

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**PETITION NO. 445/TT/2014**

**Coram:**

**Shri A.K. Singhal, Member**

**Shri A.S. Bakshi, Member**

**Dr. M. K. Iyer, Member**

**Date of Hearing : 27.10.2015**

**Date of Order : 30.06.2016**

**In the Matter of:**

Truing up of transmission tariff for 2009-14 tariff block under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 and determination of transmission tariff for 2014-19 tariff block under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2014 for Tuticorin JV – Madurai 400 kV D/C (Quad Conductor) Line and extension of 400/220 kV Madurai S/S under ATS of Tuticorin JV TPS in Southern Region (Effective COD 1.2.2012) and Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999

**And in the Matter of:**

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

**.....Petitioner**

**Versus**

1. Karnataka Power Transmission Corporation Ltd.,  
(KPTCL), Kaveri Bhavan, Bangalore – 560009
2. Transmission Corporation of Andhra Pradesh Ltd.  
Hyderabad (APTRANSCO), Vidyut Soudha,  
Hyderabad- 500082
3. Kerala State Electricity Board,  
Thiruvananthapuram Vaidyuthi Bhavanam,  
Pattom, Thiruvananthapuram - 695 004



4. Tamil Nadu Generation and Distribution Corporation Ltd  
(Formerly Tamil Nadu Electricity Board -TNEB)  
NPKRR Maaligai, 800, Anna Salai Chennai - 600 002
5. Electricity Department  
Government of Goa Vidyut Bhawan,  
Panaji Goa 403001
6. Electricity Department Govt of Pondicherry,  
Pondicherry – 605001
7. Eastern Power Distribution Company of Andhra  
Pradesh Limited (APEPDCL) APEPDCL, P&T Colony,  
Seethmmadhara Vishakhapatnam, Andhra Pradesh
8. Southern Power Distribution Company of Andhra  
Pradesh Limited (APSPDCL) Srinivasasa Kalyana  
Mandapam Backside, Tiruchanoor Road,  
Kesavayana Gunta, Tirupati-517 501,  
Chittoor District, Andhra Pradesh
9. Central Power Distribution Company of Andhra Pradesh  
limited (APCPDCL) Corporate Office, Mint Compound,  
Hyderabad- 500 063, Andhra Pradesh
10. Northern Power Distribution Company of Andhra  
Pradesh Limited (APNPDCL) Opp. NIT Petrol Pump  
Chaitanyapuri, Kazipet, Warangal - 506 004  
Andhra Pradesh
11. Bangalore Electricity Supply Company Ltd.,(BESCOM),  
Corporate Office, K.R.Circle Bangalore - 560 001 Karnataka
12. Gulbarga Electricity Supply Company Ltd., (GESCOM)  
Station Main Road, Gulbarga, Karnataka
13. Hubli Electricity Supply Company Ltd., (HESCOM)  
Navanagar, PI3 Road Hubli, Karnataka
14. MESCOM Corporate Office,  
Paradigm Plaza, AB Shetty Circle  
Mangalore - 575 001 Karnataka
15. Chamundeswari Electricity Supply Corporation Ltd., (CESC)  
927, L J Avenue Ground Floor,  
New KantharajUrs Road Saraswatipuram,  
Mysore - 570009 Karnataka

....Respondent(s)



The following were present:

For Petitioner:       Shri Rakesh Prasad, PGCIL  
                              Shri M.M. Mondal, PGCIL  
                              Shri S.S. Raju, PGCIL

For Respondents:   None

### **ORDER**

The petition has been preferred by Power Grid Corporation of India Limited (hereinafter referred to as “the petitioner”), a transmission licensee, for revision of tariff under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 Tariff Regulations”) based on truing up of capital expenditure for the period from COD to 31.3.2014 and for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) for the period from 1.4.2014 to 31.3.2019 in respect of Tuticorin JV – Madurai 400 kV D/C (Quad Conductor) Line and extension of 400/220 kV Madurai S/S under ATS of Tuticorin JV TPS in Southern Region (COD 1.2.2012) (collectively referred to as “the transmission asset”).

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

3. The transmission assets covered in the instant petition are Tuticorin JV – Madurai 400 kV D/C (Quad Conductor) Line and extension of 400/220 kV Madurai S/S under ATS of Tuticorin JV TPS in Southern Region.

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

a) The Investment approval to the scheme was accorded by Board of Directors of petitioner company vide Memorandum Ref:- C/CP/Tuticorin JV TPS dated 20.2.2009 at an estimated cost of ₹35357 lakh including IDC of ₹2763 lakh based on the 4<sup>th</sup> Quarter, 2008 price level.

b) The Commission, vide its order dated 30.9.2013, in Petition No. 63/TT/2012 had restricted the initial spares to the admissible amount based on the ceiling norms specified for sub-station i.e. 2.50% under Regulation 8 of the 2009 Tariff Regulations. Against the total initial spares claim of ₹56.73 lakh, excess initial spares amounting to ₹18.88 lakh were disallowed.

c) The Commission vide its order dated 30.9.2013 in Petition No. 63/TT/2012 had admitted the following capital cost as on COD:-

<b>As approved in order in Petition No. 63/TT/2012</b>		
<b>Capital cost admitted as on COD</b>	<b>Amount (₹ in lakh)</b>	<b>Percentage (%)</b>
Debt	16446.74	70.00
Equity	7048.60	30.00
<b>Total</b>	<b>23495.34</b>	<b>100.00</b>

d) The Commission, in its order dated 30.9.2013, in Petition No. 63/TT/2012 had allowed the following additional capital expenditure for the 2009-14 tariff period:-

<b>Approved add. cap. during 2009-14 (₹ in lakh)</b>		
<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
447.84	1546.29	135.00

e) The transmission tariff allowed by the Commission in the order dated 30.9.2013 in Petition No. 63/TT/2012 is depicted below:-

(₹ in lakh)

Particulars	2011-12 (pro-rata)	2012-13	2013-14
Depreciation	208.69	1303.07	1346.49
Interest on Loan	243.26	1456.25	1390.99
Return on Equity	207.32	1296.20	1340.28
Interest on Working Capital	15.38	95.05	96.29
O & M Expenses	46.17	292.90	309.56
<b>Total</b>	<b>720.82</b>	<b>4443.47</b>	<b>4483.62</b>

5. As per Regulation 6 of the 2009 Tariff Regulations, the Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up. Further, as per Regulation 15 of the 2009 Tariff Regulations, the petitioner is required to adjust the yearly impact of MAT rate in the truing up petition for 2009-14 tariff period.

6. In this context, the petitioner has filed the instant petition on 29.10.2014, for revision of tariff for the tariff period 2009-14 in accordance with Regulation 6 of the 2009 Tariff Regulations.

7. 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. No comments/objections have been received from the public in response to the notice in newspaper. The hearing in this matter was held on 27.10.2015. Tamil Nadu Generation and Distribution Corporation Ltd (TANGEDCO),

i.e., Respondent No.4 has filed a reply vide letter dated 14.9.2015. In response, the petitioner has submitted the rejoinder to the reply filed by TANGEDCO vide affidavit dated 11.1.2016.

8. The Commission had directed the petitioner to submit an affidavit depicting the computation of interest during construction, details depicting the un-discharged liability as on COD in respect of hard cost/IDC/IEDC, capital expenditure and initial spares and clarify whether it has been included in the projected additional capital expenditure claimed, the details pertaining to initial spares and to clarify whether the capital cost certified by auditor is on accrual basis or cash basis. The petitioner in response to the Commission's direction has submitted its reply vide affidavit dated 11.1.2016.

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

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

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

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

11. The petitioner has submitted the information as required under the 2009 Tariff Regulations for truing up of annual fixed charges for 2009-14 tariff period. The tariff for 2009-14 tariff period has been trued up in the subsequent paragraphs.

## **Capital Cost**

12. The petitioner has claimed the capital cost of ₹23491.36 lakh as on COD after restricting the amount of Initial spares to the ceiling limit of ₹33.87 based on the ceiling norms specified for sub-station i.e. 2.50% under Regulation 8 of the 2009 Tariff Regulations for the purpose of tariff determination.

13. The Regulation 7 of the 2009 Tariff Regulations provides that:-

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

(a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan -

(i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;

(b) capitalised initial spares subject to the ceiling rates specified in regulation 8; and

(c) additional capital expenditure determined under regulation 9:

Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost.

(2) The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff:

xxxxx.”

14. The admissible capital cost of the transmission assets as on 1.4.2009 for the purpose of computation of tariff for 2009-14 tariff period is worked out in the subsequent paragraphs after the treatment of initial spares.

## **Treatment of Initial Spares**

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

"Transmission line:	0.75%
Transmission sub-station	2.50%
Series compensation devices & HVDC Station:	3.50%"

16. The petitioner has submitted, in the present petition, that the actual initial spares are ₹56.73 lakh pertaining to sub-station, corresponding to the capital cost of ₹1377.47lakh as on the cut-off date of 31.3.2015 as submitted vide Auditor's Certificate dated 23.7.2014.

17. We have worked out the admissible initial spares by considering capital cost as per Auditor's Certificate in accordance with the 2009 Tariff Regulations. Regulation 8 of the 2009 Tariff Regulations provide for ceiling norms for capitalization of initial spares in respect of sub-station at 2.50%. Accordingly, the initial spares have been allowed as under:-

(₹ in lakh)		
Particulars	Formula	Sub-station
Capital cost as on cut off date	(a)	1377.47
Initial Spares as per Auditor's Certificate	(b)	56.73
Ceiling limit as per Regulation 8 of 2009 regulations	(c)	2.50%
Initial spares worked out	$(d) = ((a-b)/(1-c)) - (a-b)$	33.87
Excess initial spares claimed	$(e) = (b) - (d)$	22.86

18. Accordingly, the capital cost as on COD for tariff computation of 2009-14 tariff period is considered as below:-

(₹ in lakh)	
Particulars	Asset
Capital cost as on COD	23514.22
Less: Excess initial spares	22.86
Capital cost as on COD considered for tariff determination	<b>23491.36</b>



## **Additional Capital Expenditure**

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

“The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014”

20. The additional capital expenditure approved by the Commission in its order dated 30.9.2013 in Petition No. 63/TT/2012 and that claimed by the petitioner in the instant petition are depicted below:-

(₹ in lakh)

Approved / Claimed	Apportioned approved cost	Capital cost as on COD	Additional capital expenditure				Capital as on 31.3.2014
			2011-12	2012-13	2013-14	Total	
Approved in order in Petition No. 63/TT/2012	35357.00	23495.34	447.84	1546.29	135.00	2129.13	25624.47
Claimed by Petitioner		23491.36*	428.58	814.69	82.23	1325.50	24816.86*

\*Cost after restricting the initial spares to the ceiling limit of ₹33.87 lakh

21. The petitioner has submitted the Auditor's Certificate dated 25.7.2014 certifying the actual capital cost incurred towards additional capitalization. The petitioner has submitted that the additional capital expenditure during 2009-14 tariff period is on account of balance and retention payments towards the transmission assets. The petitioner has claimed the actual additional capital expenditure during 2009-14 period under Regulation 9 (1) of the 2009 Tariff Regulations.

22. It is observed that the petitioner was directed vide order dated 30.9.2013 in Petition No. 63/2012 to submit the details of LD, if any in respect of the sub-station package. The relevant extract of the Para is given as below:

30. The petitioner has submitted that the work was to be completed by 20.9.2011 but the sub-station package was completed on 31.1.2012. The petitioner also submitted that transmission line package was completed within time and hence no Liquidated Damages (LD) has been levied. However, levy of LD, if any, in respect of sub-station package is under review and would be done at the time of contract closing and release of final retention payments. LD, if any, levied on the contractor shall be considered at the time of truing-up.

23. The petitioner has not submitted any information regarding recovery of the LD amount during the 2009-14 tariff period. We have proceeded based on information available. The Commission had issued the direction based on the submission of information that LD amount was under review. The petitioner is required to submit the status of LD recovered, if any, towards the sub-station package. In the event of recovery of LD during 2009-14 tariff period, the petitioner should file revise capital cost and tariff. In the event of non recovery of LD, the petitioner should file a reason for same. In case, the details of LD amount are not submitted, the Commission will review its order appropriately.

24. We have considered the submissions of the petitioner with regard to the actual capital expenditure during 2009-14 tariff period. The capital addition claimed by the petitioner is based on actual capital expenditure incurred as per the Auditor Certificate dated 23.7.2014 and is within the original scope of work. The additional capital expenditure claimed by the petitioner towards balance and retention payments is allowed for truing up under Regulation 9(1)(i) of 2009 Tariff Regulations.

25. The capital cost including additional capital expenditure allowed during 2009-14 tariff period for truing up is as follows:-

(` in lakh)

Capital cost as on COD	Additional Capitalisation				Capital as on 31.3.2014
	2011-12	2012-13	2013-14	Total	
23491.36*	428.58	814.69	82.23	1325.50	24816.86*

\*Cost after restricting the initial spares to the ceiling limit of `33.87 lakh

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

### **Debt: Equity**

27. Regulation 12 of the 2009 Tariff Regulations provides as under:-

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

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

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

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

28. The admitted debt:equity ratio of 70.00:30.00 as on COD was considered by the Commission in order dated 30.9.2013 in Petition No. 63/TT/2012 in line with the Regulation 12 of the 2009 Tariff Regulations. In respect of the additional capitalization,

debt: equity ratio of 70.00:30.00 has been considered in line with the 2009 Tariff Regulations.

29. The details of the debt:equity considered for the purpose of tariff for 2009-14 tariff period is as follows:-

(₹ in lakh)

<b>Funding</b>	<b>Capital cost as on COD</b>	<b>(%)</b>	<b>Additional capital expenditure during 2009-14</b>	<b>(%)</b>	<b>Total Cost as on 31.3.2014</b>	<b>(%)</b>
Debt	16443.95	70.00	927.85	70.00	17371.80	70.00
Equity	7047.41	30.00	397.65	30.00	7445.06	30.00
<b>Total</b>	<b>23491.36</b>	<b>100.00</b>	<b>1325.50</b>	<b>100.00</b>	<b>24816.86</b>	<b>100.00</b>

### **Return on Equity (“ROE”)**

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

“(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.

(4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

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.”

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

Year	MAT Rate claimed in the current petition	Grossed up ROE (Base Rate/(1-t)) claimed in the current petition
2009-10	16.995%	18.674%
2010-11	19.931%	19.358%
2011-12	20.008%	19.377%
2012-13	20.008%	19.377%
2013-14	20.961%	19.610%

The petitioner has claimed the additional capital expenditure in the debt:equity ratio of 70:30, which is in line with Regulation 12 of the 2009 Tariff Regulations.

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

(₹ in lakh)			
Return on Equity	2011-12 (pro-rata)	2012-13	2013-14
As approved vide Order dated 30.9.2013	207.32	1296.20	1340.28
Claimed by the petitioner	229.68	1414.17	1457.56
Allowed after true up in this order	229.67	1414.16	1457.59

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

### **Interest on Loan ("IoL")**

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

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

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

(₹ in lakh)

<b>Interest on Loan</b>	<b>2011-12 (pro-rata)</b>	<b>2012-13</b>	<b>2013-14</b>
As approved vide Order dated 30.9.2013	243.26	1456.25	1390.99
Claimed by the petitioner	243.43	1434.06	1348.03
Allowed after true up in this order	243.42	1434.07	1348.03

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

### **Depreciation**

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

(₹ in lakh)

<b>Depreciation</b>	<b>2011-12 (pro-rata)</b>	<b>2012-13</b>	<b>2013-14</b>
As approved vide Order dated 30.9.2013	208.69	1303.07	1346.49
Claimed by the petitioner	208.58	1283.37	1306.92
Allowed after true up in this order	208.57	1283.36	1306.90

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

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

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

(₹ in lakh)

<b>O&amp;M Expenses</b>	<b>2011-12 (pro-rata)</b>	<b>2012-13</b>	<b>2013-14</b>
As approved vide Order dated 30.9.2013	46.17	292.90	309.56
Claimed by the petitioner	46.18	292.90	309.56
Allowed after true up in this order	46.18	292.90	309.57

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

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

(₹ in lakh)

<b>Interest on Working Capital</b>	<b>2011-12 (pro-rata)</b>	<b>2012-13</b>	<b>2013-14</b>
As approved vide Order dated 30.9.2013	15.38	95.05	96.29
Claimed by the petitioner	15.83	96.57	96.99
Allowed after true up in this order	15.83	96.57	96.99

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

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

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

	(₹ in lakh)		
<b>Particulars</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
<b>Depreciation</b>			
Opening Gross Block	23491.36	23919.94	24734.63
Additional Capitalisation	428.58	814.69	82.23
Closing Gross Block	23919.94	24734.63	24816.86
Average Gross Block	23705.65	24327.28	24775.74
Rate of Depreciation (%)	5.28	5.28	5.27
Depreciable Value	21335.08	21894.55	22298.17
Balance useful life of the asset	35.00	34.00	33.00
Elapsed life	0.00	1.00	2.00
Remaining Depreciable Value	21335.08	21685.98	20806.24
Depreciation during the year	208.57	1283.36	1306.90
Cumulative depreciation (incl. of AAD)	208.57	1491.93	2798.83
<b>Interest on Loan</b>			
Gross Normative Loan	16443.95	16743.95	17314.24
Cumulative Repayments upto Previous Year	0.00	208.57	1491.93
Net Loan-Opening	16443.95	16535.39	15822.31
Additions	300.01	570.28	57.56
Repayment during the year	208.57	1283.36	1306.90
Net Loan-Closing	16535.39	15822.31	14572.97
Average Loan	16489.67	16178.85	15197.64
Weighted Average Rate of Interest on Loan (%)	8.8572	8.8638	8.8700
Interest on Loan	243.42	1434.07	1348.03
<b>Return on Equity</b>			
Opening Equity	7047.41	7175.98	7420.39
Additions	128.57	244.41	24.67
Closing Equity	7175.98	7420.39	7445.06
Average Equity	7111.69	7298.18	7432.72
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
MAT Rate for respective year (%)	20.008	20.008	20.961
Rate of Return on Equity (%)	19.377	19.377	19.610
Return on Equity	229.67	1414.16	1457.59
<b>Interest on Working Capital</b>			
O & M Expenses	3.85	24.41	25.80
Maintenance Spares	6.93	43.94	46.44
Receivables	123.94	753.51	753.18
Total Working Capital	134.72	821.85	825.41
Rate of Interest (%)	11.75	11.75	11.75
Interest of working capital	15.83	96.57	96.99
<b>Annual Transmission Charges</b>			



Particulars	2011-12	2012-13	2013-14
Depreciation	208.57	1283.36	1306.90
Interest on Loan	243.42	1434.07	1348.03
Return on Equity	229.67	1414.16	1457.59
Interest on Working Capital	15.83	96.57	96.99
O & M Expenses	46.18	292.90	309.57
<b>Total</b>	<b>743.67</b>	<b>4521.06</b>	<b>4519.07</b>

#### **DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD**

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1309.33	1309.56	1309.56	1309.56	1309.56
Interest on Loan	1235.28	1120.10	1004.33	888.41	772.49
Return on Equity	1460.24	1460.50	1460.50	1460.50	1460.50
Interest on Working Capital	107.77	105.65	103.52	101.40	99.31
O & M Expenses	282.20	291.53	301.15	311.21	321.54
<b>Total</b>	<b>4394.82</b>	<b>4287.34</b>	<b>4179.06</b>	<b>4071.08</b>	<b>3963.40</b>

40. The details submitted by the petitioner in support of its claim for interest on working capital are given hereunder:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	23.52	24.29	25.10	25.93	26.80
Maintenance Spares	42.33	43.73	45.17	46.68	48.23
Receivables	732.47	714.56	696.51	678.51	660.57
Total working capital	798.32	782.58	766.78	751.12	735.60
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest on working capital</b>	<b>107.77</b>	<b>105.65</b>	<b>103.52</b>	<b>101.40</b>	<b>99.31</b>

#### **Capital Cost**

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

“(3) The Capital cost of an existing project shall include the following:

(a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;

(b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and  
(c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15.”

“(6) The following shall be excluded or removed from the capital cost of the existing and new project:

(a) The assets forming part of the project, but not in use; (b) Decapitalisation of Asset;”

42. The petitioner has claimed the capital cost of ₹24816.86 lakh for the instant transmission asset as on 31.3.2014.

43. The capital cost of ₹24816.86 lakh worked out by the Commission as on 31.3.2014 for the instant transmission asset has been considered as opening capital cost as on 1.4.2014 for determination of tariff in accordance with Regulation 9 of the 2014 Tariff Regulations.

### **Additional Capital Expenditure**

44. Clause (1) of Regulation 14 of the 2014 Tariff Regulations provides as under:-

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

- (i) Undischarged liabilities recognized to be payable at a future date;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and
- (v) Change in law or compliance of any existing law.”

45. Clause 13 of Regulation 3 of the 2014 Tariff Regulations defines

“Cut - off Date” means 31<sup>st</sup> March of the year closing after two years of the year of commercial operation of whole or part of the project, and in case the whole or part of the project is declared under commercial operation in the last quarter of a year, the cut - off date shall be 31<sup>st</sup> March of the year closing after three years of the year of commercial operation.”

46. The petitioner has claimed additional capital expenditure amounting to ₹9.00 lakh during 2014-15 for the instant transmission asset.

47. The petitioner in its rejoinder to the reply of TANGEDCO in affidavit dated 11.1.2016 has submitted that ₹9.00 lakh during 2014-15 has been proposed for sub-station on account of Balance and Retention payments for the works done in 2009-14 tariff period and the same is within the original scope of work.

48. The Commission has considered the submission of the petitioner. The additional capital expenditure projected for 2014-19 tariff period is allowed under Regulation 14 (1(i)) of 2014 Tariff Regulations subject to true up on actual basis.

#### **Debt: Equity**

49. Clause (1) and (3) of Regulation 19 of the 2014 Tariff Regulations provide as under:-\*

“19. Debt-Equity Ratio: (1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.”

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

“(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as maybe admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”

50. The petitioner has considered the debt:equity ratio of 70.00:30.00 as on 31.3.2014 for the instant transmission asset which is in line with the 2014 Tariff Regulations. The

details of the debt:equity considered for the purpose of tariff for 2014-19 tariff period is as follows:-

(₹ in lakh)

Funding	Capital cost as on 1.4.2014	(%)	Additional capital expenditure during 2014-19	(%)	Total Cost as on 31.3.2019	(%)
Debt	17371.80	70.00	6.30	70.00	17378.10	70.00
Equity	7445.06	30.00	2.70	30.00	7447.76	30.00
<b>Total</b>	<b>24816.86</b>	<b>100.00</b>	<b>9.00</b>	<b>100.00</b>	<b>24825.86</b>	<b>100.00</b>

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

51. Clause (1) and (2) of Regulations 24 and Clause (2) of Regulation 25 of the 2014 Tariff Regulations specify as under:-

“24. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.  
(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system”

“25. Tax on Return on Equity:

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

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

Where “t” is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.”

52. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during the 2013-14 has been considered for the purpose of ROE, which shall be trued up with actual tax rate in

accordance with Clause (3) of Regulation 25 of the 2014 Tariff Regulations. The ROE has been worked out and allowed as follows:-

(₹ in lakh)

<b>Return on Equity</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Opening Equity	7445.06	7447.76	7447.76	7447.76	7447.76
Additions	2.70	0.00	0.00	0.00	0.00
Closing Equity	7447.76	7447.76	7447.76	7447.76	7447.76
Average Equity	7446.41	7447.76	7447.76	7447.76	7447.76
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (%)	19.610	19.610	19.610	19.610	19.610
<b>Return on Equity</b>	<b>1460.27</b>	<b>1460.54</b>	<b>1460.54</b>	<b>1460.54</b>	<b>1460.54</b>

### **Interest on Loan ("IoL")**

53. Clause 5 and Clause 6 of Regulation 26 of the 2014 Tariff Regulations provides that:-

“(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.”

54. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2014. The petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2014-19 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up or next revision of tariff. By considering above, the IoL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of weighted

average rate of interest for 2014-19 tariff period are placed in Annexure-2 and the IoL has been worked out and allowed as follows:-

(₹ in lakh)

<b>Interest on Loan</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Gross Normative Loan	17371.80	17378.10	17378.10	17378.10	17378.10
Cumulative Repayments upto Previous Year	2798.83	4108.14	5417.68	6727.23	8036.78
Net Loan-Opening	14572.97	13269.96	11960.42	10650.87	9341.32
Additions	6.30	0.00	0.00	0.00	0.00
Repayment during the year	1309.31	1309.55	1309.55	1309.55	1309.55
Net Loan-Closing	13269.96	11960.42	10650.87	9341.32	8031.77
Average Loan	13921.47	12615.19	11305.64	9996.09	8686.55
Weighted Average Rate of Interest on Loan (%)	8.8732	8.8790	8.8835	8.8877	8.8930
<b>Interest on Loan</b>	<b>1235.29</b>	<b>1120.10</b>	<b>1004.34</b>	<b>888.43</b>	<b>772.49</b>

### **Depreciation**

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

"27. Depreciation:

...(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis"

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

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets."

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

(₹ in lakh)					
<b>Depreciation</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Opening Gross Block	24816.86	24825.86	24825.86	24825.86	24825.86
Additional Capitalisation	9.00	0.00	0.00	0.00	0.00
Closing Gross Block	24825.86	24825.86	24825.86	24825.86	24825.86
Average Gross Block	24821.36	24825.86	24825.86	24825.86	24825.86
Rate of Depreciation (%)	5.27	5.27	5.27	5.27	5.27
Depreciable Value	22339.22	22343.27	22343.27	22343.27	22343.27
Balance useful life of the asset	32.00	31.00	30.00	29.00	28.00
Elapsed life	3.00	4.00	5.00	6.00	7.00
Remaining Depreciable Value	19540.39	18235.13	16925.59	15616.04	14306.49
Depreciation during the year	1309.31	1309.55	1309.55	1309.55	1309.55
Cumulative depreciation (incl. of AAD)	4108.14	5417.68	6727.23	8036.78	9346.32

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

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

<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
<b>400 kV Bays:</b>					
No. of Bays	2	2	2	2	2
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
<b>Line: D/C Bundled( 4 or more sub-conductors)</b>					
Line Length (km)	152.17	152.17	152.17	152.17	152.17
Norms (₹ lakh/km)	1.06	1.10	1.13	1.17	1.21
<b>Total O&amp;M Expenses (₹ lakh)</b>	<b>282.20</b>	<b>291.53</b>	<b>301.15</b>	<b>311.21</b>	<b>321.55</b>

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

59. We would like to clarify that any application filed by the petitioner for revision of O&M Expenses on account of wage revision will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations. The O&M Expenses are allowed for the instant transmission asset as per prevailing norms.

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

60. Clause 1 (c) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specifies as follows:

##### **“28. Interest on Working Capital**

- (c) (i) Receivables equivalent to two months of fixed cost;
- (ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and
- (iii) Operation and maintenance expenses for one month”

“(5) ‘Bank Rate’ means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;”

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



62. The interest on working capital is worked out in accordance with Regulation 28 of the 2014 Tariff Regulations. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points). The components of the working capital and interest thereon have been worked as follows:-

	(₹ in lakh)				
<b>Interest on Working Capital</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
O & M Expenses	23.52	24.29	25.10	25.93	26.80
Maintenance Spares	42.33	43.73	45.17	46.68	48.23
Receivables	732.47	714.56	696.52	678.52	660.57
Total Working Capital	798.32	782.58	766.78	751.14	735.60
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	107.77	105.65	103.52	101.40	99.31

### **ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD**

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

	(₹ in lakh)				
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
<b>Depreciation</b>					
Opening Gross Block	24816.86	24825.86	24825.86	24825.86	24825.86
Additional Capitalisation	9.00	0.00	0.00	0.00	0.00
Closing Gross Block	24825.86	24825.86	24825.86	24825.86	24825.86
Average Gross Block	24821.36	24825.86	24825.86	24825.86	24825.86
Rate of Depreciation (%)	5.27	5.27	5.27	5.27	5.27
Depreciable Value	22339.22	22343.27	22343.27	22343.27	22343.27
Balance useful life of the asset	32.00	31.00	30.00	29.00	28.00
Elapsed life	3.00	4.00	5.00	6.00	7.00
Remaining Depreciable Value	19540.39	18235.13	16925.59	15616.04	14306.49
Depreciation during the year	1309.31	1309.55	1309.55	1309.55	1309.55
Cumulative depreciation (incl. of AAD)	4108.14	5417.68	6727.23	8036.78	9346.32
<b>Interest on Loan</b>					
Gross Normative Loan	17371.80	17378.10	17378.10	17378.10	17378.10
Cumulative Repayments upto Previous Year	2798.83	4108.14	5417.68	6727.23	8036.78

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Net Loan-Opening	14572.97	13269.96	11960.42	10650.87	9341.32
Additions	6.30	0.00	0.00	0.00	0.00
Repayment during the year	1309.31	1309.55	1309.55	1309.55	1309.55
Net Loan-Closing	13269.96	11960.42	10650.87	9341.32	8031.77
Average Loan	13921.47	12615.19	11305.64	9996.09	8686.55
Weighted Average Rate of Interest on Loan (%)	8.8732	8.8790	8.8835	8.8877	8.8930
Interest on Loan	1235.29	1120.10	1004.34	888.43	772.49
<b>Return on Equity</b>					
Opening Equity	7445.06	7447.76	7447.76	7447.76	7447.76
Additions	2.70	0.00	0.00	0.00	0.00
Closing Equity	7447.76	7447.76	7447.76	7447.76	7447.76
Average Equity	7446.41	7447.76	7447.76	7447.76	7447.76
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity	1460.27	1460.54	1460.54	1460.54	1460.54
<b>Interest on Working Capital</b>					
O & M Expenses	23.52	24.29	25.10	25.93	26.80
Maintenance Spares	42.33	43.73	45.17	46.68	48.23
Receivables	732.47	714.56	696.52	678.52	660.57
Total Working Capital	798.32	782.58	766.78	751.14	735.60
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	107.77	105.65	103.52	101.40	99.31
<b>Annual Transmission Charges</b>					
Depreciation	1309.31	1309.55	1309.55	1309.55	1309.55
Interest on Loan	1235.29	1120.10	1004.34	888.43	772.49
Return on Equity	1460.27	1460.54	1460.54	1460.54	1460.54
Interest on Working Capital	107.77	105.65	103.52	101.40	99.31
O & M Expenses	282.20	291.53	301.15	311.21	321.55
<b>Total</b>	<b>4394.85</b>	<b>4287.36</b>	<b>4179.09</b>	<b>4071.13</b>	<b>3963.43</b>

64. 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. However, the COD of the asset is after 2009, hence the claim of the petitioner is not relevant in the instant case.

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

65. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 52 (1) of the 2014 Tariff Regulations.

### **Licence Fee & RLDC Fees and Charges**

66. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 52 (2) (b) of the 2014 Tariff Regulations for 2014-19 tariff period. The petitioner shall also be entitled for recovery of RLDC fee & charges in accordance with Regulations 52 (2) (a) of the 2014 Tariff Regulations for 2014-19 tariff period.

### **Service Tax**

67. The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future. We are of the view that the petitioner's prayer is premature.

### **Sharing of Transmission Charges**

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. 445/TT/2014.

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

Sd/-  
(A.S. Bakshi)  
Member

Sd/-  
(A.K. Singhal)  
Member



# Annexure – 1

## DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2009-14

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXX- DOCO DRAWL ON 01-FEB-2012	8.80	2080.00	0.00	2080.00
BOND XXXI- DOCO DRAWL ON 01-FEB-2012	8.90	4837.00	0.00	4837.00
BOND XXXIII- DOCO DRAWL ON 01-FEB-2012	8.64	4500.00	0.00	4500.00
BOND XXXIV- DOCO DRAWL ON 01-FEB-2012	8.84	2887.00	0.00	2887.00
BOND XXXV- DOCO DRAWL ON 01-FEB-2012	9.64	105.00	0.00	105.00
BOND XXXVI- DOCO DRAWL ON 01-FEB-2012	9.35	529.00	0.00	529.00
BOND XXXVII- DOCO DRAWL ON 01-FEB-2012	9.25	625.00	0.00	625.00
BOND XXXVII-ADDCAP FOR 2011-12 ADDCAP FOR 2011-12 DRAWL 22011-12	9.25	0.00	17.84	17.84
BOND XXXVIII- DOCO DRAWL ON 01-FEB-2012	9.25	882.16	0.00	882.16
BOND XL-ADDCAP FOR 2012-13 ADDCAP FOR 2012-13 DRAWL ON 31-MAR-2013	0.00	0.00	490.00	490.00
BOND XLI -ADDCAP FOR 2012-13 ADDCAP FOR 2012-13 DRAWL ON 31-MAR-2013	0.00	0.00	80.28	80.28
BOND XLI -ADDCAP FOR 2013-14 ADDCAP FOR 2013-14	0.00	0.00	23.72	23.72
BOND XLII -ADDCAP FOR 2013-14 ADDCAP FOR 2013-14	0.00	0.00	33.84	33.84
<b>Total</b>		<b>16445.16</b>	<b>645.68</b>	<b>17090.84</b>

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

(₹ in lakh)

<b>Particulars</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Gross Opening Loan	16445.16	16463.00	17033.28
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00
<b>Net Loans Opening</b>	<b>16445.16</b>	<b>16463.00</b>	<b>17033.28</b>
Add: Draw(s) during the Year	17.84	570.28	57.56
Less: Repayments of Loan during the year	0.00	0.00	576.41
<b>Net Closing Loan</b>	<b>16463.00</b>	<b>17033.28</b>	<b>16514.43</b>
Average Net Loan	16454.08	16748.14	16773.86
Rate of Interest on Loan (%)	8.8572%	8.8638%	8.8700%
<b>Interest on Loan</b>	<b>1457.36</b>	<b>1484.53</b>	<b>1487.84</b>

## Annexure – 2

### DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2014-19

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND XXX- DOCO DRAWL ON 01-FEB-2012	8.80	2080.00	0.00	2080.00
BOND XXXI- DOCO DRAWL ON 01-FEB-2012	8.90	4837.00	0.00	4837.00
BOND XXXIII- DOCO DRAWL ON 01-FEB-2012	8.64	4500.00	0.00	4500.00
BOND XXXIV- DOCO DRAWL ON 01-FEB-2012	8.84	2887.00	0.00	2887.00
BOND XXXV- DOCO DRAWL ON 01-FEB-2012	9.64	105.00	0.00	105.00
BOND XXXVI- DOCO DRAWL ON 01-FEB-2012	9.35	529.00	0.00	529.00
BOND XXXVII- DOCO DRAWL ON 01-FEB-2012	9.25	625.00	0.00	625.00
BOND XXXVII-ADDCAP FOR 2011-12 ADDCAP FOR 2011-12 DRAWL 22011-12	9.25	17.84	0.00	17.84
BOND XXXVIII- DOCO DRAWL ON 01-FEB-2012	9.25	899.12	0.00	899.12
BOND XL-ADDCAP FOR 2012-13 ADDCAP FOR 2012-13 DRAWL ON 31-MAR-2013	9.30	490.00	0.00	490.00
BOND XLI -ADDCAP FOR 2012-13 ADDCAP FOR 2012-13 DRAWL ON 31-MAR-2013	8.85	80.28	0.00	80.28
BOND XLI -ADDCAP FOR 2013-14 ADDCAP FOR 2013-14	8.85	23.72	0.00	23.72
BOND XLII -ADDCAP FOR 2013-14 ADDCAP FOR 2013-14	8.80	33.84	0.00	33.84
<b>Total</b>		<b>17107.80</b>	<b>0.00</b>	<b>17107.80</b>

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

(₹ in lakh)

<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Gross Opening Loan	17107.80	17107.80	17107.80	17107.80	17107.80
Cumulative Repayments of Loans upto Previous Year	576.41	1768.40	3021.22	4358.81	5696.40
<b>Net Loans Opening</b>	<b>16531.39</b>	<b>15339.40</b>	<b>14086.58</b>	<b>12748.99</b>	<b>11411.40</b>
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	1191.99	1252.82	1337.59	1337.59	1337.59
<b>Net Closing Loan</b>	<b>15339.40</b>	<b>14086.58</b>	<b>12748.99</b>	<b>11411.40</b>	<b>10073.81</b>
Average Net Loan	15935.40	14712.99	13417.79	12080.20	10742.61
Rate of Interest on Loan (%)	8.8732%	8.8790%	8.8835%	8.8877%	8.8930%
<b>Interest on Loan</b>	<b>1413.99</b>	<b>1306.36</b>	<b>1191.97</b>	<b>1073.66</b>	<b>955.34</b>