

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO.15/TT/2015

Coram:

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

**Date of Hearing: 20.1.2016
Date of Order : 18.3.2016**

In the Matter of:

Truing up of transmission tariff for 2009-14 tariff block under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 and determination of transmission tariff for 2014-19 tariff block under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for Combined Assets of 400 kV D/C Twin Conductor Kanpur- Ballabgarh Transmission Line along with its Associated Bays and 40% FSC at Ballabgarh on 400 kV D/C Kanpur- Ballabgarh Transmission Line under Northern Region System Strengthening Scheme - IX (NRSS-IX).

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 - 302005.
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 Electricity Board,
The Mall, 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.,
Power Trading & Load Dispatch Group,
Cennet Building,
Adjacent to 66/11kV Pitampura - ,
Grid Building, Near PP Jewellers,
Pitampura, New Delhi - 110 034
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 - 110 002

.....Respondents

The following were present:

For Petitioner: Shri M.M. Mondal, PGCIL
Shri S.K Venkatesan, PGCIL
Smt.Sangeeta Edwards, PGCIL
Shri S.C. Taneja, PGCIL
Shri Jasbir Singh, PGCIL
Shri S.S. Raju, PGCIL
Shri Rakesh Prasad, PGCIL
Shri Anshul Garg, PGCIL
Shri Y.K Sehgal, PGCIL
Shri Nitish Kumar, PGCIL
Shri G.C. Dhal, PGCIL
Shri Amit Yadav, PGCIL

For Respondents: Shri Vinod Kumar Yadav, Advocate, Rajasthan Discoms

ORDER

The petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as “the petitioner”) for revision of tariff under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 Tariff Regulations”) based on truing up of capital expenditure for the period 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



Combined Assets of 400 kV D/C Twin Conductor Kanpur- Ballabgarh Transmission Line along with its Associated Bays ("Asset-I") and 40% FSC at Ballabgarh on 400 kV D/C Kanpur-Ballabgarh Transmission Line ("Asset-II") under Northern Region System Strengthening Scheme - IX (NRSS-IX) (hereinafter referred to as "the transmission assets").

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

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

a) The administrative approval and expenditure sanction to the transmission scheme was accorded by the Board of Directors of POWERGRID vide C/CP/NRSS-IX dated 7.7.2008 for ₹52514 lakh including an IDC of ₹3855 lakh based on 1st Quarter, 2008 price level. The Asset-I of the scheme was commissioned on 1.11.2010 and Asset-II was commissioned on 1.7.2011.

b) The tariff for the 2009-14 tariff period was determined vide order dated 1.8.2011 in Petition No. 329/2010 for Asset-I based on actual COD of 1.11.2010 and in the order dated 23.5.2012 in Petition No. 17/2011 for Asset-II based on anticipated COD of 1.6.2011.

c) The total estimated additional capital expenditure of ₹1900.01 lakh for Asset - I and ₹666.74 lakh for Asset-II was considered for determination of tariff for 2009-14 tariff period. The details of capital cost are as shown below:-



(₹ in lakh)

Asset	Apportioned approved cost	Admitted cost as on COD	Allowed Additional capital expenditure during 2009-14			Cost as on 31.3.2014
			2010-11	2011-12	Total	
Asset-I	49473.46	33694.21*	1430.27	469.74	1900.01	35594.22
Asset-II	3040.55	2485.44	-	666.74	666.74	3152.18
Total	52514.00	36179.65	1430.27	1136.48	2566.75	38745.93

*inclusive of initial spares of ₹100.88 lakh for S/S

d) The annual fixed charges were determined based on the above capital cost and estimated additional capital expenditure for the transmission assets during 2009-14 tariff period as given below:-

(₹ in lakh)

Particulars	Asset-I		Combined Asset-I and Asset-II		
	2010-11 (pro-rata)	2011-12 (pro-rata)	2011-12 (pro-rata)	2012-13	2013-14
Depreciation	756.73	466.16	1677.88	2043.01	2043.01
Interest on Loan	895.19	522.49	1869.15	2109.74	1923.79
Return on Equity	751.89	463.59	1668.46	2031.94	2031.94
Interest on Working Capital	53.62	32.66	128.60	154.52	152.57
O & M Expenses	194.76	123.55	509.44	646.26	683.07
Total	2652.18	1608.44	5853.53	6985.46	6834.37

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 19.12.2014, 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. The hearing in this matter was held on 20.1.2016. The petitioner was directed to submit the details in respect of the additional capital expenditure, initial spares, undischarged liabilities and actual equity infused during 2009-14 and 2014-19 tariff periods and the same has been submitted by the petitioner vide affidavit dated 11.2.2016.

7. 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:-

8. 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”.

9. 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

10. The petitioner has claimed capital cost of ₹33708.45 lakh and ₹2488.86 lakh as on COD in respect of Asset-I and Asset-II respectively for the purpose of tariff determination.

11. Clause 1 of Regulation 7 of the 2009 Tariff Regulations provides that:-

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

(a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan – (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;

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

(c) additional capital expenditure determined under regulation 9:

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

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

Cost Overrun

13. There is cost overrun in respect of Asset-II. The Commission in its previous order dated 23.5.2012 in Petition No. 17/2011 had allowed the cost overrun in respect of Asset-II subject to prudence check during truing up. Further, in response to query of the

Commission dated 16.1.2016 and 20.1.2016 regarding the Revised Cost Estimate (RCE) for Asset-II, the petitioner has submitted that the same is under management approval. In the absence of RCE, the capital cost of Asset-II has been restricted to the apportioned approved cost. Thus, the total capital cost in respect of Asset-II is restricted to ₹3040.55 lakh.

Treatment of Initial Spares

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

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

15. The petitioner has submitted, in the present petition, that the actual initial spares are ₹130.74 lakh and ₹214.91 lakh pertaining to sub-station, corresponding to the capital cost of ₹4164.37 lakh and ₹3328.92 lakh, as on the cut-off date of 31.3.2013 and 31.3.2014 respectively for Asset-I and Asset-II as submitted vide Auditor’s Certificate dated 17.9.2014.

16. We have worked out the admissible initial spares by considering capital cost as per Auditor’s Certificate in accordance with the 2009 Tariff Regulations. Regulation 8 of the 2009 Tariff Regulations provide for ceiling norms for capitalization of initial spares in respect of sub-station at 2.50% and for series compensation at 3.50%. Accordingly, the initial spares have been allowed as under:-

(₹ in lakh)

Particulars	Formula	Asset-I	Asset-II
Capital cost as on cut off date	(a)	4164.37	3474.52
Capital Cost after restricting to the apportioned approved cost	(b)	4164.37	3328.92
Initial Spares as per Auditor's Certificate	(c)	130.74	214.91
Proportionate Initial Spares claimed after restricting the capital cost	$(d) = (c)/(a) * (b)$	130.74	205.90
Ceiling limit as per Regulation 8 of 2009 regulations	(e)	2.50%	3.50%
Initial spares worked out	$(f) = ((b-d)*e) / (100\%-e)$	103.43	113.27
Excess initial spares claimed	$(g) = (d) - (f)$	27.31	92.63

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

(₹ in lakh)

Particulars	Asset-I	Asset-II
Capital cost as on COD	33724.07	2579.89
Less: Excess initial spares	27.31	92.63
Capital cost as on COD considered for tariff determination	33696.76	2487.26

Additional Capital Expenditure

18. 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”

19. Regulation 9(1) of the 2009 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;

- (ii) Works deferred for execution;
 - (iii) Procurement of initial capital spares within the original scope of work, subject to the provisions of regulation 8;
 - (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
 - (v) Change in law:
- Provided that the details of works included in the original scope of work along with estimates of expenditure, undischarged liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff."

20. The petitioner has submitted that it has actually incurred an additional capital expenditure of ₹1634.05 lakh and ₹894.63 lakh respectively for Asset-I and Asset-II during 2009-14 towards balance and retention payments for the works completed before the cut-off date, as depicted below:-

(₹ in lakh)

Asset	Apportioned approved cost	Cost as on COD	Additional capital expenditure during 2009-14					Capital Cost as on 31.3.2014
			2010-11	2011-12	2012-13	2013-14	Total	
Asset-I: Approved vide order dated 1.8.2011	49473.46	33694.21*	1430.27	469.74	-	-	1900.01	35594.22
Asset-I:Actual		33724.07	358.68	261.27	526.81	487.29	1634.05	36992.17
Asset-II: Approved vide order dated 23.5.2012	3040.55	2485.44*	-	666.74	-	-	666.74	3152.18
Asset-II:Actual		2579.89	-	606.26	248.32	40.05	894.63	3474.52

*after reducing excess initial spares

21. The petitioner has claimed additional capital expenditure before the cut-off date i.e. 31.3.2012, under Regulation 9(1)(i) and that after the cut-off date under Regulation 9(2)(viii) of 2009 Tariff Regulations. We have considered the submissions of the

petitioner with regard to the additional capital expenditure during 2009-14. The above mentioned additional capital expenditure is towards balance and retention payments and the same has been certified by the Auditor vide certificate dated 17.9.2014 for Asset-I and Asset-II. In response to query of the Commission, the petitioner has submitted, vide affidavit dated 11.2.2016, the details of balance and retention payments during 2009-14.

22. As discussed in foregoing paragraph, the total capital cost of Asset-II has to be restricted to the apportioned approved cost in absence of RCE. Thus, the additional capital expenditure in respect of Asset-II after restricting the cost and reducing the initial spares from capital cost on COD is ₹553.29 lakh during 2011-12.

23. The completion cost of Asset-I as on 31.3.2014 is within its apportioned approved cost. Thus, the same is allowed for the purpose of revision of tariff in accordance with Regulation 9(1)(i) and 9(2)(viii) read with Regulation 6 of the 2009 Tariff Regulations.

24. Accordingly, the capital cost allowed is as under:

Asset	Apportioned Approved cost	Cost as on COD	Additional capital expenditure during 2009-14						Capital Cost as on 31.3.2014
			2010-11	2011-12		2012-13	2013-14	Total	
Asset I	49473.46	33696.76	358.68	88.18*	173.09	526.81	487.29	1634.05	35330.81
Asset II	3040.55	2487.26	0.00	0.00	553.29	-	-	553.29	3040.55
Combined Asset-I & II		36630.87		726.38	526.81	487.29	1740.48	38371.36	

(*expenditure from 1.4.2011 to 30.6.2011)

Debt: Equity

25. 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.”

26. The petitioner was directed to submit the details of actual equity infusion corresponding to additional capital expenditure during 2009-14 tariff period. In response, the petitioner has submitted, vide affidavit dated 11.2.2016, the actual equity infusion during 2009-14 period. It is observed that the actual equity infused during 2009-14 period for the Combined Asset I & II is not less than 30%, and thus the same ratios have been considered for tariff computations in accordance with Regulation 12 of the 2009 Tariff Regulations.

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

(₹ in lakh)

Funding	Capital cost as on COD	(%)	Additional capital expenditure during 2009-14	(%)	Total Cost as on 31.3.2014	(%)
Asset-I (Single Asset)						
Debt	23587.73	70.00	312.80	70.00		
Equity	10109.03	30.00	134.06	30.00		
Total	33696.76	100.00	446.86 (up to 30.6.2011)	100.00		
Combined Asset-I & II (Notional COD: 1.7.2011)						
Debt	25641.61	70.00	1202.45	70.00	26844.06	70.00
Equity	10989.26	30.00	538.03	30.00	11527.29	30.00
Total	36630.87	100.00	1740.48	100.00	38371.36	100.00

Return on Equity ("ROE")

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

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

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

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

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

(5) The generating company or the transmission licensee, as the case 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.”

29. 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

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

(₹ in lakh)

Particulars	Asset-I		Combined Asset-I and Asset-II		
	2010-11 (pro-rata)	2011-12 (pro-rata)	2011-12 (pro-rata)	2012-13	2013-14
Approved vide order dated 1.8.2011 23.5.2012	751.89	463.59	1668.46	2031.94	2031.94
Claimed by the petitioner	820.00	496.99	1614.60	2197.98	2262.72
Allowed after truing up in this order	819.73	495.56	1614.03	2190.00	2246.22

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 change in the capital cost on COD of Asset-I and actual additional capital expenditure in both the Assets.

Interest on Loan (“IoL”)

27. 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”.

28. 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)

Particulars	Asset-I		Combined Asset-I and Asset-II		
	2010-11 (pro-rata)	2011-12 (pro-rata)	2011-12 (pro-rata)	2012-13	2013-14
Approved vide order dated 1.8.2011 and 23.5.2012	895.19	522.49	1869.15	2109.74	1923.79
Claimed by the petitioner	881.29	520.02	1625.07	2059.60	1918.65
Allowed after truing up in this order	880.99	518.48	1622.79	2046.85	1898.02

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 and change in capital cost and additional capital expenditure.

Depreciation

29. 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)

Particulars	Asset-I		Combined Asset-I and Asset-II		
	2010-11 (pro-rata)	2011-12 (pro-rata)	2011-12 (pro-rata)	2012-13	2013-14
Approved vide order dated 1.8.2011 and 23.5.2012	756.73	466.16	1677.88	2043.01	2043.01
Claimed by the petitioner	745.74	451.36	1466.38	1995.51	2029.82
Allowed after truing up in this order	745.48	450.22	1464.81	1985.46	2012.15

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.

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

30. 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)

Particulars	Asset-I		Combined Asset-I and Asset-II		
	2010-11 (pro-rata)	2011-12 (pro-rata)	2011-12 (pro-rata)	2012-13	2013-14
Approved vide order dated 1.8.2011 and 23.5.2012	194.76	123.55	509.44	646.26	683.07
Claimed by the petitioner	194.76	123.55	458.50	646.26	683.07
Allowed after truing up in this order	194.76	123.55	458.50	646.26	683.07

Interest on Working Capital ("IWC")

31. 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)

Particulars	Asset-I		Combined Asset-I and Asset-II		
	2010-11 (pro-rata)	2011-12 (pro-rata)	2011-12 (pro-rata)	2012-13	2013-14
Approved vide order dated 1.8.2011 and 23.5.2012	53.62	32.66	128.60	154.52	152.57
Claimed by the petitioner	54.43	32.96	115.98	155.88	156.81
Allowed after truing up in this order	54.41	32.88	115.89	155.27	155.71

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

APPROVED ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

32. 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)

Particulars	Asset-I		Combined Asset-I and Asset-II		
	2010-11 (pro-rata)	2011-12 (pro-rata)	2011-12 (pro-rata)	2012-13	2013-14
Depreciation					
Opening Gross Block	33696.76	34055.44	36630.87	37357.26	37884.07
Additional Capitalisation	358.68	88.18	726.38	526.81	487.29
Closing Gross Block	34055.44	34143.62	37357.26	37884.07	38371.36
Average Gross Block	33876.10	34099.53	36994.06	37620.66	38127.71
Rate of Depreciation	5.28	5.28	5.28	5.28	5.28
Depreciable Value	30488.49	30850.98	33294.66	34185.47	34552.00

Particulars	Asset-I		Combined Asset-I and Asset-II		
	2010-11 (pro-rata)	2011-12 (pro-rata)	2011-12 (pro-rata)	2012-13	2013-14
Balance Useful life of the asset	34	33	33	32	31
Elapsed Life	0	1	0	1	2
Remaining Depreciable Value	30488.49	30850.98	33294.66	32393.79	30864.67
Depreciation during the year	745.48	450.22	1464.81	1985.46	2012.15
Cumulative depreciation (incl. of AAD)	745.48	1195.70	2660.51	4645.97	6658.12
Interest on Loan					
Gross Normative Loan	23587.73	23838.81	25641.61	26134.2	26503
Cumulative Repayment upto Previous Year	0	745.48	1195.7	2660.51	4645.97
Net Loan-Opening	23587.73	23093.33	24445.91	23473.7	21857
Additions	251.08	61.73	492.58	368.77	341.1
Repayment during the year	745.48	450.22	1464.81	1985.46	2012.15
Net Loan-Closing	23093.33	22704.83	23473.69	21857	20186
Average Loan	23340.53	22899.08	23959.8	22665.3	21021.5
Weighted Average Rate of Interest on Loan (%)	9.0588	9.0568	9.0306	9.0307	9.029
Interest on Loan	880.99	518.48	2163.72	2046.85	1898.02
Return on Equity					
Opening Equity	10109.03	10216.63	10989.26	11223.1	11381.1
Additions	107.6	26.45	233.8	158.04	146.19
Closing Equity	10216.63	10243.08	11223.06	11381.1	11527.3
Average Equity	10162.83	10229.86	11106.16	11302.1	11454.2
Return on Equity (Base Rate)	15.500	15.500	15.500	15.500	15.500
MAT rate for the respective year	19.931	20.008	20.008	20.008	20.961
Rate of Return on Equity	19.358	19.377	19.377	19.377	19.610
Return on Equity	819.73	495.56	2152.03	2190	2246.22
Interest on Working Capital					
O & M expenses	38.94	41.17	50.92	53.83	56.9
Maintenance Spares	70.11	74.13	91.7	96.94	102.46
Receivables	1078.15	1080.46	1172.45	1170.64	1165.86
Total	1187.2	1195.76	1315.07	1321.41	1325.22
Rate of Interest	11.00	11.00	11.75	11.75	11.75
Interest on Working Capital	54.41	32.88	154.52	155.27	155.71
Annual Transmission Charges					
Depreciation	745.48	450.22	1464.81	1985.46	2012.15
Interest on Loan	880.99	518.48	1622.79	2046.85	1898.02
Return on Equity	819.73	495.56	1614.03	2190	2246.22
Interest on Working Capital	54.41	32.88	115.89	155.27	155.71
O & M Expenses	194.76	123.55	458.5	646.26	683.07
Total	2695.37	1620.69	5276.02	7023.83	6995.18



DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

33. The petitioner has claimed the tariff charges for 2014-19 tariff period for the Combined Asset I & II as under:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	2058.18	2072.60	2072.60	2072.60	2072.60
Interest on Loan	1768.05	1598.80	1411.55	1224.27	1036.98
Return on Equity	2294.31	2310.38	2310.38	2310.38	2310.38
Interest on Working Capital	175.35	173.31	170.18	167.09	164.04
O & M Expenses	623.94	644.83	666.15	688.26	711.10
Total	6919.83	6799.92	6630.86	6462.6	6295.1

34. 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	52.00	53.74	55.51	57.36	59.26
Maintenance Spares	93.59	96.72	99.92	103.24	106.67
Receivables	1153.31	1133.32	1105.14	1077.10	1049.18
Total	1298.90	1283.78	1260.57	1237.70	1215.11
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	175.35	173.31	170.18	167.09	164.04

Capital Cost

35. 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;”

36. The capital cost of ₹38371.36 lakh worked out by the Commission for Combined Asset-I & II, 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

37. Clause (3) of Regulation 14 of the 2014 Tariff Regulations provides as under:-

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

- (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) Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security;
- (iv) Deferred works relating to ash pond or ash handling system in the original scope of work;
- (v) Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;

(vi) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments.”

38. Clause 13 of Regulation 3 of the 2014 Tariff Regulations defines “cut-off” as follows:-

“Cut - off Date” means 31st 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 31st March of the year closing after three years of the year of commercial operation.”

39. The petitioner has claimed additional capital expenditure of ₹390.71 lakh in Asset-I and ₹155.87 lakh in Asset-II for 2014-15 on account of balance and retention payments, under Regulation 14(3)(v) of the 2014 Tariff Regulations.

40. In response to the query of Commission, the petitioner has submitted, vide affidavit dated 11.2.2016, the details of additional capital expenditure claimed for 2014-15 on account of balance and retention payments. This amount is subject to truing up during 2014-19 period as per 2014 Tariff Regulations.

41. We have considered the submissions of the petitioner with regard to the projected additional capital expenditure during 2014-19. The additional capital expenditure claimed is towards balance and retention payments for works executed before the cut-off date and the same has been certified by the Auditor vide Certificate dated 17.9.2014. However, since we have restricted the capital cost of Asset-II due to cost overrun and non submission of RCE, the claim of additional capital expenditure is not being allowed for Asset-II. The total estimated cost of Asset-I as on 31.3.2019 is within the apportioned approved cost. Thus, the same is allowed for the purpose of

computation of tariff in accordance with Regulation 14(3)(v) of the 2014 Tariff Regulations, subject to true-up on actual basis.

42. Accordingly, the capital cost of the Combined Asset- I & II, including the additional capital expenditure during 2014-19 tariff period considered for the purpose of computation of tariff is as follows:-

(₹ in lakh)

Capital cost as on 1.4.2014	Additional capital expenditure	Capital cost as on 31.3.2019
	2014-15	
38371.36	390.71	38762.07

Debt: Equity

43. 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 oftarriff, and renovation and modernisation expenditure for life extension shall be servicedin the manner specified in clause (1) of this regulation.”

44. The normative debt:equity ratio has been considered to work out the tariff in accordance with the 2014 Tariff Regulations as given below:-

(₹ in lakh)

Funding	Capital cost as on 31.3.2014	(%)	Additional capital expenditure during 2014-19	(%)	Total Cost as on 31.3.2019	(%)
Debt	26844.06	70.00	273.50	70.00	27117.56	70.00
Equity	11527.29	30.00	117.21	30.00	11644.50	30.00
Total	38371.36	100.00	390.71	100.00	38762.07	100.00

Return on Equity ("ROE")

45. 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.”

46. 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 additional ROE of 0.5% has been allowed to the petitioner. The ROE has been worked out and allowed as follows:-

(₹ in lakh)

Return on Equity	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	11527.29	11644.50	11644.50	11644.50	11644.50
Additions	117.21	0.00	0.00	0.00	0.00
Closing Equity	11644.50	11644.50	11644.50	11644.50	11644.50
Average Equity	11585.90	11644.50	11644.50	11644.50	11644.50
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	2272.05	2283.54	2283.54	2283.54	2283.54

Interest on Loan (“IoL”)

47. 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.”

48. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2014. The petitioner has prayed that the change in interest rate due

to floating rate of interest applicable, if any, during 2014-19 tariff period will be adjusted. 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	26844.06	27117.56	27117.56	27117.56	27117.56
Cumulative Repayment upto Previous Year	6658.12	8693.44	10739.08	12784.72	14830.36
Net Loan-Opening	20185.95	18424.12	16378.48	14332.84	12287.20
Additions	273.50	0.00	0.00	0.00	0.00
Repayment during the year	2035.33	2045.64	2045.64	2045.64	2045.64
Net Loan-Closing	18424.12	16378.48	14332.84	12287.20	10241.56
Average Loan	19305.03	17401.30	15355.66	13310.02	11264.38
Weighted Average Rate of Interest on Loan (%)	9.0291	9.0289	9.0281	9.0269	9.0252
Interest on Loan	1743.06	1571.15	1386.33	1201.48	1016.63

Depreciation

49. 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.”

50. 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 beyond 2014-19 period; hence depreciation up to 2014-19 tariff period 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)					
Depreciation	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	38371.36	38762.07	38762.07	38762.07	38762.07
Additional Capitalisation	390.71	0.00	0.00	0.00	0.00
Closing Gross Block	38762.07	38762.07	38762.07	38762.07	38762.07
Average Gross Block	38566.71	38762.07	38762.07	38762.07	38762.07
Rate of Depreciation	5.28	5.28	5.28	5.28	5.28
Depreciable Value	34929.32	35061.68	34885.86	34885.86	34885.86
Balance Useful life of the asset	30	29	28	27	26
Elapsed Life	3	4	5	6	7
Remaining Depreciable Value	29247.62	27388.12	25342.47	23296.83	21251.19
Depreciation during the year	2035.33	2045.64	2045.64	2045.64	2045.64
Cumulative depreciation	8693.44	10739.08	12784.72	14830.36	16876.01

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

51. 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
400 kV Bays:					
No. of Bays	6	6	6	6	6
Norms (₹ lakh/Bay)	60.3	62.3	64.37	66.51	68.71
Transmission Line:					
D/C (Twin/Triple) (km)	370.772	370.772	370.772	370.772	370.772
Norms (₹ lakh/km)	0.707	0.731	0.755	0.78	0.806
Total O&M Expenses (₹ lakh)	623.94	644.83	666.15	688.26	711.10

52. 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)

53. 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;”

54. 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%.

55. 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)

Interest on Working Capital	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	51.97	53.71	55.49	57.33	59.23
Maintenance Spares	93.59	96.73	99.92	103.24	106.67
Receivables	1141.35	1119.43	1091.67	1064.04	1036.54
Total	1286.92	1269.87	1247.08	1224.61	1202.44
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	173.73	171.43	168.36	165.32	162.33

ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	38371.36	38762.07	38762.07	38762.07	38762.07
Additional Capitalisation	390.71	0.00	0.00	0.00	0.00
Closing Gross Block	38762.07	38762.07	38762.07	38762.07	38762.07
Average Gross Block	38566.71	38762.07	38762.07	38762.07	38762.07
Rate of Depreciation	5.28	5.28	5.28	5.28	5.28
Depreciable Value	34929.32	35061.68	34885.86	34885.86	34885.86
Balance Useful life of the asset	30	29	28	27	26
Elapsed Life	3	4	5	6	7
Remaining Depreciable Value	29247.62	27388.12	25342.47	23296.83	21251.19
Depreciation	2035.33	2045.64	2045.64	2045.64	2045.64
Cumulative depreciation (incl. of AAD)	8693.44	10739.08	12784.72	14830.36	16876.01
Interest on Loan					
Gross Normative Loan	26844.06	27117.56	27117.56	27117.56	27117.56
Cumulative Repayment upto Previous Year	6658.12	8693.44	10739.08	12784.72	14830.36
Net Loan-Opening	20185.95	18424.12	16378.48	14332.84	12287.20
Additions	273.50	0.00	0.00	0.00	0.00
Repayment during the year	2035.33	2045.64	2045.64	2045.64	2045.64
Net Loan-Closing	18424.12	16378.48	14332.84	12287.20	10241.56
Average Loan	19305.03	17401.30	15355.66	13310.02	11264.38
Weighted Average Rate of Interest on Loan	9.0291	9.0289	9.0281	9.0269	9.0252
Interest	1743.06	1571.15	1386.33	1201.48	1016.63
Return on Equity					
Opening Equity	11527.29	11644.50	11644.50	11644.50	11644.50
Additions	117.21	0.00	0.00	0.00	0.00
Closing Equity	11644.50	11644.50	11644.50	11644.50	11644.50
Average Equity	11585.90	11644.50	11644.50	11644.50	11644.50
Return on Equity (Base Rate)	15.500	15.500	15.500	15.500	15.500
MAT rate for the 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	2272.05	2283.54	2283.54	2283.54	2283.54



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Working Capital					
O & M expenses	51.97	53.71	55.49	57.33	59.23
Maintenance Spares	93.59	96.73	99.92	103.24	106.67
Receivables	1141.35	1119.43	1091.67	1064.04	1036.54
Total	1286.92	1269.87	1247.08	1224.61	1202.44
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on working capital	173.73	171.43	168.36	165.32	162.33
Annual Transmission Charges					
Depreciation	2035.33	2045.64	2045.64	2045.64	2045.64
Interest on Loan	1743.06	1571.15	1386.33	1201.48	1016.63
Return on Equity	2272.05	2283.54	2283.54	2283.54	2283.54
Interest on Working Capital	173.73	171.43	168.36	165.32	162.33
O & M Expenses	623.94	644.83	666.15	688.26	711.10
Total	6848.10	6716.60	6550.02	6384.24	6219.25

57. The petitioner has sought recovery of deferred tax liability before 1.4.2009 from the beneficiaries or long term consumers/ DICs as and when materialized. However, the COD of the asset is after 2009, hence the claim of the petitioner is not maintainable.

Filing Fee and the Publication Expenses

58. 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

59. 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

60. 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

61. 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.

62. This order disposes of Petition No.15/TT/2015.

Sd/-

(Dr. M.K. Iyer)
Member

Sd/-

(A.S. Bakshi)
Member

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

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXVIII-DOCO DRAWL ON 15-DEC-2008-	9.33	4000.00	0.00	4000.00
BOND XXIX-DOCO DRAWL ON 12-MAR-2009-	9.20	8867.00	0.00	8867.00
BOND XXX-DOCO DRAWL ON 29-SEP-2009-	8.80	4686.00	0.00	4686.00
BOND XXXI-DOCO DRAWL ON 25-FEB-2010-	8.90	4624.00	0.00	4624.00
BOND XXXIII-doco-	8.64	257.70	0.00	257.70
BOND-XXXIV-ADDCAP FOR 2010-2011 addcap-	8.84	0.00	251.08	251.08
BOND-XXXIV-ADDCAP FOR 2011-2012 addcap-	8.84	0.00	61.73	61.73
BOND-XXXIV-ADDCAP FOR 2011-2012 addcap1-	8.84	0.00	121.16	121.16
BOND-XXXIV-doco-	8.84	1161.21	0.00	1161.21
BOND XXXVI-ADDCAP FOR 2012-2013 addcap-	9.35	0.00	156.44	156.44
BOND XXXVII-ADDCAP FOR 2012-13	9.25	0.00	212.33	212.33
BOND XXXVIII-ADDCAP FOR 2013-14	9.25	0.00	256.85	256.85
BOND XL-ADDCAP FOR 2013-2014 -	9.30	0.00	84.25	84.25
Total		23595.91	1143.84	24739.75

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

(₹ in lakh)

Particulars	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	23595.91	23846.99	24029.88	24398.65
Cumulative Repayments of Loans up to Previous Year	0.00	0.00	0.00	0.00
Net Loans Opening	23595.91	23846.99	24029.88	24398.65
Add: Drawl(s) during the Year	251.08	182.89	368.77	341.10
Less: Repayments during the year	0.00	0.00	0.00	0.00
Net Closing Loan	23846.99	24029.88	24398.65	24739.75
Average Net Loan	23721.45	23938.44	24214.27	24569.20
Rate of Interest on Loan (%)*	9.0588%	9.0568%	9.0578%	9.0610%
Interest on Loan	2148.88	2168.06	2193.28	2226.21

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



Combined Asset-I & II:

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXVIII-doco-	9.33	4000.00	0.00	4000.00
BOND XXIX-doco-	9.20	8867.00	0.00	8867.00
BOND XXX-doco-	8.80	4686.00	0.00	4686.00
BOND XXXI-doco-	8.90	4624.00	0.00	4624.00
BOND XXXIII-doco-	8.64	1742.30	0.00	1742.30
BOND XXXIII-doco1-	8.64	257.70	0.00	257.70
BOND-XXXIV-8.ADDCAP FOR 2011-2012 Addcap loan 8-	8.84	0.00	121.16	121.16
BOND-XXXIV-ADDCAP FOR 2011-2012 Addcap-	8.84	0.00	123.82	123.82
BOND-XXXIV-DOCO-	8.84	312.81	0.00	312.81
BOND-XXXIV-doco-	8.84	1161.21	0.00	1161.21
BOND-XXXV-ADDCAP FOR 2011-12	9.64	0.00	160.00	160.00
BOND XXXVI-ADDCAP FOR 2011-12	9.35	0.00	140.56	140.56
BOND XXXVI-ADDCAP FOR 2012-13	9.35	0.00	156.44	156.44
BOND XXXVII-ADDCAP FOR 2012-13	9.25	0.00	212.33	212.33
BOND XXXVII-ADDCAP FOR 2012-13	9.25	0.00	130.67	130.67
BOND XXXVIII-ADDCAP FOR 2012-	9.25	0.00	43.15	43.15
BOND XXXVIII-ADDCAP FOR 2013-13	9.25	0.00	256.85	256.85
BOND XL-20.ADDCAP FOR 2013-14	9.30	0.00	28.04	28.04
BOND XL-ADDCAP FOR 2013-2014	9.30	0.00	84.25	84.25
Total		25651.02	1457.27	27108.29

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

(₹ in lakh)

Particulars	2011-12	2012-13	2013-14
Gross Opening Loan	25651.02	26196.56	26739.15
Cumulative Repayments of Loans up to Previous Year	0.00	0.00	1072.25
Net Loans Opening	25651.02	26196.56	25666.90
Add: Drawl(s) during the Year	545.54	542.59	369.14
Less: Repayments during the year	0.00	1072.25	1848.08
Net Closing Loan	26196.56	25666.90	24187.96
Average Net Loan	25923.79	25931.73	24927.43
Rate of Interest on Loan (%)*	9.0306%	9.0307%	9.0290%
Interest on Loan	2341.08	2341.83	2250.69

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



Annexure – 2

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
BOND XXVIII- DOCO-	9.33	4000.00	0.00	4000.00
BOND XXIX- DOCO-	9.20	8867.00	0.00	8867.00
BOND XXX- DOCO-	8.80	4686.00	0.00	4686.00
BOND XXXI- DOCO-	8.90	4624.00	0.00	4624.00
BOND XXXIII- DOCO-	8.64	1742.30	0.00	1742.30
BOND XXXIII- DOCO1-	8.64	257.70	0.00	257.70
BOND-XXXIV-8.ADDCAP FOR 2011-12	8.84	121.16	0.00	121.16
BOND-XXXIV-ADDCAP FOR 2011-12	8.84	123.82	0.00	123.82
BOND-XXXIV-DOCO-	8.84	312.81	0.00	312.81
BOND-XXXIV- DOCO--	8.84	1161.21	0.00	1161.21
BOND-XXXV-ADDCAP FOR 2011-12	9.64	160.00	0.00	160.00
BOND XXXVI-ADDCAP FOR 2011-12	9.35	140.56	0.00	140.56
BOND XXXVI-ADDCAP FOR 2012-13	9.35	156.44	0.00	156.44
BOND XXXVII-ADDCAP FOR 2012-13	9.25	212.33	0.00	212.33
BOND XXXVII-ADDCAP FOR 2012-13	9.25	130.67	0.00	130.67
BOND XXXVIII-ADDCAP FOR 2012-13	9.25	43.15	0.00	43.15
BOND XXXVIII-ADDCAP FOR 2013-14	9.25	256.85	0.00	256.85
BOND XL-20.ADDCAP FOR 2013-2014	9.30	28.04	0.00	28.04
BOND XL-ADDCAP FOR 2013-2014	9.30	84.25	0.00	84.25
Total		27108.29	0.00	27108.29

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	27108.29	27108.29	27108.29	27108.29	27108.29
Cumulative Repayments of Loans up to Previous Year	2920.33	5078.34	7278.26	9507.34	11736.42
Net Loans Opening	24187.96	22029.95	19830.03	17600.95	15371.87
Add: Drawl(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments during the year	2158.01	2199.92	2229.08	2229.08	2229.08
Net Closing Loan	22029.95	19830.03	17600.95	15371.87	13142.79
Average Net Loan	23108.96	20929.99	18715.49	16486.41	14257.33
Rate of Interest on Loan (%)*	9.0291%	9.0289%	9.0281%	9.0269%	9.0252%
Interest on Loan	2086.52	1889.75	1689.66	1488.21	1286.75

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

