

**CENTRAL ELECTRICITY REGULATORY COMMISSION**

**NEW DELHI**

**Petition No. 275/TT/2014**

**Coram:**

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

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

**Date of Hearing : 21.12.2015**

**Date of Order : 11.01.2016**

**In the matter of:**

Truing up of transmission tariff for 2009-14 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 and determination of transmission tariff for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for Combined elements of Asset-I: 315 MVA ICT-IV along with associated bays at Moga Sub-station, Asset-II: ICT-II along with associated bays and 2 nos. PSEB line bays at Moga Sub-station under Augmentation of transformation capacity at Amritsar and Moga Sub-station in Northern Region under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

**And in the matter of:**

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

.....**Petitioner**

**Versus**

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



Heerapura, Jaipur

3. Jaipur Vidyut Vitran Nigam Ltd.  
400 kV GSS Building (Ground Floor), Ajmer Road  
Heerapura, Jaipur
4. Jodhpur Vidyut Vitran Nigam Ltd.  
400 kV GSS Building (Ground Floor), Ajmer Road  
Heerapura, Jaipur
5. Himachal Pradesh State Electricity Board,  
Vidyut Bhawan, Kumar House Complex Building II  
Shimla-171004
6. Punjab State Power Corporation Ltd.  
Thermal Shed T1A, Near 22 Phatak  
Patiala-147001
7. Haryana Power Purchase Centre  
Shakti Bhawan, Sector-6  
Panchkula (Haryana) 134 109
8. Power Development Department  
Govt. of Jammu & Kashmir  
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Ltd.  
Shakti Bhawan, 14, Ashok Marg  
Lucknow- 226001
10. Delhi Transco Ltd.  
Shakti Sadan, Kotla Road  
New Delhi- 110002
11. BSES Yamuna Power Ltd.  
BSES Bhawan, Nehru Place  
New Delhi
12. BSES Rajdhani Power Ltd.  
BSES Bhawan, Nehru Place  
New Delhi



13. North Delhi Power Ltd.  
Power Trading & Load Dispatch Group  
Cennet Building  
Pitampura, New Delhi-110034
14. Chandigarh Administration  
Sector-9, Chandigarh
15. Uttarakhand Power Corporation Ltd.  
Urja Bhawan, Kanwali Road  
Dehradun
16. North Central Railway  
Allahabad
17. New Delhi Municipal Council  
Palika Kendra, Sansad Marg  
New Delhi-110002

....Respondents

The following were present:-

For Petitioner: Shri Anshul Garg, PGCIL  
Shri S K Niranjana, PGCIL  
Shri S.K. Venkatesan, PGCIL  
Shri M.M. Mondal, PGCIL  
Shri Rakesh Prasad, PGCIL  
Shri S.S. Raju, PGCIL

For Respondent: Shri G.L Sharma, Advocate, Rajasthan Discoms  
Smt. Neelam, Advocate, Rajasthan Discoms

### **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 Combined elements of 315 MVA ICT-IV along with associated bays



at Moga Sub-station (COD:1.7.2008)(Asset-I), ICT-II along with associated bays and 2 nos. PSEB line bays at Moga Sub-station(COD: 1.3.2008)(Asset-II) under Augmentation of transformation capacity at Amritsar and Moga Sub-station in Northern 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 capital 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 transmission licensees and distribution licensees or centralised power procurement companies of States who are procuring transmission service from the petitioner, mainly beneficiaries of the Northern 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 Electricity Act, 2003 (“the Act”). No comments have been received from the public in response to the notices published by the petitioner under Section 64 of the Act. The hearing in this matter was held on 21.12.2015. During the hearing, Respondent No. 2, 3 and 4, i.e., Ajmer Vidyut Vitaran Nigam Ltd., Jaipur Vidyut Vitaran Nigam Ltd., and Jodhpur Vidyut Vitaran Nigam Ltd., respectively, requested the Commission for one week time to file reply to the petition. The



Commission directed the respondents to file their reply by 28.12.2015 and the petitioner to file its rejoinder by 4.1.2016. The Commission during the hearing observed that in case no information is filed within the due date, the matter shall be considered based on the available records. Reply has been filed by Uttar Pradesh Power Corporation Ltd., Respondent No.9 and Respondent Nos.2, 3 and 4 vide affidavit dated 22.9.2014 and 23.12.2015, respectively. The petitioner has filed the rejoinder to the reply filed by Respondent Nos. 2, 3 and 4 vide affidavit dated 5.1.2016. The submissions of the respondents and the petitioner are being dealt in the respective paras of this order. The Commission further directed the petitioner to submit replies to the queries sought vide letter dated 18.12.2015 on affidavit with copy to respondents by 28.12.2015. Having heard the representatives of the petitioner and respondents 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 transmission scheme was accorded by the Board of Directors of the petitioner company vide Memorandum dated 1.9.2005 for an estimated cost of ₹4728.00 lakh including IDC of ₹250.00 lakh. The petitioner has built the transmission asset in the Northern Region. The date of commercial operation for combined elements of Asset-I is 1.7.2007, and for Asset-II the date of commercial operation is 1.3.2008. The notional date of commercial operation of the transmission asset is 1.3.2008.



- (b) The tariff from COD to 31.3.2009 for Asset-I and Asset-II was allowed vide order dated 30.6.2009 in Petition No. 128/2008 in accordance with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004.
- (c) Further, the transmission tariff for Asset-I and Asset-II was revised for COD to 31.3.2009 vide order dated 11.3.2010 in Petition No.292/2009 based on admitted capital cost of ₹3470.34 lakh on account of additional capitalization for 2008-09 in accordance with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004.
- (d) The tariff for Combined elements of Asset-I and Asset-II for the 2009-14 tariff period was allowed vide order dated 1.3.2011 in Petition No. 162/2010 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	186.44	198.33	207.32	207.32	207.32
Interest on Loan	211.36	207.99	199.94	180.16	160.39
Return on equity	184.86	196.66	205.57	205.57	205.57
Interest on Working Capital	28.39	29.75	30.94	31.56	32.25
O & M Expenses	324.88	343.48	363.14	383.88	405.84
<b>Total</b>	<b>935.94</b>	<b>976.21</b>	<b>1006.91</b>	<b>1008.49</b>	<b>1011.36</b>

- (e) The Commission, vide order dated 1.3.2011 in Petition No. 162/2010, has determined the tariff for the tariff period 2009-14 based on admitted capital cost of ₹3470.34 lakh as on 31.3.2009.



- (f) The MAT rate applicable as on 2008-09 was considered to arrive at rate of return on equity for the tariff period 2009-14, which is required to be adjusted as per the actual MAT rate applicable for the respective year at the time of truing up of tariff for the 2009-14 tariff period.
- (g) The instant petition was filed on 27.8.2014.

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

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

#### **Capital Cost**

6. The petitioner has claimed admitted capital cost of ₹3470.34 lakh as on 31.3.2009 for the purpose of tariff.

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 1.3.2011 in Petition No. 162/2010 has been considered as the opening capital cost as on 1.4.2009 for determination of tariff in accordance with Regulation 7 of the 2009 Tariff Regulations. The admitted capital cost of ₹3470.34 lakh as on 31.3.2009 has been considered to work out the trued up tariff for the tariff period 2009-14.



### **Additional Capital Expenditure**

9. The petitioner has claimed additional capitalization under Regulation 9 (1)(i) on account of un-discharged liabilities towards balance and retention payments within cut-off date.

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

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

(i) Undischarged liabilities;...”.

11. The petitioner has claimed additional capitalization of ₹152.18 lakh and ₹298.72 lakh for 2009-10 and 2010-11, respectively, on account of un-discharged liabilities towards Sub-station and PLCC.

12. In this regard, UPPCL, vide affidavit dated 22.9.2014, has submitted that additional capitalization allowed as per order dated 1.3.2011 was ₹109.97 lakh for sub-station, whereas the petitioner has claimed ₹152.18 lakh. The total capitalization allowed for the 2009-11 period was ₹449.77 lakh but the total additional capitalisation claimed in the instant petition is ₹450.90 lakh, resulting in an increase of ₹1.13 lakh. UPPCL has submitted that the petitioner should give justification for the increase in actual capitalization. The petitioner has not made any submissions in this regard.

13. Respondent No. 2, 3 and 4 vide affidavit dated 23.12.2015 submitted that the information furnished by the petitioner do not clarify nature and quantum of





work done. The petitioner has submitted that the additional capital expenditure pertains to the Transmission System and it was advertently stated that it pertains to generating station. The petitioner has further submitted that details of additional capital expenditure have been submitted in Form 7 and in the Auditor's Certificate filed alongwith the petition.

14. We have considered the submissions of the respondents and the petitioner. We are of the view that the additional capitalization claimed is on account of balance and retention payments for works done within the cut-off date. Further, the total capital cost of ₹3921.24 lakh including actual additional capitalisation claimed by the petitioner is well within the overall approved cost of ₹4728.00 lakh. Hence, considering the submissions made by the petitioner, the total capital cost including additional capitalization under of Regulation 9 (1)(i) of the 2009 Tariff Regulations as shown in the table below:-

(₹ in lakh)

Cost as per Investment Approval is ₹4728.00 lakh								
Particulars	Admitted capital cost as on 31.3.2009	Additional capitalization					Total additional capitalization	Total capital cost as on 31.3.2014
		2009-10	2010-11	2011-12	2012-13	2013-14		
Approved in order dated 1.3.2011	3470.34	109.97	339.80	0.00	0.00	0.00	449.77	3920.11
Actual	3470.34	152.18	298.72	0.00	0.00	0.00	450.90	3921.24

### **Debt: Equity**

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



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

16. The petitioner has claimed trued up Annual Fixed Charge based on debt-equity ratio of 70:30 as on 31.3.2009 admitted by the Commission in its order dated 1.3.2011 in Petition No. 162/2010 as opening debt:equity ratio as on 1.4.2009. The transmission assets covered in the instant petition are existing assets, as the COD is prior to 1.4.2009.

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

(₹ in lakh)		
Funding	Amount	(%)
Debt	2429.32	70.00
Equity	1041.02	30.00
<b>Total</b>	<b>3470.34</b>	<b>100.00</b>

18. With respect to additional capitalization, the petitioner has submitted the debt:equity ratio of 70:30 for 2009-10 to 2013-14. The Commission vide letter dated 18.12.2015, asked the petitioner to submit an undertaking on affidavit that actual equity infused for the additional capitalization during the 2009-14 tariff period is not less than 30%. The petitioner vide affidavit dated 22.12.2015 submitted that as per Clause 3 of Regulation 12 of the 2009 Tariff Regulations, debt:equity ratio for additional capitalization is 70:30. As per Form -13, 70% loan has been deployed for 2009-10 and 2010-11. Hence, deployment of equity is 30% as mentioned in Form- 1A, submitted with the affidavit dated 22.12.2015.



19. Debt: equity ratio is allowed in accordance with Clause 2 of Regulation 12 of the 2009 Tariff Regulations. The overall debt equity as on 31.3.2014 including additional capitalization is as under:-

(₹ in lakh)		
Funding	Amount	(%)
Debt	2744.95	70.00
Equity	1176.29	30.00
<b>Total</b>	<b>3921.24</b>	<b>100.00</b>

### **Interest on Loan (“IOL”)**

20. Regulation 16 of the 2009 Tariff Regulations provides the methodology for working out weighted average rate of interest on loan. The 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”.

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

22. We have considered the submissions of the petitioner and accordingly calculated the IOL based on actual interest rate submitted by the petitioner, in accordance with Regulation 16 of the 2009 Tariff Regulations. The details of weighted average rate of interest are placed at **Annexure-I** and the IOL has been worked out and allowed as follows:-

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 1.3.2011	211.36	207.99	199.94	180.16	160.39



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
As claimed by petitioner	212.71	208.80	198.92	179.15	159.42
Allowed after true up	212.71	208.80	198.91	179.15	159.40

23. The interest on loan has increased due to increase in actual weighted average interest rates and increase in loan on account of increase in additional capitalization incurred during tariff period 2009-14.

### **Return on Equity (“ROE”)**

24. 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 true up in accordance with Regulation 6 of these regulations.”

25. The petitioner has submitted that MAT rate of 11.330% applicable for 2008-09 was considered in the order dated 20.10.2010. However, for trueing 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 (t) %	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

26. UPPCL vide affidavit dated 22.9.2014 submitted that increase in Annual Fixed Charges as compared to order dated 1.3.2011 is on account of increase in pre-tax rate of return on equity. The respondent also submitted that the petitioner has not submitted any document to substantiate that the actual Income Tax paid to the Income Tax Department is same as the difference between ROE at revised pre-tax rate of return on equity and rate of return on equity at 15.50%. The petitioner should submit the required documents.

27. We have considered the submissions of the petitioner and respondents and have approved ROE in accordance with the provisions of the 2009-14 Tariff Regulations. Accordingly, the ROE as trued up in accordance with the 2009 Tariff Regulations is shown in the table below:-

Particulars	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 1.3.2011	184.86	196.66	205.57	205.57	205.57
As claimed by petitioner	198.66	219.03	227.93	227.93	230.67
Allowed after true up	198.66	219.03	227.93	227.93	230.67



28. The variation in return on equity is on account of increase in the applicable MAT rate for the purpose of grossing up of base rate of return on equity in accordance with the 2009 Tariff Regulations.

### **Depreciation**

29. 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”

30. 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.”

31. The Commission, in its order dated 1.3.2011 in Petition No. 162/2010, has worked out the depreciation in accordance with Regulation 17 of the 2009 Tariff Regulations.

32. The weighted average useful life of the transmission asset has been considered as per Regulations 3 (42) and 17 (4) of the 2009 Tariff Regulations. For the purpose of calculation, the weighted average useful life of the asset as on



COD has been considered as 25 years. The depreciation for the tariff period 2009-14 has been worked out in accordance with Regulation 17 of the 2009 Tariff Regulations based on admitted capital expenditure as under. There is slight variation in allowed depreciation after true up with respect to petitioner's submission due to rounding off.

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 1.3.2011	186.44	198.33	207.32	207.32	207.32
As claimed by petitioner	187.58	199.51	207.40	207.40	207.40
Allowed after true up	187.58	199.51	207.40	207.40	207.40

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

33. The petitioner has computed O&M expenses for the assets mentioned in the petition and in accordance with the O&M norms for lines and bays specified in Regulation 19(g) of the 2009 Tariff Regulations. Accordingly, the O&M Expenses have been worked out as given in the table below:-

Particulars		2009-10	2010-11	2011-12	2012-13	2013-14
Actual No of Sub-stations (nos.)	400 kV Sub-stations	2	2	2	2	2
Actual No of Sub-stations (nos.)	220 kV Sub-stations	6	6	6	6	6
Norms as per Regulation	400 kV Sub-stations (₹lakh/bay)	52.40	55.40	58.57	61.92	65.46
	220 kV Sub-stations (₹lakh/bay)	36.68	38.78	41.00	43.34	45.82
<b>Total (₹in lakh)</b>		<b>324.88</b>	<b>343.48</b>	<b>363.14</b>	<b>383.88</b>	<b>405.84</b>



34. The O&M Expenses claimed by the petitioner for tariff period 2009-14 are same as that approved in the tariff order dated 1.3.2011 in Petition No. 162/2010. Accordingly, the O&M Expenses claimed by the petitioner, allowed and true up are the same, and are as follows:-

Particulars	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 1.3.2011	324.88	343.48	363.14	383.88	405.84
As claimed by petitioner	324.88	343.48	363.14	383.88	405.84
Allowed after true up	324.88	343.48	363.14	383.88	405.84

#### **Interest on working capital("IWC")**

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

36. 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.

37. The Commission, vide order dated 1.3.2011 in Petition No. 162/2010, has 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, as amended, 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.

38. The IWC true up is as under:-

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	48.73	51.52	54.47	57.58	60.88
O & M expenses	27.07	28.62	30.26	31.99	33.82
Receivables	158.76	166.85	171.46	171.73	172.68
Total	234.57	246.99	256.19	261.30	267.37
Rate of Interest (%)	12.25	12.25	12.25	12.25	12.25
<b>Interest</b>	<b>28.73</b>	<b>30.26</b>	<b>31.38</b>	<b>32.01</b>	<b>32.75</b>

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 1.3.2011	28.39	29.75	30.94	31.56	32.25
As claimed by petitioner	28.73	30.26	31.38	32.01	32.75
Allowed after true up	28.73	30.26	31.38	32.01	32.75

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



## ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

40. 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	3470.34	3622.52	3921.24	3921.24	3921.24
Addition during 2009-14 due to Projected Additional Capitalization	152.18	298.72	0.00	0.00	0.00
Closing Gross block	3622.52	3921.24	3921.24	3921.24	3921.24
Average Gross block	3546.43	3771.88	3921.24	3921.24	3921.24
<b>Depreciation</b>					
Rate of Depreciation(%)	5.289	5.289	5.289	5.289	5.289
Depreciable Value	3191.79	3394.69	3529.12	3529.12	3529.12
Elapsed Life (Beginning of the year)	0	1	2	3	4
Weighted Balance Useful life of the assets	25	24	23	22	21
Remaining Depreciable Value	3191.79	3207.11	3142.02	2934.62	2727.23
Depreciation	187.58	199.51	207.40	207.40	207.40
Cumulative Depreciation	187.58	387.09	594.49	801.89	1009.29
<b>Interest on Loan</b>					
Gross Normative Loan	2429.32	2535.85	2744.95	2744.95	2744.95
Cumulative Repayment upto Previous Year	158.80	346.38	545.89	753.29	960.69
Net Loan-Opening	2270.52	2189.47	2199.06	1991.66	1784.26
Addition due to Additional Capitalization	106.53	209.10	0.00	0.00	0.00
Repayment during the year	187.58	199.51	207.40	207.40	207.40
Net Loan-Closing	2189.47	2199.06	1991.66	1784.26	1576.86
Average Loan	2229.99	2194.26	2095.36	1887.96	1680.56
Weighted Average Rate of Interest on Loan(%)	9.5384	9.5157	9.4930	9.4891	9.4850
Interest	212.71	208.80	198.91	179.15	159.40



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
<b>Return on Equity</b>					
Opening Equity	1041.02	1086.67	1176.29	1176.29	1176.29
Additions	45.65	89.62	0.00	0.00	0.00
Closing Equity	1086.67	1176.29	1176.29	1176.29	1176.29
Average Equity	1063.85	1131.48	1176.29	1176.29	1176.29
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT Rate for respective year (%)	16.995	19.931	20.008	20.008	20.961
Return on Equity (Pre-Tax) (%)	18.674	19.358	19.377	19.377	19.610
Return on Equity (Pre-Tax)	198.66	219.03	227.93	227.93	230.67
<b>Interest on Working Capital</b>					
Maintenance Spares	48.73	51.52	54.47	57.58	60.88
O & M expenses	27.07	28.62	30.26	31.99	33.82
Receivables	158.76	166.85	171.46	171.73	172.68
Total	234.57	246.99	256.19	261.30	267.37
Interest	28.73	30.26	31.38	32.01	32.75
<b>Annual Transmission Charges</b>					
Depreciation	187.58	199.51	207.40	207.40	207.40
Interest on Loan	212.71	208.80	198.91	179.15	159.40
Return on Equity	198.66	219.03	227.93	227.93	230.67
Interest on Working Capital	28.73	30.26	31.38	32.01	32.75
O & M Expenses	324.88	343.48	363.14	383.88	405.84
<b>Total</b>	<b>952.56</b>	<b>1001.08</b>	<b>1028.76</b>	<b>1030.37</b>	<b>1036.06</b>

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

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



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	207.40	207.40	207.40	207.40	207.40
Interest on Loan	139.71	120.02	100.33	80.64	60.95
Return on equity	230.67	230.67	230.67	230.67	230.67
Interest on Working Capital	33.95	34.18	34.44	34.72	35.02
O & M Expenses	373.86	386.26	399.10	412.32	426.02
<b>Total</b>	<b>985.59</b>	<b>978.53</b>	<b>971.94</b>	<b>965.75</b>	<b>960.06</b>

42. 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	56.08	57.94	59.87	61.85	63.90
O & M expenses	31.16	32.19	33.26	34.36	35.50
Receivables	164.27	163.09	161.99	160.96	160.01
Total	251.50	253.22	255.11	257.17	259.41
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest</b>	<b>33.95</b>	<b>34.18</b>	<b>34.44</b>	<b>34.72</b>	<b>35.02</b>

43. Respondent 2,3 and 4, have submitted that the petitioner has not furnished the specific details of the application fees, expenses for publication of notices, licensee fee, taxes, levies, duties, RLDC fee and charges, additional capitalization, etc. The respondents have further submitted that the petitioner claim should be allowed as per the regulations. In response, the petitioner has clarified that as per the regulations the petitioner is entitled to claim the same directly from the beneficiaries without making any application to the Commission.

44. We have considered the submissions of the respondent and the petitioner. It is clarified that application fees, expenses for publication of notices, licensee fee, taxes, levies, duties, RLDC fee and charges, additional capitalization, etc.



are allowed as per the norms laid down in the 2014-19 Tariff Regulations after carrying out due prudence check.

### **Capital Cost**

45. Clause (1) & (3) of Regulation 9 of the 2014 Tariff Regulations specifies 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.”

46. The petitioner has claimed capital expenditure of ₹3921.24 lakh as on 31.3.2014 and no additional capitalization has been claimed for the tariff period 2014-19. The trued up capital cost of ₹3921.24 lakh as on 31.3.2014 is considered to workout the tariff for the 2014-19 tariff period.

### **Additional Capital Expenditure**

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



### **Debt:EquityRatio**

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

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

49. The petitioner has considered debt:equity ratio as 70:30 as on 31.3.2014. The admitted debt:equity ratio of 70:30 after true-up for the tariff period ending 31.3.2014 has been considered as opening debt:equity ratio as on 1.4.2014. Further, as there is no additional capitalization, debt:equity ratio will remain the same for the 2014-19 tariff period. The details of the debt:equity as on 1.4.2014 considered for the purpose of tariff for the 2014-19 tariff period is as follows:-

(in ₹ lakh)

Particulars	Amount	(%)
Debt	2744.95	70.00
Equity	1176.29	30.00
<b>Total</b>	<b>3921.24</b>	<b>100.00</b>

### **Interest on Loan (“IOL”)**

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

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

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



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

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

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

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	2744.95	2744.95	2744.95	2744.95	2744.95
Cumulative Repayment upto Previous Year	1168.09	1375.48	1582.88	1790.28	1997.68
Net Loan-Opening	1576.86	1369.47	1162.07	954.67	747.27
Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Repayment during the year	207.40	207.40	207.40	207.40	207.40
Net Loan-Closing	1369.47	1162.07	954.67	747.27	539.87
Average Loan	1473.16	1265.77	1058.37	850.97	643.57
Weighted Average Rate of Interest on Loan(%)	9.4838	9.4819	9.4795	9.4762	9.4714
<b>Interest</b>	<b>139.71</b>	<b>120.02</b>	<b>100.33</b>	<b>80.64</b>	<b>60.96</b>

### **Return on Equity(“ROE”)**

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

“**24. Return on Equity:** (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system”



**“25. Tax on Return on Equity:**

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

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

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

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

54. In this regard, Respondent No.9 submitted that approval of transmission tariff for the 2014-19 tariff period should be withheld till the petitioner submits necessary documents to substantiate the actual income tax paid to the income tax department. Further, the respondent submits that the petitioner should not be allowed to recover the shortfall in AFC till the relevant documents are submitted. The petitioner has not submitted any replies regarding the same.





55. Respondent Nos. 2,3 and 4 submitted that the petitioner should submit specific data for proper checking of income tax for MAT rate and ROE calculated at prevalent rates. The petitioner has submitted that the ROE has been claimed by grossing up with MAT rate as provided in the regulations.

56. We have considered the submissions made by the respondents and the petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the ROE determined by the Commission is given below:-

<b>(₹ in lakh)</b>					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	1176.29	1176.29	1176.29	1176.29	1176.29
Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Equity	1176.29	1176.29	1176.29	1176.29	1176.29
Average Equity	1176.29	1176.29	1176.29	1176.29	1176.29
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 of Equity(Pre-Tax)	19.610	19.610	19.610	19.610	19.610
<b>Return on Equity(Pre-Tax)</b>	<b>230.67</b>	<b>230.67</b>	<b>230.67</b>	<b>230.67</b>	<b>230.67</b>



## **Depreciation**

57. 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."

58. The petitioner in the instant petition has submitted that the assets will complete 12 years on 29.2.2020 considering notional COD of 1.3.2008. The petitioner has computed depreciation considering capital expenditure of ₹3921.24 lakh as on 31.3.2014 and no additional capitalization during the 2014-19 tariff period.

59. We have considered the submission made by the petitioner with reference to depreciation. Depreciation is allowed as provided under Regulation 27 of the



2014 Tariff Regulations. The details of the depreciation allowed is given hereunder:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross block	3921.24	3921.24	3921.24	3921.24	3921.24
Additions during the year due to projected additional capitalization	0.00	0.00	0.00	0.00	0.00
Closing Gross block	3921.24	3921.24	3921.24	3921.24	3921.24
Rate of Depreciation(%)	5.289	5.289	5.289	5.289	5.289
Depreciable Value	3529.12	3529.12	3529.12	3529.12	3529.12
Remaining Depreciable Value	2519.83	2312.43	2105.03	1897.64	1690.24
<b>Depreciation</b>	<b>207.40</b>	<b>207.40</b>	<b>207.40</b>	<b>207.40</b>	<b>207.40</b>

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

60. 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 No of Sub-stations (nos.)	400 kV Sub-stations	2	2	2	2	2
Actual No of Sub-stations (nos.)	220 kV Sub-stations	6	6	6	6	6
Norms as per Regulation	400 kV Sub-stations (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71
	220 kV Sub-stations (₹ lakh/bay)	42.21	43.61	45.06	46.55	48.10
<b>Total (₹ in lakh)</b>		<b>373.86</b>	<b>386.26</b>	<b>399.10</b>	<b>412.32</b>	<b>426.02</b>

61. The petitioner has submitted that norms for O&M Expenses for the tariff period 2014-19 have been arrived on the basis of normalized actual O&M



Expenses during the period 2008-13. The petitioner has further submitted that the wage revision of the employees of the petitioner Company is due during 2014-19 and actual impact of wage hike, which will be effective at a future date, has not been factored in fixation of the normative O&M rate specified for the tariff period 2014-19. The petitioner has prayed to be allowed to approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase.

62. With respect to the revision in O&M norms due to wage revision, UPPCL has submitted that in case the amount exceeds the normative O&M charges the petitioner has to show the amount that exceeds the normative O&M Expenses.

63. 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.

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

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>O&amp;M Expenses Allowed</b>	<b>373.86</b>	<b>386.26</b>	<b>399.10</b>	<b>412.32</b>	<b>426.02</b>

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

65. 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;”

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

67. 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 by the Commission is shown in the table below:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	56.08	57.94	59.87	61.85	63.90
O & M expenses	31.16	32.19	33.26	34.36	35.50
Receivables	164.27	163.09	161.99	160.96	160.01
Total	251.50	253.22	255.11	257.17	259.42
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest</b>	<b>33.95</b>	<b>34.18</b>	<b>34.44</b>	<b>34.72</b>	<b>35.02</b>

**Annual Transmission Charges**

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



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Gross Block</b>					
Opening Gross block	3921.24	3921.24	3921.24	3921.24	3921.24
Addition during 2014-19 due to Projected Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Gross block	3921.24	3921.24	3921.24	3921.24	3921.24
Average Gross block	3921.24	3921.24	3921.24	3921.24	3921.24
<b>Depreciation</b>					
Rate of Depreciation(%)	5.2891	5.2891	5.2891	5.2891	5.2891
Depreciable Value	3529.12	3529.12	3529.12	3529.12	3529.12
Elapsed Life (Beginning of the year)	5	6	7	8	9
Weighted Balance Useful life of the assets	20	19	18	17	16
Remaining Depreciable Value	2519.83	2312.43	2105.03	1897.64	1690.24
Depreciation	207.40	207.40	207.40	207.40	207.40
Cumulative Depreciation	1216.68	1424.08	1631.48	1838.88	2046.28
<b>Interest on Loan</b>					
Gross Normative Loan	2744.95	2744.95	2744.95	2744.95	2744.95
Cumulative Repayment upto Previous Year	1168.09	1375.48	1582.88	1790.28	1997.68
Net Loan-Opening	1576.86	1369.47	1162.07	954.67	747.27
Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Repayment during the year	207.40	207.40	207.40	207.40	207.40
Net Loan-Closing	1369.47	1162.07	954.67	747.27	539.87
Average Loan	1473.16	1265.77	1058.37	850.97	643.57
Weighted Average Rate of Interest on Loan (%)	9.4838	9.4819	9.4795	9.4762	9.4714
Interest	139.71	120.02	100.33	80.64	60.96
<b>Return on Equity</b>					
Opening Equity	1176.29	1176.29	1176.29	1176.29	1176.29
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	1176.29	1176.29	1176.29	1176.29	1176.29
Average Equity	1176.29	1176.29	1176.29	1176.29	1176.29



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT Rate for respective year (%)	20.961	20.961	20.961	20.961	20.961
Return on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity (Pre Tax)	230.67	230.67	230.67	230.67	230.67
<b>Interest on Working Capital</b>					
Maintenance Spares	56.08	57.94	59.87	61.85	63.90
O & M expenses	31.16	32.19	33.26	34.36	35.50
Receivables	164.27	163.09	161.99	160.96	160.01
Total	251.50	253.22	255.11	257.17	259.42
Interest	33.95	34.18	34.44	34.72	35.02
<b>Annual Transmission Charges</b>					
Depreciation	207.40	207.40	207.40	207.40	207.40
Interest on Loan	139.71	120.02	100.33	80.64	60.96
Return on Equity	230.67	230.67	230.67	230.67	230.67
Interest on Working Capital	33.95	34.18	34.44	34.72	35.02
O & M Expenses	373.86	386.26	399.10	412.32	426.02
<b>Total</b>	<b>985.59</b>	<b>978.53</b>	<b>971.94</b>	<b>965.74</b>	<b>960.06</b>

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

69. 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.

70. UPPCL has submitted vide affidavit dated 22.9.2014 that reimbursement of expenditure towards petition filing fee and expenditure of publishing of notices should be paid only after production of documentary proof thereof. The petitioner



vide affidavit dated 20.11.2015 submitted the documentary proof regarding the same.

71. 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**

72. The petitioner has requested to be allowed 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**

73. 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**

74. 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**

75. 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.

76. This Order disposes of Petition No. 275/TT/2014.

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

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



**ANNEXURE-I****DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO**

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
BOND XXVI-DOCO-01 Jul-2007	9.95	223.00	0.00	223.00
BOND XXV-ADD CAP FOR 2007-08-JUL 2007- 2 JUL 2007	10.10	30	0.00	30.00
BOND XXV-ADD CAP FOR 2009-2010 Add cap loan 1-	10.10	0.00	30.00	30.00
BOND XXV-DOCO 01-jul-2007-	10.10	495.00	0.00	495.00
BOND XXVI-ADD CAP FOR 2007-2008-31 MAR-2008	9.30	127.00	0.00	127.00
BOND XXVI-Add Cap for 2009-2010 Add Cap Loan 2-	9.30	0.00	76.53	76.53
BOND XXVI-ADD CAP FOR 2010-2011 Add cap loan 3-	9.30	0.00	4.47	4.47
BOND XXVI-DOCO-01-MAR-2008-	9.30	1341.00	0.00	1341.00
BOND XXVI-DOCO 02-JUL-2007-02-JUL-2007-	9.30	81.00	0.00	81.00
BOND XXXI-ADD CAP FOR 2009-2010 XXXI Add Cap 9-10-	9.33	80.00	0.00	80.00
BOND XXVII-ADD CAP FOR 2010-11 Add Cap loan 4-	9.33	0.00	80.00	80.00
BOND XXXI-ADD CAP FOR 2010-11 Add cap loan 5-	8.90	0.00	86.00	86.00
BOND XXXII- ADD CAP FOR 2010-11 Add cap loan 6-	8.64	0.00	38.63	38.63
<b>Total</b>		<b>2377.00</b>	<b>315.63</b>	<b>2692.63</b>

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

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	2377.00	2483.53	2692.63	2692.63	2692.63
Cumulative Repayments of loans upto previous year	0.00	0.00	18.58	219.24	433.24
Net Loans Opening	2377.00	2483.53	2674.05	2473.39	2259.39



Add: Drawals during the year	106.53	209.10	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	0.00	18.58	200.66	214.00	214.00
Net Closing Loans	2483.53	2674.05	2473.39	2259.39	2045.39
Average Net Loan	2430.27	2578.79	2573.72	2366.39	2152.39
<b>Rate of Interest on Loan(%)</b>	<b>9.5384</b>	<b>9.5157</b>	<b>9.4930</b>	<b>9.4891</b>	<b>9.4850</b>
Interest on Loan	231.81	245.39	244.32	224.55	204.15



**ANNEXURE-II****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 XXVI-DOCO-01 Jul-2007	9.95	223.00	0.00	223.00
BOND XXV-ADD CAP FOR 2007-08-JUL 2007- 2 JUL 2007	10.10	30	0.00	30.00
BOND XXV-ADD CAP FOR 2009-2010 Add cap loan 1-	10.10	30.00	0.00	30.00
BOND XXV-DOCO 01-jul-2007-	10.10	495.00	0.00	495.00
BOND XXVI-ADD CAP FOR 2007-2008-31 MAR-2008	9.30	127.00	0.00	127.00
BOND XXVI-Add Cap for 2009-2010 Add Cap Loan 2-	9.30	76.53	0.00	76.53
BOND XXVI-ADD CAP FOR 2010-2011 Add cap loan 3-	9.30	4.47	0.00	4.47
BOND XXVI-DOCO-01-MAR-2008-	9.30	1341.00	0.00	1341.00
BOND XXVI-DOCO 02-JUL-2007-02-JUL-2007-	9.30	81.00	0.00	81.00
BOND XXXI-ADD CAP FOR 2009-2010 XXXI Add Cap 9-10-	9.33	80.00	0.00	80.00
BOND XXVII-ADD CAP FOR 2010-11 Add Cap loan 4-	9.33	80.00	0.00	80.00
BOND XXXI-ADD CAP FOR 2010-11 Add cap loan 5-	8.90	86.00	0.00	86.00
BOND XXXII- ADD CAP FOR 2010-11 Add cap loan 6-	8.64	38.63	0.00	38.63
<b>Total</b>		<b>2692.63</b>	<b>0.00</b>	<b>2692.63</b>



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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	2692.63	2692.63	2692.63	2692.63	2692.63
Cumulative Repayments of loans upto previous year	654.41	878.80	1103.19	1327.58	1551.97
Net Loans Opening	2038.22	1813.83	1589.44	1365.05	1140.66
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	224.39	224.39	224.39	224.39	224.39
Net Closing Loans	1813.83	1589.44	1365.05	1140.66	916.27
Average Net Loan	1926.03	1701.64	1477.25	1252.86	1028.47
<b>Rate of Interest on Loan(%)</b>	<b>9.4838</b>	<b>9.4819</b>	<b>9.4795</b>	<b>9.4762</b>	<b>9.4714</b>
Interest on Loan	182.66	161.35	140.04	118.72	97.41

