

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**PETITION NO.366/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 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 and Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 for 400 kV D/C Dulhasti-Kishenpur Transmission Line with associated bays and 400 kV Kishenpur-Wagoora Transmission Line along with associated bays at Kishenpur and Wagoora Sub-Stations under Dulhasti Combined Transmission System in Northern Region

**And in the Matter of:**

Power Grid Corporation of India Ltd,  
SAUDAMINI, Plot No.-2, Sector-29,  
Gurgaon-122001 (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 - 171 004.
6. Punjab State Power Corporation Ltd. Electricity Board,  
Thermal Shed TIA  
Near 22 Pathak Patiala - 147 001.
7. Haryana Power Purchase Centre,  
Shakti Bhawan, Sector - 6  
Panchkula (Haryana) - 134 109
8. Power Development Department,  
Govt. of Jammu and Kashmir  
Mini Secretariat, Jammu .
9. Uttar Pradesh Power Corporation Ltd.,  
Shakti Bhawan, 14, Ashok Marg,  
Lucknow - 226 001.
10. Delhi Transco Ltd.,  
Shakti Sadan, Kotla Road,  
New Delhi - 110 002
11. BSES Yamuna Power Ltd.,  
Shakti Kiran Building, Karkardooma,  
Delhi – 110 092.
12. BSES Rajdhani Power Ltd.,  
BSES Bhawan, Nehru Place,  
New Delhi.
13. North Delhi Power Ltd.,  
33kV S/STN Building  
Hudson Line  
Kingsway Camp  
New Delhi
14. Chandigarh Administration,  
Sector - 9, Chandigarh
15. Uttaranchal Power Corporation Ltd.,  
FRI Complex, Kalagarh,  
Dehradun



16. North Central Railway,  
Allahabad

17. New Delhi Municipal Council,  
Palika Kendra, Sansad Marg,  
New Delhi - 110 002

.....Respondent(s)

The following were present:

For Petitioner: Shri S.K. Niranjana, PGCIL  
Shri S.S. Raju, PGCIL  
Shri Jasbir Singh, PGCIL  
Shri Rakesh Prasad, PGCIL  
Shri Anshul Garg, PGCIL  
Shri M.M. Mondal, PGCIL  
Shri S.K Venkatesan, PGCIL  
Shri Piyush Awasthi, PGCIL  
Smt. Sangeeta Edwards, PGCIL

For Respondents: Shri S.K Agarwal, Advocate, Rajasthan Discoms  
Shri G.L Verma, Advocate, Rajasthan Discoms  
Smt. Neelam, Advocate, Rajasthan Discoms

### **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 trueing up of 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 in respect of 400 kV D/C Dulhasti-Kishenpur Transmission Line with associated bays and 400 kV Kishenpur-Wagoora Transmission Line along with associated bays at Kishenpur and



Wagoora Sub-Stations under Dulhasti Combined Transmission System in Northern Region (hereinafter referred to as "the transmission assets").

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

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

a) Administrative approval and expenditure for the transmission scheme was accorded by the Government of India vide its letter dated 2.7.2002 at a total capital investment of ₹56705 lakh, which included IDC of ₹14204 lakh at 3rd quarter, 2000 price level. Transmission assets were commissioned on 1.4.2007.

b) The transmission charges for the 2009-14 tariff period was initially determined vide order dated 11.2.2011 in Petition No. 164/2010 based on admitted capital cost of the transmission assets and debt:equity as on 31.3.2009 as under:-

<b>Admitted as on 31.3.2009</b>	<b>Amount (₹ in lakh)</b>	<b>Percentage (%)</b>
Debt	35990.71	73.04
Equity	13282.74	26.96
<b>Capital Cost</b>	<b>49273.45</b>	<b>100.00</b>

c) In addition to the above, the Commission had also allowed estimated additional capital cost amounting to ₹66.90 lakh towards balance and retention payments during 2009-11 for determination of tariff for 2009-14 tariff period.

d) The Commission determined the tariff for the transmission assets for tariff period 2009-14, based on admitted capital cost of ₹49273.45 lakh and estimated additional capital expenditure of ₹66.90 lakh during 2009-11 as given below:-

(₹ in lakh)

<b>Particulars</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Depreciation	2583.51	2585.18	2585.90	2585.90	2585.90
Interest on Loan	1921.78	1728.92	1533.60	1335.43	1139.14
Return on Equity	2322.89	2324.65	2325.46	2325.46	2325.46
Interest on Working Capital	165.96	163.36	160.75	158.13	155.64
O & M Expenses	472.64	499.64	528.30	558.51	590.36
<b>Total</b>	<b>7466.79</b>	<b>7301.74</b>	<b>7134.01</b>	<b>6963.44</b>	<b>6796.50</b>

4. 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.

5. In this context, the petitioner has filed the instant petition on 11.9.2014, for revision of tariff for the tariff period 2009-14 in accordance with Regulation 6 of the 2009 Tariff Regulations.

6. 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. A common reply to the petition has been filed by Respondents No. 2, 3 and 4 vide their affidavit dated 21.12.2015. At the outset, we have observed that the respondents seek thorough checking of details furnished by the petitioner. Suffice it to say that the requisite prudence check is an integral part of the tariff determination process. Specific concerns expressed by these respondents are addressed in the respective para hereunder.



7. The hearing in this matter was held on 21.12.2015. During the hearing, the Commission had directed the petitioner to submit details of the additional capital expenditure claimed towards final payments and house compensation, forest payments during 2014-15 on affidavit with a copy to the respondents by 31.12.2015. The commission had also allowed further time for reply by the respondents to file their reply by 31.12.2015 and the petitioner to file rejoinder by 5.1.2016. During the hearing, the Commission emphasized to comply with the timeline given to file reply and rejoinder. The Commission through record of proceeding, it was reiterated that on failing to submit information by due date, the matter would be decided on the basis of the information already available on record. As the petitioner has not filed the additional information and rejoinder, the case is being decided based on the information available on record.

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

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

9. 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”.

10. 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**

11. The petitioner has claimed capital cost of ₹49273.45 lakh as on 31.3.2009 in respect of the transmission assets for the purpose of tariff determination.

12. The last proviso to Regulation 7(2) 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”.

13. Accordingly, the capital cost of ₹49273.45 lakh admitted by the Commission as on 31.3.2009 has been considered as opening capital cost as on 1.4.2009 for determination of trued up tariff in accordance with Regulation 7 of the 2009 Tariff Regulations.

## **Additional Capital Expenditure**

14. 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”

15. The petitioner has submitted that it has actually incurred an additional capital expenditure of ₹167.73 lakh during 2009-14 towards final payment of undischarged liabilities as depicted below:-

(₹ in lakh)

Apportioned approved cost	Admitted cost as on 31.3.2009	Additional capital expenditure						Capital cost as on 31.3.2014
		2009-10	2010-11	2011-12	2012-13	2013-14	Total	
56705.00	49273.45	35.08	27.46	33.88	70.03	1.28	167.73	49441.18



16. The above mentioned additional capital expenditure is towards balance and retention payments. Respondents No. 2, 3 and 4 vide their combined affidavit dated 21.12.2015 have submitted that the figures furnished by the petitioner do not clarify the nature and quantum of payments made. We notice that the petitioner has submitted the Auditor's Certificate dated 20.7.2014 certifying the actual capital cost.

17. We have considered the submissions of the petitioner with regard to the actual capital expenditure during 2009-14. Since the capital addition of ₹167.73 lakh is based on actual capital expenditure incurred as per the Auditor Certificate dated 20.7.2014, and is within the original scope of work and the total capital expenditure during 2009-14 is within the limits of the total approved capital expenditure, the same is allowed for the purpose of revision of tariff in accordance with Regulation 6 of the 2009 Tariff Regulations.

### **Debt: Equity**

18. 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.”



19. The debt:equity ratio of 73.04:26.96 admitted by the Commission vide order dated 11.2.2011 in Petition No. 164/2010 as on 31.3.2009 has been considered as on 1.4.2009 for determination of tariff in accordance with the Regulation 12 of the 2009 Tariff Regulations. In respect of the additional capital expenditure, debt: equity ratio of 70:30 has been considered in line with the 2009 Tariff Regulations.

20. 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.

21. 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 31.3.2009</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	35990.71	73.04	117.41	70.00	36108.13	73.03
Equity	13282.74	26.96	50.32	30.00	13333.05	26.97
<b>Total</b>	<b>49273.45</b>	<b>100.00</b>	<b>167.73</b>	<b>100.00</b>	<b>49441.18</b>	<b>100.00</b>

### **Return on Equity (“ROE”)**

22. 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:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$



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

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

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

23. 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

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

Return on Equity	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 11.2.2011	2322.89	2324.65	2325.46	2325.46	2325.46
Claimed by the petitioner	2481.40	2574.10	2578.41	2581.43	2614.57
Allowed after truing up in this order	2481.40	2574.11	2578.41	2581.44	2614.57

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 and increase due to actual additional capital expenditure.

### **Interest on Loan (“IoL”)**

25. 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”.

26. 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 are placed in Annexure-1. The IoL worked out is as follows:-

	(₹ in lakh)				
<b>Interest on Loan</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Approved vide order dated 11.2.2011	1921.78	1728.92	1533.60	1335.43	1139.14
Claimed by the petitioner	1914.71	1722.50	1537.23	1338.12	1139.51
Allowed after truing up in this order	1914.70	1722.50	1536.52	1338.12	1139.51

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**

27. 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>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Approved vide order dated 11.2.2011	2583.51	2585.18	2585.90	2585.90	2585.90
Claimed by the petitioner	2583.50	2585.04	2586.24	2588.69	2590.57
Allowed after truing up in this order	2583.50	2585.03	2586.24	2588.68	2590.57

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

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

28. 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>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Approved vide order dated 11.2.2011	165.96	163.36	160.75	158.13	155.64
Claimed by the petitioner	169.11	168.42	166.11	163.58	161.77
Allowed after truing up in this order	169.11	168.42	166.09	163.58	161.77

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.

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

29. 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>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Approved vide order dated 11.2.2011	472.64	499.64	528.30	558.51	590.36
Claimed by the petitioner	472.64	499.64	528.30	558.51	590.36
Allowed after truing up in this order	472.64	499.64	528.30	558.51	590.36

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

30. 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>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
<b>Depreciation</b>					
Opening Gross Block	49273.45	49308.53	49335.99	49369.87	49439.90
Additional Capitalisation	35.08	27.46	33.88	70.03	1.28
Closing Gross Block	49308.53	49335.99	49369.87	49439.90	49441.18
Average Gross Block	49290.99	49322.26	49352.93	49404.89	49440.54
Rate of Depreciation (%)	5.24	5.24	5.24	5.24	5.24
Depreciable Value	44361.89	44405.82	44429.99	44479.64	44528.00
Balance useful life of the asset	32	31	30	29	28
Elapsed life	2	3	4	5	6
Remaining Depreciable Value	39989.10	37433.75	34876.32	32336.84	29780.25
Depreciation during the year	2583.50	2585.03	2586.24	2588.68	2590.57
Cumulative depreciation (incl. of AAD)	6956.29	9541.32	12127.56	14716.24	17306.81
<b>Interest on Loan</b>					
Gross Normative Loan	35990.72	36015.28	36034.50	36058.21	36107.24
Cumulative Repayments upto Previous Year	9336.45	11919.95	14504.98	17091.22	19679.90
Net Loan-Opening	26654.27	24095.33	21529.52	18967.00	16427.34
Additions	24.56	19.22	23.72	49.02	0.90
Repayment during the year	2583.50	2585.03	2586.24	2588.68	2590.57
Net Loan-Closing	24095.33	21529.52	18967.00	16427.34	13837.67
Average Loan	25374.80	22812.43	20248.26	17697.17	15132.50



<b>Particulars</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Weighted Average Rate of Interest on Loan (%)	7.5457	7.5507	7.5884	7.5612	7.5302
Interest on Loan	1914.70	1722.50	1536.52	1338.12	1139.51
<b>Return on Equity</b>					
Opening Equity	13282.73	13293.25	13301.49	13311.66	13332.67
Additions	10.52	8.24	10.16	21.01	0.38
Closing Equity	13293.25	13301.49	13311.66	13332.67	13333.05
Average Equity	13287.99	13297.37	13306.57	13322.16	13332.86
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	16.995	19.931	20.008	20.008	20.961
Rate of Return on Equity (%)	18.674	19.358	19.377	19.377	19.610
Return on Equity	2481.40	2574.11	2578.41	2581.44	2614.57
<b>Interest on Working Capital</b>					
O & M Expenses	39.39	41.64	44.02	46.54	49.20
Maintenance Spares	70.90	74.95	79.24	83.78	88.55
Receivables	1270.22	1258.28	1232.59	1205.06	1182.80
Total Working Capital	1380.51	1374.87	1355.86	1335.38	1320.55
Rate of Interest (%)	12.25	12.25	12.25	12.25	12.25
Interest of working capital	169.11	168.42	166.09	163.58	161.77
<b>Annual Transmission Charges</b>					
Depreciation	2583.50	2585.03	2586.24	2588.68	2590.57
Interest on Loan	1914.70	1722.50	1536.52	1338.12	1139.51
Return on Equity	2481.40	2574.11	2578.41	2581.44	2614.57
Interest on Working Capital	169.11	168.42	166.09	163.58	161.77
O & M Expenses	472.64	499.64	528.30	558.51	590.36
<b>Total</b>	<b>7621.35</b>	<b>7549.70</b>	<b>7395.56</b>	<b>7230.33</b>	<b>7096.77</b>

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

31. The petitioner has claimed the tariff charges for 2014-19 tariff period as under:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	2593.92	2597.24	2597.24	2597.24	2597.24
Interest on Loan	949.31	759.51	565.99	372.59	178.17
Return on Equity	2618.75	2622.89	2622.89	2622.89	2622.89
Interest on Working Capital	171.68	168.49	165.05	161.66	158.28
O & M Expenses	540.27	558.37	576.89	596	615.78
<b>Total</b>	<b>6873.93</b>	<b>6706.50</b>	<b>6528.06</b>	<b>6350.38</b>	<b>6172.36</b>

32. 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	45.02	46.53	48.07	49.67	51.32
Maintenance Spares	81.04	83.76	86.53	89.40	92.37
Receivables	1145.66	1117.75	1088.01	1058.40	1028.73
<b>Total</b>	<b>1271.72</b>	<b>1248.04</b>	<b>1222.61</b>	<b>1197.47</b>	<b>1172.42</b>
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	171.68	168.49	165.05	161.66	158.28

### **Capital Cost**

33. 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;”

34. The capital cost of ₹49441.18 lakh worked out by the Commission as on 31.3.2014 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**

35. Clause (1) and (2) 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.”

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

- (i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;
- (ii) Change in law or compliance of any existing law;
- (iii) Deferred works relating to ash pond or ash handling system in the original scope of work; and
- (iv) Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.

36. 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.”

37. The petitioner has submitted, vide Management Certificate enclosed with the petition dated 11.9.2014 that the additional capital expenditure estimated during 2014-19 tariff period is ₹26.12 lakh towards forest land compensation in respect of 400 kV D/C Dulhasti-Kishenpur Transmission Line with associated bays. The petitioner has





further submitted, vide Auditor's Certificate dated 20.7.2014, that the additional capital expenditure estimated during 2014-19 tariff period is ₹114.64 lakh towards final payments & house compensation, forest payments and retention payments in respect of the 400 kV Kishenpur Wagoora Transmission Line with associated bays. The details of additional capital expenditure is given as below:

Sr. No.	Work/Equipment	Amount (₹ in lakh)	Justification
(a)	Transmission Line (2014-15)	99.77	Final Payments & House compensation, forest payments, balance/retention payments.
(b)	Leasehold Land	40.99	Balance/ Retention Payments

The petitioner has submitted copies of correspondence with the State Government authorities in support of its claim for additional capital expenditure for forest land compensation. Further the Commission, during the hearing dated 21.12.2015, directed the petitioner to submit the details of the additional capital expenditure claimed towards house compensation and forest payments. However, the petitioner has not submitted any documents within due date to substantiate the claim of additional capital expenditure towards land compensation, forest payments and house compensation.

38. We have considered the submission of the petitioner placed on record. The petitioner has claimed the additional capital expenditure on account of balance and retention payments. However, in absence of the supporting documents as sought, the estimated additional capital expenditure is not considered at present. The petitioner shall claim additional capital expenditure after actual payments incurred along with the supporting documents at the time of true up or revision of tariff. In view of the above, the capital cost allowed during 2014-19 is worked out as under:

<b>Funding</b>	<b>Capital cost as on 31.3.2014</b>	<b>(%)</b>	<b>Additional capital expenditure during 2014-19</b>	<b>(%)</b>	<b>Total Cost as on 31.3.2019</b>	<b>(%)</b>
Debt	36108.13	73.03	00.00	00.00	36108.13	73.03
Equity	13333.05	26.97	00.00	00.00	13333.05	26.97
<b>Total</b>	<b>49441.18</b>	<b>100.00</b>	<b>00.00</b>	<b>00.00</b>	<b>49441.18</b>	<b>100.00</b>

### **Debt: Equity**

39. 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.”

40. The petitioner has considered the debt:equity ratio of 73.03:26.97 as on 31.3.2014, which is in line with the 2014 Tariff Regulations.

### **Return on Equity (“ROE”)**

41. 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.”

42. 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	13333.05	13333.05	13333.05	13333.05	13333.05
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	13333.05	13333.05	13333.05	13333.05	13333.05
Average Equity	13333.05	13333.05	13333.05	13333.05	13333.05
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	2614.61	2614.61	2614.61	2614.61	2614.61

### **Interest on Loan (“IoL”)**



43. 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.”

44. 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. IoL has been worked out and allowed as follows:-

(₹ in lakh)

Interest on Loan	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	36108.13	36108.13	36108.13	36108.13	36108.13
Cumulative Repayment upto Previous Year	22270.47	24861.07	27451.67	30042.26	32632.86
Net Loan-Opening	13837.67	11247.07	8656.47	6065.87	3475.27
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	2590.60	2590.60	2590.60	2590.60	2590.60
Net Loan-Closing	11247.07	8656.47	6065.87	3475.27	884.67
Average Loan	12542.37	9951.77	7361.17	4770.57	2179.97
Weighted Average Rate of Interest on Loan (%)	7.5403	7.5621	7.6009	7.6838	7.9121
Interest on Loan	<b>945.73</b>	<b>752.56</b>	<b>559.52</b>	<b>366.56</b>	<b>172.48</b>

## **Depreciation**

45. 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."

46. 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 transmissions asset will be completing 12 years after the tariff period 2014-19; hence depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-II of the 2014 Tariff Regulations. The detailed calculations for depreciation for the transmission asset are worked out and allowed as follows:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Depreciation</b>					
Opening Gross Block	49441.18	49441.18	49441.18	49441.18	49441.18
Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	49441.18	49441.18	49441.18	49441.18	49441.18
Average Gross Block	49441.18	49441.18	49441.18	49441.18	49441.18
Freehold Land (Av. Cost)	0.00	0.00	0.00	0.00	0.00
Rate of Depreciation (%)	5.24	5.24	5.24	5.24	5.24
Elapsed life	7	8	9	10	11
Balance Useful life of the asset	27	26	25	24	23
Remaining Depreciable Value	27190.26	24599.66	22009.06	19418.46	16827.86
Depreciation during the year	2590.60	2590.60	2590.60	2590.60	2590.60

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

47. Clause 3(a) of Regulation 29 of the 2014 Tariff Regulations specifies 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:-

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>400 kV Bays:</b>					
No. of Bays	6	6	6	6	6
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
<b>Line: S/C Twin/Triple Conductor:</b>					
Line Length (km)	139.77	139.77	139.77	139.77	139.77
Norms (₹ lakh/km)	0.404	0.418	0.432	0.446	0.461
<b>Line D/C Twin/Triple Conductor</b>					
Line Length (km)	172.57	172.57	172.57	172.57	172.57
Norms (₹ lakh/km)	0.707	0.731	0.755	0.78	0.806
<b>Total O&amp;M Expenses (₹ lakh)</b>	<b>540.27</b>	<b>558.37</b>	<b>576.89</b>	<b>596.00</b>	<b>615.78</b>



48. 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. 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)**

49. 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;”

50. 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%.

51. 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	45.02	46.53	48.07	49.67	51.32
Maintenance Spares	81.04	83.76	86.53	89.40	92.37
Receivables	1143.77	1114.02	1084.36	1054.82	1025.21
Total	1269.84	1244.31	1218.97	1193.89	1168.89
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	171.43	167.98	164.56	161.18	157.80

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

52. 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	49441.18	49441.18	49441.18	49441.18	49441.18
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	49441.18	49441.18	49441.18	49441.18	49441.18
Average Gross Block	49441.18	49441.18	49441.18	49441.18	49441.18
Rate of Depreciation (%)	5.24	5.24	5.24	5.24	5.24
Depreciable Value	44497.64	44497.06	44497.06	44497.06	44497.06
Balance useful life of the asset	27	26	25	24	23
Elapsed life	7	8	9	10	11
Remaining Depreciable Value	27190.26	24599.66	22009.06	19418.46	16827.86
Depreciation during the year	2590.60	2590.60	2590.60	2590.60	2590.60
Cumulative depreciation	19897.41	22488.01	25078.60	27669.20	30259.80
<b>Interest on Loan</b>					
Gross Normative Loan	36108.13	36108.13	36108.13	36108.13	36108.13
Cumulative Repayments upto Previous Year	22270.47	24861.07	27451.67	30042.26	32632.86
Net Loan-Opening	13837.67	11247.07	8656.47	6065.87	3475.27
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	2590.60	2590.60	2590.60	2590.60	2590.60
Net Loan-Closing	11247.07	8656.47	6065.87	3475.27	884.67
Average Loan	12542.37	9951.77	7361.17	4770.57	2179.97





<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Weighted Average Rate of Interest on Loan (%)	7.5403	7.5621	7.6009	7.6838	7.9121
Interest on Loan	945.73	752.56	559.52	366.56	172.48
<b>Return on Equity</b>					
Opening Equity	13333.05	13333.05	13333.05	13333.05	13333.05
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	13333.05	13333.05	13333.05	13333.05	13333.05
Average Equity	13333.05	13333.05	13333.05	13333.05	13333.05
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	2614.61	2614.61	2614.61	2614.61	2614.61
<b>Interest on Working Capital</b>					
O & M Expenses	45.02	46.53	48.07	49.67	51.32
Maintenance Spares	81.04	83.76	86.53	89.40	92.37
Receivables	1143.77	1114.02	1084.36	1054.82	1025.21
Total Working Capital	1269.84	1244.31	1218.97	1193.89	1168.89
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	171.43	167.98	164.56	161.18	157.80
<b>Annual Transmission Charges</b>					
Depreciation	2590.60	2590.60	2590.60	2590.60	2590.60
Interest on Loan	945.73	752.56	559.52	366.56	172.48
Return on Equity	2614.61	2614.61	2614.61	2614.61	2614.61
Interest on Working Capital	171.43	167.98	164.56	161.18	157.80
O & M Expenses	540.27	558.37	576.89	596.00	615.78
<b>Total</b>	<b>6862.64</b>	<b>6684.13</b>	<b>6506.18</b>	<b>6328.95</b>	<b>6151.27</b>

### **Deferred Tax Liability**

53. 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. The deferred tax liability shall be dealt as per Regulations 49 of the 2014 Tariff Regulations, as amended. Accordingly, the petitioner is entitled to recover the deferred tax liability upto 31.3.2009 whenever the same gets materialized directly from the beneficiaries or long term transmission customers /DICs.

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

54. 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**

55. 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**

56. 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**

57. 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.

58. This order disposes of Petition No.366/TT/2014.

sd/-

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

sd/-

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



**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2009-14)**

(₹ in lakh)

Particulars	Interest Rate (%)					Loan deployed as on 1.4.2009	Additions during the tariff period	Total
	2009-10	2010-11	2011-12	2012-13	2013-14			
BOND VII-DOCO - 01-APR-2007-	13.64	13.64	13.64	13.64	13.64	442.00	0.00	442.00
BOND X-DOCO - 01-NOV-2006-	10.90	10.90	10.90	10.90	10.90	43.00	0.00	43.00
BOND XI-option- I-DOCO - 01-NOV-2006-	9.80	9.80	9.80	9.80	9.80	46.00	0.00	46.00
BOND XII-DOCO - 01-NOV-2006-	9.70	9.70	9.70	9.70	9.70	3.00	0.00	3.00
BOND - XIII - Option - I-DOCO - 01-NOV-2006-	8.63	8.63	8.63	8.63	8.63	2247.00	0.00	2247.00
BOND-XIII - Option-II-DOCO - 01-APR-2007-	7.85	7.85	7.85	7.85	7.85	1768.00	0.00	1768.00
BOND XV-DOCO - 01-NOV-2006-	6.68	6.68	6.68	6.68	6.68	6700.00	0.00	6700.00
BOND XVI-DOCO - 01-NOV-2006-	7.10	7.10	7.10	7.10	7.10	3323.00	0.00	3323.00
BOND XVII-DOCO - 01-NOV-2006-	7.39	7.39	7.39	7.39	7.39	7326.00	0.00	7326.00
BOND XVIII-DOCO - 01-NOV-2006-	8.15	8.15	8.15	8.15	8.15	2540.00	0.00	2540.00
BOND XXII-ADDCAP FOR 2008-2009 - 02-NOV-2006-	8.68	8.68	8.68	8.68	8.68	250.00	0.00	250.00
*Oriental Bank of commerce-DOCO - 01-NOV-2006-	9.6000	10.2207	12.3157	12.3721	12.3500	21.00	0.00	21.00
*CORPORATION BANK-DOCO -01-APR-2007-	10.5990	10.5651	12.5486	13.0000	13.0000	221.00	0.00	221.00
*PUNJAB NATIONAL BANK-I-DOCO - 01-APR-2007-	8.9512	9.7222	11.8627	11.8969	0.0000	442.00	0.00	442.00
*Punjab National Bank-II-DOCO - 01-NOV-2006-	8.8915	9.6512	11.7996	11.8396	11.6000	25.00	0.00	25.00
*BOI (Foreign Currency)-DOCO - 01-APR-2007-43.53	2.7715	2.1673	2.1084	2.2839	2.0160	773.53	0.00	773.53
BOND-III series-I-DOCO - 01-APR-2007-	9.75	9.75	9.75	9.75	9.75	838.79	0.00	838.79
BOND-III SERIES -(2nd) (9.75%)-DOCO - 01-APR-2007-	13.50	13.50	13.50	13.50	13.50	134.21	0.00	134.21



Particulars	Interest Rate (%)					Loan deployed as on 1.4.2009	Additions during the tariff period	Total
	2009-10	2010-11	2011-12	2012-13	2013-14			
BOND XXVII-ADDCAP FOR 2007-2008 - 31-MAR-2008-	9.47	9.47	9.47	9.47	9.47	1489.85	0.00	1489.85
*INDIAN OVERSEAS BANK II-DOCO - 01-APR-2007-	9.4768	9.8142	11.9379	12.5664	0.0000	1500.00	0.00	1500.00
BOND XXVIII-DOCO DRAWL ON 01-APR-2007-	9.33	9.33	9.33	9.33	9.33	151.00	0.00	151.00
BOND XXIX-ADDCAP FOR 2008-2009 DRAWL ON 12-MAR-2009 - 12-MAR-2009-	9.20	9.20	9.20	9.20	9.20	764.00	0.00	764.00
BOND XXXI-ADDCAP FOR 2009-2010 ADDCAP 2009-10-	8.90	8.90	8.90	8.90	8.90	0.00	24.56	24.56
BOND XXXI-ADDCAP FOR 2010-2011 Add cap 1 201011-	0.00	8.90	8.90	8.90	8.90	0.00	19.22	19.22
BOND XXXI-ADDCAP FOR 2011-2012 Add cap 1 2011-12-	0.00	0.00	8.90	8.90	8.90	0.00	2.22	2.22
BOND XXXIII-ADDCAP FOR 2011-2012 Add cap 2 2011-12-	0.00	0.00	8.64	8.64	8.64	0.00	1.00	1.00
<b>Total</b>						<b>31048.38</b>	<b>47.00</b>	<b>31095.38</b>

\*Weighted average rate of interest upto 4 decimal places has been considered here as per the actual loan portfolio of PGCIL.

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

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	31048.38	31072.94	31092.16	31095.38	31095.38
Cumulative Repayments of Loans upto Previous Year	6748.68	9036.93	11346.01	13779.24	16288.72
<b>Net Loans Opening</b>	<b>24299.70</b>	<b>22036.01</b>	<b>19746.15</b>	<b>17316.14</b>	<b>14806.66</b>
Add: Draw(s) during the Year	24.56	19.22	3.22	0.00	0.00
Less: Repayments of Loan during the year	2288.25	2309.08	2433.23	2509.48	2309.30
<b>Net Closing Loan</b>	<b>22036.01</b>	<b>19746.15</b>	<b>17316.14</b>	<b>14806.66</b>	<b>12497.36</b>
Average Net Loan	23167.86	20891.08	18531.15	16061.40	13652.01
Rate of Interest on Loan (%)*	7.5457	7.5507	7.5884	7.5612	7.5302
<b>Interest on Loan</b>	<b>1748.17</b>	<b>1577.42</b>	<b>1406.22</b>	<b>1214.44</b>	<b>1028.03</b>

\*Petitioner, in the tariff computation submitted with the petition, has considered rate of interest on loan upto two decimal points.



**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2014-19)**

(₹ in lakh)

Particulars	Interest Rate (%)					Loan deployed as on 1.4.2014	Additions during the tariff period	Total
	2014-15	2015-16	2016-17	2017-18	2018-19			
BOND VII-DOCO - 01-APR-2007-	13.64	13.64	13.64	13.64	13.64	442.00	0.00	442.00
BOND X-DOCO - 01-NOV-2006-	10.90	10.90	10.90	10.90	10.90	43.00	0.00	43.00
BOND XI-option- I-DOCO - 01-NOV-2006-	9.80	9.80	9.80	9.80	9.80	46.00	0.00	46.00
BOND XII-DOCO - 01-NOV-2006-	9.70	9.70	9.70	9.70	9.70	3.00	0.00	3.00
BOND - XIII - Option - I-DOCO - 01-NOV-2006-	8.63	8.63	8.63	8.63	8.63	2247.00	0.00	2247.00
BOND-XIII - Option-II-DOCO - 01-APR-2007-	7.85	7.85	7.85	7.85	7.85	1768.00	0.00	1768.00
BOND XV-DOCO - 01-NOV-2006-	6.68	6.68	6.68	6.68	6.68	6700.00	0.00	6700.00
BOND XVI-DOCO - 01-NOV-2006-	7.10	7.10	7.10	7.10	7.10	3323.00	0.00	3323.00
BOND XVII-DOCO - 01-NOV-2006-	7.39	7.39	7.39	7.39	7.39	7326.00	0.00	7326.00
BOND XVIII-DOCO - 01-NOV-2006-	8.15	8.15	8.15	8.15	8.15	2540.00	0.00	2540.00
BOND XXII-ADDCAP FOR 2008-2009 - 02-NOV-2006-	8.68	8.68	8.68	8.68	8.68	250.00	0.00	250.00
*Oriental Bank of commerce-DOCO - 01-NOV-2006-	12.3500	12.3500	12.3500	12.3500	12.3500	21.00	0.00	21.00
*CORPORATION BANK-DOCO -01-APR-2007-	13.0000	13.0000	13.0000	13.0000	13.0000	221.00	0.00	221.00
*PUNJAB NATIONAL BANK-I-DOCO - 01-APR-2007-	11.6600	11.6600	11.6600	11.6600	11.6600	442.00	0.00	442.00
*Punjab National Bank- II-DOCO - 01-NOV-2006-	11.6000	11.6000	11.6000	11.6000	11.6000	25.00	0.00	25.00
*BOI (Foreign Currency)-DOCO - 01-APR-2007-43.53	1.9300	1.9300	1.9300	1.9300	1.9300	773.53	0.00	773.53
BOND-III series-I-DOCO - 01-APR-2007-	9.75	9.75	9.75	9.75	9.75	838.79	0.00	838.79
BOND-III SERIES -(2nd) (9.75%)-DOCO - 01-APR-2007-	13.50	13.50	13.50	13.50	13.50	134.21	0.00	134.21



Particulars	Interest Rate (%)					Loan deployed as on 1.4.2014	Additions during the tariff period	Total
	2014-15	2015-16	2016-17	2017-18	2018-19			
BOND XXVII-ADDCAP FOR 2007-2008 - 31-MAR-2008-	9.47	9.47	9.47	9.47	9.47	1489.85	0.00	1489.85
*INDIAN OVERSEAS BANK II-DOCO - 01-APR-2007-	12.9000	12.9000	12.9000	12.9000	12.9000	1500.00	0.00	1500.00
BOND XXVIII-DOCO DRAWL ON 01-APR-2007-	9.33	9.33	9.33	9.33	9.33	151.00	0.00	151.00
BOND XXIX-ADDCAP FOR 2008-2009 DRAWL ON 12-MAR-2009 - 12-MAR-2009-	9.20	9.20	9.20	9.20	9.20	764.00	0.00	764.00
BOND XXXI-ADDCAP FOR 2009-2010 ADDCAP 2009-10-	8.90	8.90	8.90	8.90	8.90	24.56	0.00	24.56
BOND XXXI-ADDCAP FOR 2010-2011 Add cap 1 201011-	8.90	8.90	8.90	8.90	8.90	19.22	0.00	19.22
BOND XXXI-ADDCAP FOR 2011-2012 Add cap 1 2011-12-	8.90	8.90	8.90	8.90	8.90	2.22	0.00	2.22
BOND XXXIII-ADDCAP FOR 2011-2012 Add cap 2 2011-12-	8.64	8.64	8.64	8.64	8.64	1.00	0.00	1.00
<b>Total</b>						<b>31095.38</b>	<b>0.00</b>	<b>31095.38</b>

\*Rate of interest upto 4 decimal places has been considered here as per the actual loan portfolio of PGCIL on 31.3.2014.

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	31095.38	31095.38	31095.38	31095.38	31095.38
Cumulative Repayments of Loans upto Previous Year	18598.02	20897.58	23197.14	25489.29	27777.36
<b>Net Loans Opening</b>	<b>12497.36</b>	<b>10197.80</b>	<b>7898.24</b>	<b>5606.09</b>	<b>3318.02</b>
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	2299.56	2299.56	2292.15	2288.07	1768.52
<b>Net Closing Loan</b>	<b>10197.80</b>	<b>7898.24</b>	<b>5606.09</b>	<b>3318.02</b>	<b>1549.50</b>
Average Net Loan	11347.58	9048.02	6752.17	4462.06	2433.76
Rate of Interest on Loan (%)*	7.5403	7.5621	7.6009	7.6838	7.9121
<b>Interest on Loan</b>	<b>855.64</b>	<b>684.22</b>	<b>513.23</b>	<b>342.86</b>	<b>192.56</b>

\*Petitioner, in the tariff computation submitted with the petition, has considered rate of interest on loan upto two decimal points.

