28	1042.28	1042.28	1042.28	1034.08
Net Closing Loan	7988.44	6946.16	5903.88	4861.60	3827.52
Average Net Loan	8509.58	7467.30	6425.02	5382.74	4344.56
Rate of Interest on Loan (%)	8.8081	8.8322	8.9287	8.8864	8.8166
Interest on Loan	749.53	659.53	573.67	478.33	383.04



**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO**

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND XI	12.25	82.00	0.00	82.00
BOND X	10.90	971.00	0.00	971.00
BOND XI-Option-I	9.80	974.00	0.00	974.00
BOND XII-DOCO	9.70	2268.00	0.00	2268.00
BOND XIII-Option-I	8.63	5200.00	0.00	5200.00
BOND XV	6.68	1290.00	0.00	1290.00
BOND XVIII-ADDCAP for 2005-06	8.15	720.00	0.00	720.00
Oriental Bank of Commerce	12.35	448.00	0.00	448.00
Punjab National Bank-II	11.60	538.00	0.00	538.00
Total Loan		12491.00	0.00	12491.00

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	12491.00	12491.00	12491.00	12491.00	12491.00
Cumulative Repayments of Loans upto Previous Year	8663.49	9697.57	10731.65	11602.65	12203.48
Net Loans Opening	3827.51	2793.43	1759.35	888.35	287.52
Add: Drawl(s) during year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	1034.08	1034.08	871.00	600.83	167.50
Net Closing Loan	2793.43	1759.35	888.35	287.52	120.02
Average Net Loan	3310.47	2276.39	1323.86	587.94	203.77
Rate of Interest on Loan (%)	8.7194	8.5341	8.2485	7.9238	7.7626
Interest on Loan	288.65	194.27	109.20	46.59	15.82

