

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO.290/TT/2015

Coram:

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

**Date of Hearing: 03.02.2016
Date of Order : 18.04.2016**

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 of Asset-I: 400/220 kV 500 MVA ICT-I at Jaipur South Sub-station along with associated bays and 02 nos. 200 kV line bays; Asset-II: 400/220 kV 500 MVA ICT-II at Jaipur South Sub-station along with associated bays; Asset-III: 400/220 kV 2X315 MVA ICTs at Sohawal Sub-station along with associated bays; Asset-IV: LILO on one ckt of 400 kV D/C Agra-Jaipur T/L with 50 MVAR Line reactor at Jaipur South Sub-station along with associated bays, Asset V: LILO of 2nd ckt of 400 kV D/C Ballia-Lucknow T/L with 50 MVAR line reactor at Sohawal Sub-station; Asset-VI: LILO of 1st ckt of 400 kV D/C Ballia-Lucknow T/L with 50 MVAR line reactor at Sohawal Sub-station and Asset VII: LILO of 2nd ckt of 400 kV D/C Agra-Jaipur T/L with 50 MVAR line reactor at Jaipur South Sub-station along with associated bays under Northern Transmission Strengthening Scheme (NRTSS) Project in Northern Region under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

And in the Matter of:

Power Grid Corporation of India Ltd,
SAUDAMINI, Plot No.-2, Sector-29,
Gurgaon-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 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 Pritampura - Grid Building,
Near PP Jewellers,
Pritampura, 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

....Respondent(s)

The following were present:

For Petitioner: Shri Rakesh Prasad, PGCIL
Shri M.M. Mondal, PGCIL
Shri S.S. Raju, PGCIL
Smt. Sangeeta Edwards, PGCIL
Shri S.C. Taneja, PGCIL

For Respondents: Shri B.L. Sharma, Advocate, Rajasthan Discom
Shri S.K. Agarwal, Advocate, Rajasthan Discom
Shri S.P. Das, Advocate, Rajasthan Discom

ORDER

This petition has been preferred 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 from the date of commercial operation 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 for 400/220 kV 500 MVA ICT-I



at Jaipur South Sub-station along with associated bays and 02 nos. 200 kV line bays (referred as "Asset-I"); 400/220 kV 500 MVA ICT-II at Jaipur South Sub-station along with associated bays (referred as "Asset II"), 400/220 kV 2X315 MCA ICTs at Sohawal Sub-station along with associated bays (referred as "Asset-III"), LILO on one ckt of 400 kV D/C Agra-Jaipur T/L with 50 MVAR Line reactor at Jaipur South Sub-station along with associated bays (referred as "Asset-IV"), LILO of 2nd circuit of 400 kV D/C Ballia-Lucknow T/L with 50 MVAR line reactor at Sohawal Sub-station (referred as "Asset V"), LILO of 1st circuit of 400 kV D/C Ballia-Lucknow T/L with 50 MVAR line reactor at Sohawal Sub-station (referred as "Asset-VI") and LILO of 2nd circuit of 400 kV D/C Agra-Jaipur T/L with 50 MVAR line reactor at Jaipur South Sub-station along with associated bays (referred as "Asset VII") under Northern Transmission Strengthening Scheme (NRTSS) Project 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) The administrative approval for the transmission project was accorded by the Board of Directors of the petitioner's company vide C/CP/NRTSS dated 17.3.2010 for ₹96568 lakh, including IDC of ₹7003 lakh based on 3rd quarter, 2009 price level. The details of assets covered in the instant petition and the date of commercial operations are given hereunder:-



Name of the Assets		Transmission Assets	COD
As filed in instant petition	As per Previous order		
Asset-I	Asset – A	400/220 kV 500 MVA ICT-I at Jaipur South Sub-station along with associated bays and 02 nos. 200 kV line bays	1.6.2012
Asset-II	Asset – B	400/220 kV 500 MVA ICT-II at Jaipur South Sub-station along with associated bays	1.12.2012
Asset-III	Asset – C	400/220 kV 2X315 MCA ICTs at Sohawal Sub-station along with associated bays	1.7.2012
Asset-IV	Asset – D	LILO on one ckt of 400 kV D/C Agra-Jaipur T/L with 50 MVAR Line reactor at Jaipur South Sub-station along with associated bays	1.6.2012
Asset-V	Asset – E	LILO of 2nd ckt of 400 kV D/C Ballia-Lucknow T/L with 50 MVAR line reactor at Sohawal Sub-station	1.7.2012
Asset-VI	Asset – F	LILO of 1 st ckt of 400 kV D/C Ballia-Lucknow T/L with 50 MVAR line reactor at Sohawal Sub-station and	1.2.2013
Asset-VII	Asset - G	LILO of 2 nd ckt of 400 kV D/C Agra-Jaipur T/L with 50 MVAR line reactor at Jaipur South Sub-station along with associated bays	1.9.2012

b) The annual transmission charges for 2009-14 tariff period for the transmission assets were determined vide order dated 23.1.2015 in Petition No. 89/TT/2012 based on admitted capital cost given as under:-

(₹ in lakh)

Asset	Capital cost approved as on COD as per order 89/TT/2012	IDC and IEDC disallowed	Excess initial spares disallowed
Asset-I	1748.02	0.00	0.00
Asset-II	1414.82	0.00	0.00
Asset-III	2392.63	0.00	0.00
Asset-IV	4245.47	0.00	0.00
Asset-V	1932.64	0.00	0.00
Asset-VI	2291.97	14.75	0.00
Asset-VII	4496.76	0.00	0.00



c) As per the investment approval, the COD for the assets was scheduled on 17.11.2012. Accordingly, there was a delay of two months in COD of Asset-VI. After examination the reason for the delay, the Commission in its order dated 23.1.2015 in Petition No. 89/TT/2012 held that the delay was attributable to the petitioner and hence, the delay of 2 month for Asset-VI not condoned.

d) The debt:equity ratio is 70:30 as on COD for all the assets. The estimated additional capital expenditure approved was towards balance and retention payments for determination of tariff for 2009-14 tariff period is as follows:

(₹ in lakh)

Asset	AppORTIONED approved cost as per FR	Capital cost as on COD*	Allowed additional capital expenditure during 2009-14		Cost as on 31.3.2014
			2012-13	2013-14	
Asset-I	3813.17	1748.02	319.86	416.95	2484.83
Asset-II	3818.17	1414.82	627.18	416.92	2458.92
Asset-III	7141.02	2392.63	1437.90	699.46	4529.99
Asset-IV	5442.40	4245.47	507.94	688.89	5442.30
Asset-V	3330.52	1932.64	387.36	144.57	2464.57
Asset-VI	3330.52	2291.97	13.29	144.58	2449.84
Asset-VII	5442.30	4496.76	256.64	688.90	5442.30

*Capital cost after adjusting the disallowed IDC and IEDC in order dated 23.1.2015 in Petition No. 89/TT/2012.

e) The annual fixed charges were determined vide order dated 23.1.2015 in Petition No. 89/TT/2012 based the above capital cost and estimated additional capital expenditure for the transmission assets during 2009-14 as given below:-

(₹ in lakh)

Particulars	Asset-I		Asset-II		Asset-III	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Depreciation	70.48	102.49	25.02	101.57	104.02	193.29
Interest on Loan	96.43	126.56	33.89	119.11	132.08	208.28
Return on Equity	83.38	119.38	30.21	118.02	122.39	219.23
Interest on Working	15.10	19.23	4.10	13.94	17.47	26.58



Particulars	Asset-I		Asset-II		Asset-III	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Capital						
O & M Expenses	169.10	202.92	37.09	111.28	166.92	222.56
Total	434.49	570.58	130.31	463.92	542.88	869.94

(₹ in lakh)

Particulars	Asset-IV		Asset-V		Asset-VI	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Depreciation	193.77	263.68	80.43	121.10	19.31	119.73
Interest on Loan	225.53	278.81	94.11	126.73	17.70	105.27
Return on Equity	196.64	267.35	83.63	125.46	20.09	124.69
Interest on Working Capital	20.31	25.87	11.24	15.82	2.54	15.80
O & M Expenses	111.09	130.92	95.81	130.92	22.11	140.24
Total	747.34	966.63	365.22	520.03	81.75	505.73

(₹ in lakh)

Asset-VII		
Particulars	2012-13 (pro-rata)	2013-14
Depreciation	139.52	263.72
Interest on Loan	166.76	292.98
Return on Equity	141.49	267.35
Interest on Working Capital	18.07	33.04
O & M Expenses	140.61	254.79
Total	606.45	1111.88

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 actual capital expenditure including additional capital expenditure incurred up to 31.3.2014, 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. In this context, the petitioner has filed the instant petition for revision of tariff for the tariff period 2009-14 in accordance with Regulation 6 of the 2009 Tariff Regulations.



5. The petitioner has served the petition on the respondents and notice of this application has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003 ("the Act"). No comments/objections have been received from the public in response to the notice in newspaper. The hearing in this matter was held on 3.2.2016. Ajmer Vidyut Vitran Nigam Limited (AVVNL), Respondent No. 2, Jaipur Vidyut Vitran Nigam Limited (JVVNL), Respondent No. 3, and Jodhpur Vidyut Vitran Nigam Limited (JdVVNL) Respondent No. 4, (hereinafter collectively referred to as "Rajasthan Discoms") have filed their reply vide a common affidavit dated 25.1.2016 raising the objections regarding O&M Expenses and service tax. The petitioner was directed to submit the details in respect of the actual equity infused during 2009-14 and 2014-19 tariff periods, details of balance and payment and un-discharged liabilities. The petitioner has filed the rejoinder and additional information vide affidavit dated 22.2.2016 and 26.2.2016 respectively.

6. 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:-

7. 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”.

8. 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

9. The petitioner has submitted that the actual capital expenditure incurred as on COD for all assets, as certified vide Auditor's Certificates dated 8.7.2015. Details of capital cost claimed is as under:-

(₹ in lakh)

Asset	Capital cost as on COD as per Auditor Certificate dated 8.7.2015
Asset-I	1748.02
Asset-II	1395.13
Asset-III	2327.29
Asset-IV	4185.59
Asset-V	1920.44
Asset-VI	2306.72
Asset-VII	4496.76

10. 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.”

11. The admissible capital cost of the transmission asset as on COD for the purpose of computation of tariff for 2009-14 tariff period is worked out in the subsequent



paragraphs taking into consideration the IEDC and IDC and initial spares claimed and allowed.

IDC and IEDC

12. The Commission, in order dated 23.1.2015 in Petition No. 89/TT/2012, had disallowed IDC and IEDC to the tune of ₹14.75 lakh on account of time over-run of 2 months in case of Asset VI. The time over-run was allowed in all case of the other assets.

13. As the same amount of IDC and IEDC has been claimed by the petitioner in instant petition, ₹14.75 lakh is deducted from the capital cost of Asset VI on COD for tariff calculation purpose as given hereunder:-

(₹ in lakh)			
Asset	Capital cost as on COD as per auditor certificate	IDC and IEDC disallowed	Capital cost considered as on COD
Asset-VI	2306.72	14.75	2291.97

The capital cost of ₹2291.97 lakh as on COD is considered for Asset VI. The capital cost as on COD of the remaining assets is considered as per the Auditor Certificate.

Initial Spares

14. The petitioner has claimed the actual initial spares as stated in Auditor's Certificates dated 8.7.2015. We have worked out the admissible initial spares by considering capital cost as per Auditor's Certificate in accordance with the 2009 Tariff Regulations.



15. Regulation 8 of the 2009 Tariff Regulations provide for ceiling norms for capitalization of initial spares in respect of sub-station at 2.50%. Accordingly, the initial spares have been allowed as under:-

(₹ in lakh)

Sub-Station							
Asset	Capital cost as on cut-off date	Capital cost after deducting excess IDC	Initial spares as per Auditor's Certificate	Proportion -ate initial spares claimed after deducting IDC	Ceiling limit as per Regulation 8 of 2009 Tariff Regulations	Initial spares worked out	Excess initial spares
	(a)	(b)	(c)	(d) = (c)/(a) * (b)	(e) %	(f) = ((b-d)*e)/(100% -e)	(g)=(d)- (f)
Asset-I	2446.35	2446.35	37.98	37.98	2.5	61.75	0.00
Asset-II	2360.84	2360.84	37.98	37.98	2.5	59.56	0.00
Asset-III	4551.59	4551.59	76.97	76.97	2.5	114.73	0.00
Asset-IV	971.39	971.39	29.49	29.49	2.5	24.15	5.34
Asset-V	1262.68	1262.68	27.33	27.33	2.5	31.68	0.00
Asset-VI	1377.37	1362.62	27.33	27.04	2.5	34.25	0.00
Asset-VII	983.47	983.47	29.49	29.49	2.5	24.46	5.03

The cut-off date of the subject assets falls beyond 31.3.2014. However, the petitioner has submitted the additional capital expenditure during 2014-15 and 2015-16. Hence, admissible initial spares have been worked out by considering additional capital expenditure upto cut-off date corresponding to each asset. The cut-off date is 31.3.2016 in case of Asset-VI and 31.3.2015 for rest of the Assets.

16. Accordingly, the capital cost of the instant assets as on COD considered for truing up of tariff of 2009-14 is as follows:-

(₹ in lakh)

Asset	Capital cost on COD	Excess initial spares	Capital cost as on COD considered for tariff determination
Asset-I	1748.02	0.00	1748.02
Asset-II	1395.13	0.00	1395.13
Asset-III	2327.29	0.00	2327.29
Asset-IV	4185.59	5.34	4180.25
Asset-V	1920.44	0.00	1920.44



Asset	Capital cost on COD	Excess initial spares	Capital cost as on COD considered for tariff determination
Asset-VI	2291.97	0.00	2291.97
Asset-VII	4496.76	5.03	4491.73

Additional Capital Expenditure

17. 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”

18. The petitioner has submitted actual additional capital expenditure during 2009-14 towards balance and retention payments for the works completed before the cut-off date. The petitioner has claimed the admissibility of additional capital expenditure before the cut-off date under Regulation 9(1)(i) of 2009 Tariff Regulations. Rajasthan Discoms have submitted that the admissibility of additional capital expenditure incurred after COD and up to cut-off date is to be dealt in accordance with the provisions of Regulation 14(1) and 14(3) of the 2009 Tariff Regulations.

19. We have considered the submissions of the petitioner and Rajasthan Discoms with regard to the additional capital expenditure during 2009-14. The additional capital expenditure claimed by the petitioner is towards actual balance and retention payments and the same has been certified by the Auditor vide certificates dated 8.7.2015. Further, the total capital expenditure during 2009-14 is within the limits of the total approved capital expenditure and the total cost as on 31.3.2014 is within the approved cost of the project. Thus, the same is allowed for the purpose of revision of tariff in accordance with Regulation 9(1)(i) and Regulation 6 of the 2009 Tariff Regulations.



20. The capital expenditure as on COD and additional capital expenditure from COD to 31.3.2014 allowed is as depicted below:-

(₹ in lakh)

Name of Asset	Apportioned approved cost as per RCE		Capital cost as on COD	Additional capital expenditure		Capital cost as on 31.3.2014
				2012-13	2013-14	
Asset-I	3813.17	Approved in Order dated 23.01.2015	1748.02	319.86	416.95	2484.83
		Claimed by the petitioner	1748.02	319.86	183.39	2251.27
		Allowed in this Order	1748.02	319.86	183.39	2251.27
Asset-II	3818.17	Approved in Order dated 23.01.2015	1414.82	627.18	416.92	2458.92
		Claimed by the petitioner	1395.13	627.18	157.40	2179.71
		Allowed in this Order	1395.13	627.18	157.40	2179.71
Asset-III	7141.02	Approved in Order dated 23.01.2015	2392.63	1437.90	699.46	4529.99
		Claimed by the petitioner	2327.29	1437.90	423.55	4188.74
		Allowed in this Order	2327.29	1437.90	423.55	4188.74
Asset-IV	5442.40	Approved in Order dated 23.01.2015	4245.47	507.94	688.89	5442.30
		Claimed by the petitioner	4185.59	507.94	118.64	4812.17
		Allowed in this Order	4180.25*	507.94	118.64	4806.83
Asset-V	3330.52	Approved in Order dated 23.01.2015	1932.64	387.36	144.57	2464.57
		Claimed by the petitioner	1920.44	387.36	88.71	2396.51
		Allowed in this Order	1920.44	387.36	88.71	2396.51
Asset-VI	3330.52	Approved in Order dated 23.01.2015	2291.97	13.29	144.58	2449.84
		Claimed by the petitioner	2306.72	13.29	109.21	2429.22
		Allowed in this Order	2291.97	13.29	109.21	2414.47
Asset-VII	5442.30	Approved in Order dated 23.01.2015	4496.76	256.64	688.90	5442.30
		Claimed by the	4496.76	256.64	118.64	4872.04



		petitioner				
		Allowed in this Order	4491.73*	256.64	118.64	4867.01

*Excess initial spares adjusted.

Debt: Equity

21. 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.”

22. The debt:equity ratio admitted by the Commission vide order dated 23.1.2015 in Petition No. 89/TT/2012as on COD was 70:30, for determination of tariff in accordance with the Regulation 12 of the 2009 Tariff Regulations. The petitioner was directed to confirm that actual equity corresponding to additional capital expenditure is not less than 30%. In response, the petitioner vide affidavit dated 26.2.2016, has submitted that the actual equity infusion during 2009-14 period is not less than 30%.

23. 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						
Debt	1223.61	70.00	352.30	70.00	1575.92	70.00



Funding	Capital cost as on COD	(%)	Additional capital expenditure during 2009-14	(%)	Total Cost as on 31.3.2014	(%)
Equity	524.41	30.00	150.95	30.00	675.35	30.00
Total	1748.02	100.00	503.25	100.00	2251.27	100.00
Asset-II						
Debt	976.59	70.00	549.23	70.00	1525.82	70.00
Equity	418.54	30.00	235.35	30.00	653.89	30.00
Total	1395.13	100.00	784.58	100.00	2179.71	100.00
Asset-III						
Debt	1629.10	70.00	1303.02	70.00	2932.12	70.00
Equity	698.19	30.00	558.43	30.00	1256.62	30.00
Total	2327.29	100.00	1861.45	100.00	4188.74	100.00
Asset-IV						
Debt	2926.18	70.00	438.61	70.00	3364.78	70.00
Equity	1254.08	30.00	187.97	30.00	1442.05	30.00
Total	4180.25	100.00	626.58	100.00	4806.83	100.00
Asset-V						
Debt	1344.31	70.00	333.27	70.00	1677.58	70.01
Equity	576.13	30.00	142.80	30.00	718.94	29.99
Total	1920.44	100.00	476.07	100.00	2396.51	100.00
Asset-VI						
Debt	1604.38	70.00	85.75	70.00	1690.13	70.00
Equity	687.59	30.00	36.75	30.00	724.34	30.00
Total	2291.97	100.00	122.50	100.00	2414.47	100.00
Asset-VII						
Debt	3144.21	70.00	262.70	70.00	3406.91	70.00
Equity	1347.52	30.00	112.58	30.00	1460.10	30.00
Total	4491.73	100.00	375.28	100.00	4867.01	100.00

Return on Equity (“ROE”)

24. 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.”

25. 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:-

Return on Equity	Asset-I		Asset-II		Asset-III	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved in Order dated 23.1.2015	83.38	119.38	30.21	118.02	122.39	219.23
Claimed by the petitioner	92.43	127.04	33.11	123.60	132.81	233.96
Allowed in this Order	92.42	127.05	33.11	123.60	132.81	233.97



(₹ in lakh)

Return on Equity	Asset-IV		Asset-V		Asset-VI	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved in Order dated 23.1.2015	196.64	267.35	83.63	125.46	20.09	124.69
Claimed by the petitioner	215.06	279.61	92.17	138.37	22.41	139.70
nAllowed in this Order	214.80	279.30	92.17	138.38	22.27	138.83

(₹ in lakh)

Asset-VII		
Return on Equity	2012-13 (pro-rata)	2013-14
Approved in Order dated 23.1.2015	141.49	267.35
Claimed by the petitioner	156.84	283.13
Allowed in this Order	156.66	282.84

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 due to actual additional capital expenditure.

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)

	Asset-I		Asset-II		Asset-III	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Interest on Loan						
Approved in Order dated 23.1.2015	96.43	126.56	33.89	119.11	132.08	208.28
Claimed by the petitioner	94.40	116.07	32.83	107.36	123.64	190.30
Allowed in this Order	94.40	116.07	32.83	107.36	123.64	190.29

(₹ in lakh)

	Asset-IV		Asset-V		Asset-VI	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Interest on Loan						
Approved in Order dated 23.1.2015	225.53	278.81	94.11	126.73	17.70	105.27
Claimed by the petitioner	222.70	259.24	93.75	125.59	18.09	107.17
Allowed in this Order	222.44	258.95	93.75	125.59	17.97	106.51

(₹ in lakh)

Asset-VII		
Interest on Loan	2012-13 (pro-rata)	2013-14
Approved in Order dated 23.1.2015	166.76	292.98
Claimed by the petitioner	166.88	275.91
Allowed in this Order	166.70	275.63

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

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)

	Asset-I		Asset-II		Asset-III	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Depreciation						
Approved in Order dated 23.1.2015	70.48	102.49	25.02	101.57	104.02	193.29
Claimed by the petitioner	70.49	96.72	24.67	93.90	101.43	183.62
Allowed in this Order	70.48	96.71	24.67	93.90	101.43	183.62



(₹ in lakh)

Depreciation	Asset-IV		Asset-V		Asset-VI	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved in Order dated 23.1.2015	193.77	263.68	80.43	121.10	19.31	119.73
Claimed by the petitioner	191.14	245.61	79.94	118.89	19.56	120.23
Allowed in this Order	190.90	245.32	79.95	118.89	19.43	119.45

(₹ in lakh)

Asset-VII		
Depreciation	2012-13 (pro-rata)	2013-14
Approved in Order dated 23.1.2015	139.52	263.72
Claimed by the petitioner	139.52	248.79
Allowed in this Order	139.37	248.51

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. However in the instant petition, petitioner has inadvertently claimed the O&M for 2 nos. of bays instead of 3 nos. of bays in case of Asset VII. The petitioner has rectified the error vide affidavit dated 4.4.2016 and has submitted the revised Form-2 for Asset VII. 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)

O&M Expenses	Asset-I		Asset-II		Asset-III	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved in Order dated 23.1.2015	169.10	202.92	37.09	111.28	166.92	222.56
Claimed by the petitioner	159.95	202.92	35.09	111.28	157.89	222.56



Allowed in this Order	159.95	202.92	35.09	111.28	157.89	222.56
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(₹ in lakh)

O&M Expenses	Asset-IV		Asset-V		Asset-VI	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved in Order dated 23.1.2015	111.09	130.92	95.81	130.92	22.11	140.24
Claimed by the petitioner	111.09	130.92	95.82	130.92	22.11	140.24
Allowed in this Order	111.09	130.92	95.82	130.92	22.11	140.24

(₹ in lakh)

Asset-VII		
O&M Expenses	2012-13 (pro-rata)	2013-14
Approved in Order dated 23.1.2015	140.61	254.79
Claimed by the petitioner	140.61	254.79
Allowed in this Order	140.61	254.79

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)

Interest on Working Capital	Asset-I		Asset-II		Asset-III	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved in Order dated 23.1.2015	15.10	19.23	4.10	13.94	17.47	26.58
Claimed by the petitioner	14.76	19.03	4.02	13.62	16.96	26.29
Allowed in this Order	14.76	19.03	4.02	13.62	16.96	26.29

(₹ in lakh)

Interest on Working Capital	Asset-IV		Asset-V		Asset-VI	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved in Order dated 23.1.2015	20.31	25.87	11.24	15.82	2.54	15.80
Claimed by the petitioner	20.62	25.29	11.42	16.05	2.60	16.20
Allowed in this Order	20.60	25.27	11.41	16.04	2.59	16.14



(₹ in lakh)

Asset-VII		
Interest on Working Capital	2012-13 (pro-rata)	2013-14
Approved in Order dated 23.1.2015	18.07	33.04
Claimed by the petitioner	18.43	32.67
Allowed in this Order	18.42	32.65

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:-

Asset I and II:

(₹ in lakh)

Particulars	Asset-I		Asset-II	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Depreciation				
Opening Gross Block	1748.02	2067.88	1395.13	2022.31
Additional Capitalisation	319.86	183.39	627.18	157.40
Closing Gross Block	2067.88	2251.27	2022.31	2179.71
Average Gross Block	1907.95	2159.58	1708.72	2101.01
Rate of Depreciation (%)	4.43	4.48	4.33	4.47
Depreciable Value	1474.69	1841.86	1295.38	1927.45
Balance useful life of the asset	25	24	25	24
Elapsed life	0	1	0	1
Remaining Depreciable Value	1474.69	1630.67	1295.38	1623.77
Depreciation during the year	70.48	96.71	24.67	93.90
Depreciation upto previous year	0.00	70.48	0.00	24.67
Cumulative depreciation (incl. of AAD)	70.48	167.19	24.67	118.57
Interest on Loan				
Gross Normative Loan	1223.61	1447.54	976.59	1415.64



Particulars	Asset-I		Asset-II	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Cumulative Repayment upto Previous Year	0.00	70.48	0.00	24.67
Net Loan-Opening	1223.61	1377.06	976.59	1390.97
Additions	223.93	128.37	439.05	110.18
Repayment during the year	70.48	96.71	24.67	93.90
Net Loan-Closing	1377.06	1408.72	1390.97	1407.25
Average Loan	1300.34	1392.89	1183.78	1399.11
Weighted Average Rate of Interest on Loan (%)	8.7115	8.3330	8.3202	7.6735
Interest on Loan	94.40	116.07	32.83	107.36
Return on Equity				
Opening Equity	524.41	620.34	418.54	606.67
Additions	95.93	55.02	188.13	47.22
Closing Equity	620.34	675.35	606.67	653.89
Average Equity	572.37	647.84	512.60	630.28
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
MAT rate for the respective year (%)	20.008	20.961	20.008	20.961
Rate of Return on Equity (%)	19.377	19.610	19.377	19.610
Return on Equity	92.42	127.05	33.11	123.60
Interest on Working Capital				
O & M expenses	16.00	16.90	8.77	9.27
Maintenance Spares	28.79	30.44	15.79	16.69
Receivables	86.40	93.63	64.86	74.96
Total	131.19	140.97	89.42	100.92
Rate of Interest(%)	13.50	13.50	13.50	13.50
Interest on Working Capital	14.76	19.03	4.02	13.62
Annual Transmission Charges				
Depreciation	70.48	96.71	24.67	93.90
Interest on Loan	94.40	116.07	32.83	107.36
Return on Equity	92.42	127.05	33.11	123.60
Interest on Working Capital	14.76	19.03	4.02	13.62
O & M Expenses	159.95	202.92	35.09	111.28
Total	432.01	561.78	129.72	449.77



Asset III and IV:

(₹ in lakh)

Particulars	Asset-III		Asset-IV	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Depreciation				
Opening Gross Block	2327.29	3765.19	4180.25	4688.19
Additional Capitalisation	1437.90	423.55	507.94	118.64
Closing Gross Block	3765.19	4188.74	4688.19	4806.83
Average Gross Block	3046.24	3976.97	4434.22	4747.51
Rate of Depreciation (%)	4.44	4.62	5.17	5.17
Depreciable Value	2332.46	3807.61	3909.98	4420.51
Balance useful life of the asset	25	24	25	24
Elapsed life	0	1	0	1
Remaining Depreciable Value	2332.46	3068.68	3909.98	4001.04
Depreciation during the year	101.43	183.62	190.90	245.32
Depreciation upto previous year	0.00	101.43	0.00	190.90
Cumulative depreciation (incl. of AAD)	101.43	285.05	190.90	436.22
Interest on Loan				
Gross Normative Loan	1629.10	2635.63	2926.18	3281.73
Cumulative Repayment upto Previous Year	0.00	101.43	0.00	190.90
Net Loan-Opening	1629.10	2534.20	2926.18	3090.84
Additions	1006.53	296.49	355.56	83.05
Repayment during the year	101.43	183.62	190.90	245.32
Net Loan-Closing	2534.20	2647.07	3090.84	2928.56
Average Loan	2081.65	2590.64	3008.51	3009.70
Weighted Average Rate of Interest on Loan (%)	7.9192	7.3454	8.8723	8.6040
Interest on Loan	123.64	190.29	222.44	258.95
Return on Equity				
Opening Equity	698.19	1129.56	1254.08	1406.46
Additions	431.37	127.06	152.38	35.59
Closing Equity	1129.56	1256.62	1406.46	1442.05
Average Equity	913.87	1193.09	1330.27	1424.25
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
MAT rate for the respective year (%)	20.008	20.961	20.008	20.961
Rate of Return on Equity (%)	19.377	19.610	19.377	19.610
Return on Equity	132.81	233.97	214.80	279.30



Particulars	Asset-III		Asset-IV	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Interest on Working Capital				
O & M expenses	17.54	18.54	11.11	10.91
Maintenance Spares	31.58	33.38	20.00	19.64
Receivables	118.38	142.79	151.96	156.63
Total	167.50	194.71	183.07	187.17
Rate of Interest(%)	13.50	13.50	13.50	13.50
Interest on Working Capital	16.96	26.29	20.60	25.27
Annual Transmission Charges				
Depreciation	101.43	183.62	190.90	245.32
Interest on Loan	123.64	190.29	222.44	258.95
Return on Equity	132.81	233.97	214.80	279.30
Interest on Working Capital	16.96	26.29	20.60	25.27
O & M Expenses	157.89	222.56	111.09	130.92
Total	532.73	856.73	759.82	939.77

Asset V and VI:

(₹ in lakh)

Particulars	Asset-V		Asset-VI	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Depreciation				
Opening Gross Block	1920.44	2307.80	2291.97	2305.26
Additional Capitalisation	387.36	88.71	13.29	109.21
Closing Gross Block	2307.80	2396.51	2305.26	2414.47
Average Gross Block	2114.12	2352.16	2298.62	2359.87
Rate of Depreciation (%)	5.04	5.05	5.07	5.06
Depreciable Value	1820.88	2207.51	1986.93	2046.12
Balance useful life of the asset	25	24	25	24
Elapsed life	0	1	0	1
Remaining Depreciable Value	1820.88	1955.17	1986.93	2022.62
Depreciation during the year	79.95	118.89	19.43	119.45
Depreciation upto previous year	0.00	79.95	0.00	19.43
Cumulative depreciation (incl. of AAD)	79.95	198.84	19.43	138.88
Interest on Loan				
Gross Normative Loan	1344.31	1615.48	1604.38	1613.68
Cumulative Repayment upto Previous Year	0.00	79.95	0.00	19.43



Particulars	Asset-V		Asset-VI	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Net Loan-Opening	1344.31	1535.53	1604.38	1594.25
Additions	271.17	62.10	9.30	76.45
Repayment during the year	79.95	118.89	19.43	119.45
Net Loan-Closing	1535.53	1478.73	1594.25	1551.25
Average Loan	1439.92	1507.13	1599.31	1572.75
Weighted Average Rate of Interest on Loan (%)	8.6814	8.3329	6.7429	6.7722
Interest on Loan	93.75	125.59	17.97	106.51
Return on Equity				
Opening Equity	576.13	692.32	687.59	691.58
Additions	116.19	26.61	3.99	32.76
Closing Equity	692.32	718.94	691.58	724.34
Average Equity	634.23	705.63	689.58	707.96
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
MAT rate for the respective year (%)	20.008	20.961	20.008	20.961
Rate of Return on Equity (%)	19.377	19.610	19.377	19.610
Return on Equity	92.17	138.38	22.27	138.83
Interest on Working Capital				
O & M expenses	10.65	10.91	11.05	11.68
Maintenance Spares	19.16	19.64	19.90	21.04
Receivables	82.91	88.30	84.38	86.86
Total	112.72	118.85	115.33	119.58
Rate of Interest (%)	13.50	13.50	13.50	13.50
Interest on Working Capital	11.41	16.04	2.59	16.14
Annual Transmission Charges				
Depreciation	79.95	118.89	19.43	119.45
Interest on Loan	93.75	125.59	17.97	106.51
Return on Equity	92.17	138.38	22.27	138.83
Interest on Working Capital	11.41	16.04	2.59	16.14
O & M Expenses	95.82	130.92	22.11	140.24
Total	373.10	529.82	84.38	521.17

Asset -VII

(₹ in lakh)

Asset-VII		
Particulars	2012-13 (pro-rata)	2013-14



Asset-VII		
Particulars	2012-13 (pro-rata)	2013-14
Depreciation		
Opening Gross Block	4491.73	4748.37
Additional Capitalisation	256.64	118.64
Closing Gross Block	4748.37	4867.01
Average Gross Block	4620.05	4807.69
Rate of Depreciation (%)	5.17	5.17
Depreciable Value	4077.23	4361.59
Balance useful life of the asset	25	24
Elapsed life	0.00	1.00
Remaining Depreciable Value	4077.23	4106.73
Depreciation during the year	139.37	248.51
Depreciation upto previous year	0.00	139.37
Cumulative depreciation (incl. of AAD)	139.37	387.88
Interest on Loan		
Gross Normative Loan	3144.21	3323.86
Cumulative Repayment upto Previous Year	0.00	139.37
Net Loan-Opening	3144.21	3184.49
Additions	179.65	83.05
Repayment during the year	139.37	248.51
Net Loan-Closing	3184.49	3019.03
Average Loan	3164.35	3101.76
Weighted Average Rate of Interest on Loan (%)	9.0309	8.8861
Interest on Loan	166.70	275.63
Return on Equity		
Opening Equity	1347.52	1424.51
Additions	76.99	35.59
Closing Equity	1424.51	1460.10
Average Equity	1386.02	1442.31
Return on Equity (Base Rate) (%)	15.500	15.500
MAT rate for the respective year (%)	20.008	20.961
Rate of Return on Equity (%)	19.377	19.610
Return on Equity	156.66	282.84
Interest on Working Capital		
O & M expenses	20.09	21.22
Maintenance Spares	36.16	38.22
Receivables	177.64	182.40



Asset-VII		
Particulars	2012-13 (pro-rata)	2013-14
Total	233.89	241.85
Rate of Interest (%)	13.50	13.50
Interest on Working Capital	18.42	32.65
Annual Transmission Charges		
Depreciation	139.37	248.51
Interest on Loan	166.70	275.63
Return on Equity	156.66	282.84
Interest on Working Capital	18.42	32.65
O & M Expenses	140.61	254.79
Total	621.76	1094.42

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

33. The petitioner has combined all the assets and has claimed one combined tariff for all the assets for 2014-19 tariff period. The tariff charges claimed for 2014-19 tariff period as under:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1165.65	1228.52	1263.24	1263.24	1263.24
Interest on Loan	1164.64	1140.66	1071.30	960.74	850.89
Return on Equity	1393.22	1466.05	1506.38	1506.38	1506.38
Interest on Working Capital	146.38	150.97	153.18	152.79	152.48
O & M Expenses	1098.31	1134.79	1172.48	1211.40	1251.55
Total	4968.20	5120.99	5166.58	5094.55	5024.54

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	91.53	94.57	97.91	100.95	104.30
Maintenance Spares	164.75	170.22	175.87	181.71	187.73
Receivables	828.03	853.50	861.10	849.09	837.42
Total	1084.31	1118.29	1134.68	1131.75	1129.45
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	146.38	150.97	153.18	152.79	152.48



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 tried 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 petitioner has combined all the assets for claiming tariff during 2014-19 tariff period and accordingly claimed capital cost of combined assets is ₹23129.66lakh as on 31.3.2014. Rajasthan Discoms raised objection about lack of data submitted by the petitioner in support of their claim for transmission charges. We have considered the capital cost of ₹23104.54lakh, as worked out in earlier paras, as the opening capital cost on 1.4.2014 for determination of tariff in accordance with Regulation 9 of the 2014 Tariff Regulations as shown below:-

(₹ in lakh)

Name of Asset	Apportioned approved cost as per RCE	Capital cost as on 31.3.2014
Asset-I	3813.17	2251.27
Asset-II	3818.17	2179.71
Asset-III	7141.02	4188.74
Asset-IV	5442.40	4806.83
Asset-V	3330.52	2396.51
Asset-VI	3330.52	2414.47
Asset-VII	5442.30	4867.01
Total	32318.10	23104.54

Additional Capital Expenditure

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



"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 13;
- (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.:"

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 cut-off date is 31.3.2016 in case of Asset-VI and 31.3.2015 for rest of the Assets. The petitioner has claimed additional capital expenditure for 2014-19 tariff period under Regulation 14(2) of the 2014 Tariff Regulations. The additional capital expenditure allowed is as shown below:-

(₹ in lakh)

Name of Asset	Apportioned approved cost as per RCE	Capital cost as on 1.3.2014	Additional capital expenditure allowed			Capital cost as on 31.3.2019
			2014-15	2015-16	Total	
Asset-I	3813.17	2251.27	211.68	156.11	367.79	2619.06
Asset-II	3818.17	2179.71	197.73	146.51	344.24	2523.95
Asset-III	7141.02	4188.74	368.89	301.27	670.16	4858.90
Asset-IV	5442.40	4806.83	96.90	288.47	385.37	5192.20
Asset-V	3330.52	2396.51	29.82	106.29	136.11	2532.62
Asset-VI	3330.52	2414.47	112.11	87.84	199.95	2614.42
Asset-VII	5442.30	4867.01	87.79	284.60	372.39	5239.40
Total	32318.10	23104.54	1104.92	1371.09	2476.01	25580.55



40. The petitioner has claimed the admissibility of additional capital expenditure before the cut-off date under Regulation 14(1) of 2014 Tariff Regulations. We have considered the submissions of the petitioner with regard to the estimated capital expenditure during 2014-19. The above mentioned additional capital expenditure is towards balance and retention payments and the same has been certified by the Auditor vide certificates dated 8.7.2015 for all the assets. Further, the total capital cost for all the assets as on 31.3.2019 is within the approved apportioned cost of the project. Thus, the same is allowed for the purpose of revision of tariff in accordance with Regulation 14(1) of the 2014 Tariff Regulations.

Debt: Equity

41. 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.”

42. 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	16173.18	70.00	1733.21	70.00	17906.39	70.00
Equity	6931.36	30.00	742.80	30.00	7674.17	30.00
Total	23104.54	100.00	2476.01	100.00	25580.55	100.00

Return on Equity (“ROE”)

43. 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.”

44. 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)

Return on Equity	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	6931.36	7262.84	7674.17	7674.17	7674.17
Additions	331.48	411.33	0.00	0.00	0.00
Closing Equity	7262.84	7674.17	7674.17	7674.17	7674.17
Average Equity	7097.10	7468.50	7674.17	7674.17	7674.17
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	1391.77	1464.61	1504.94	1504.94	1504.94

Interest on Loan (“IoL”)

45. 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.”

46. 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 allowed is as follows:-



(₹ in lakh)

Interest on Loan	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	16173.18	16946.62	17906.39	17906.39	17906.39
Cumulative Repayment upto Previous Year	1732.64	2896.97	4124.17	5386.07	6647.97
Net Loan-Opening	14440.54	14049.66	13782.22	12520.32	11258.42
Additions	773.44	959.76	0.00	0.00	0.00
Repayment during the year	1164.33	1227.20	1261.90	1261.90	1261.90
Net Loan-Closing	14049.66	13782.22	12520.32	11258.42	9996.51
Average Loan	14245.10	13915.94	13151.27	11889.37	10627.46
Weighted Average Rate of Interest on Loan (%)	8.1671	8.1887	8.1383	8.0732	7.9992
Interest on Loan	1163.41	1139.53	1070.29	959.85	850.11

Depreciation

47. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations provide as follows:-

"27. Depreciation:

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

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

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

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

48. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2014 and accumulated depreciation up to 31.3.2014. 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	23104.54	24209.46	25580.55	25580.55	25580.55
Additional Capitalisation	1104.92	1371.09	0.00	0.00	0.00
Closing Gross Block	24209.46	25580.55	25580.55	25580.55	25580.55
Average Gross Block	23657.00	24895.01	25580.55	25580.55	25580.55
Rate of Depreciation (%)	4.92	4.93	4.93	4.93	4.93
Depreciable Value	20032.26	21643.67	22380.44	21763.45	21763.45
Balance useful life of the asset	27	26	25	24	23
Elapsed life	0	1	2	3	4
Remaining Depreciable Value	18299.62	18249.49	17639.29	16377.38	15115.48
Depreciation during the year	1164.33	1227.20	1261.90	1261.90	1261.90
Depreciation upto previous year	1732.64	2896.97	4124.17	5386.07	6647.97
Cumulative depreciation	2896.97	4124.17	5386.07	6647.97	7909.87

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

49. 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	13	13	13	13	13
Norms(₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
220 kV Bays:					
No. of Bays	06	06	06	06	06
Norms(₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.10
D/C Twin/Triple Conductor Transmission line:					
Length(km)	86.498	86.498	86.498	86.498	86.498
Norms(₹ lakh/km)	0.707	0.731	0.755	0.780	0.806
Total O&M Expenses (₹ lakh)	1098.31	1134.79	1172.48	1211.40	1251.55

50. 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. Rajasthan Discoms have requested to consider prudence check of the claims made by the petitioner. 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)

51. 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;”

52. 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%.

53. 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	86.45	89.32	92.29	95.35	98.51
Maintenance Spares	155.68	160.84	166.19	171.71	177.40
Receivables	827.35	852.83	860.45	848.46	836.82
Total	1083.59	1117.58	1133.99	1131.08	1128.80
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	146.28	150.87	153.09	152.70	152.39

ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

54. 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	23104.54	24209.46	25580.55	25580.55	25580.55
Additional Capitalisation	1104.92	1371.09	0.00	0.00	0.00
Closing Gross Block	24209.46	25580.55	25580.55	25580.55	25580.55
Average Gross Block	23657.00	24895.01	25580.55	25580.55	25580.55
Rate of Depreciation (%)	4.92	4.93	4.93	4.93	4.93
Depreciable Value	20032.26	21643.67	22380.44	21763.45	21763.45
Balance useful life of the asset	27	26	25	24	23
Elapsed life	0	1	2	3	4
Remaining Depreciable Value	18299.62	18249.49	17639.29	16377.38	15115.48
Depreciation during the year	1164.33	1227.20	1261.90	1261.90	1261.90
Depreciation upto previous year	1732.64	2896.97	4124.17	5386.07	6647.97
Cumulative depreciation	2896.97	4124.17	5386.07	6647.97	7909.87
Interest on Loan					
Gross Normative Loan	16173.18	16946.62	17906.39	17906.39	17906.39
Cumulative Repayment upto Previous Year	1732.64	2896.97	4124.17	5386.07	6647.97
Net Loan-Opening	14440.54	14049.66	13782.22	12520.32	11258.42
Additions	773.44	959.76	0.00	0.00	0.00
Repayment during the year	1164.33	1227.20	1261.90	1261.90	1261.90
Net Loan-Closing	14049.66	13782.22	12520.32	11258.42	9996.51
Average Loan	14245.10	13915.94	13151.27	11889.37	10627.46
Weighted Average Rate of Interest on Loan (%)	8.1671	8.1887	8.1383	8.0732	7.9992
Interest on Loan	1163.41	1139.53	1070.29	959.85	850.11



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity					
Opening Equity	6931.36	7262.84	7674.17	7674.17	7674.17
Additions	331.48	411.33	0.00	0.00	0.00
Closing Equity	7262.84	7674.17	7674.17	7674.17	7674.17
Average Equity	7097.10	7468.50	7674.17	7674.17	7674.17
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT rate for the 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	1391.77	1464.61	1504.94	1504.94	1504.94
Interest on Working Capital					
O & M expenses	91.49	94.53	97.67	100.91	104.25
Maintenance Spares	164.75	170.22	175.87	181.71	187.73
Receivables	827.35	852.83	860.45	848.46	836.82
Total	1083.59	1117.58	1133.99	1131.08	1128.80
Rate of Interest(%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	146.28	150.87	153.09	152.70	152.39
Annual Transmission Charges					
Depreciation	1164.33	1227.20	1261.90	1261.90	1261.90
Interest on Loan	1163.41	1139.53	1070.29	959.85	850.11
Return on Equity	1391.77	1464.61	1504.94	1504.94	1504.94
Interest on Working Capital	146.28	150.87	153.09	152.70	152.39
O & M Expenses	1098.31	1134.79	1172.48	1211.40	1251.55
Total	4964.11	5117.00	5162.69	5090.79	5020.89

55. 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 infructuous.

Filing Fee and the Publication Expenses

56. 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

57. 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

58. The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future. Rajasthan Discoms have requested not to consider the aforesaid prayer. We are of the view that the petitioner's prayer is premature.

Sharing of Transmission Charges

59. 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.

60. This order disposes of Petition No.290/TT/2015.

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

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



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

(₹in lakh)

Asset-I				
Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXXIII-loan2-	8.6400	50.00	0.00	50.00
BOND XXXII-loan1-	8.8400	250.00	0.00	250.00
BOND-XXXIV-loan3-	8.8400	308.00	0.00	308.00
BOND-XXXV-loan4-	9.6400	200.00	0.00	200.00
BOND XXXVI-loan5-	9.3500	200.00	0.00	200.00
BOND XXXIX-loan6-	9.4000	83.00	0.00	83.00
BOND XL-loan 10-	9.3000	132.61	0.00	132.61
FC- BOND (17.01.2013)-ADDCAP FOR 2012-2013 loan7-53.38	4.0965	0.00	223.93	223.93
BOND - XLIII-ADDCAP FOR 2013-2014 loan8-	7.9300	0.00	128.37	128.37
Total		1223.61	352.30	1575.91

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

(₹in lakh)

Asset-I		
Particulars	2012-13 (pro-rata)	2013-14
Gross Opening Loan	1223.61	1447.54
Cumulative Repayments of Loans up to Previous Year	0.00	0.00
Net Loans Opening	1223.61	1447.54
Add: Drawl(s) during the Year	223.93	128.37
Less: Repayments during the year	0.00	20.83
Net Closing Loan	1447.54	1555.08
Average Net Loan	1335.58	1501.31
Rate of Interest on Loan (%)*	8.7115%	8.3330%
Interest on Loan	116.35	125.10



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

(₹in lakh)

Asset-II				
Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXXIII-loan2-	8.6400	50.00	0.00	50.00
BOND XXXII-loan1-	8.8400	50.00	0.00	50.00
BOND-XXXIV-loan3-	8.8400	68.00	0.00	68.00
BOND-XXXV-loan4-	9.6400	200.00	0.00	200.00
BOND XXXVI-loan5-	9.3500	200.00	0.00	200.00
BOND XXXVIII-loan 7-	9.2500	408.59	0.00	408.59
FC-BOND (17.01.2013)-ADDCAP FOR 2012-2013 loan8-53.38	4.0965	0.00	439.05	439.05
BOND - XLIII-ADDCAP FOR 2013-2014 loan9-	7.9300	0.00	110.18	110.18
Total		976.59	549.23	1525.82

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

(₹in lakh)

Asset-II		
Particulars	2012-13 (pro-rata)	2013-14
Gross Opening Loan	976.59	1415.64
Cumulative Repayments of Loans up to Previous Year	0.00	0.00
Net Loans Opening	976.59	1415.64
Add: Drawl(s) during the Year	439.05	110.18
Less: Repayments during the year	0.00	4.17
Net Closing Loan	1415.64	1521.65
Average Net Loan	1196.12	1468.65
Rate of Interest on Loan (%)*	8.3202%	7.6735%
Interest on Loan	99.52	112.70



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

(₹in lakh)

Asset-III				
Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXXIII-DOCO DRAWL ON 01-JUL-2012-	8.6400	100.00	0.00	100.00
BOND XXXII-loan1-	8.8400	400.00	0.00	400.00
BOND-XXXIV-DOCO DRAWL ON 01-JUL-2012-	8.8400	286.00	0.00	286.00
BOND-XXXV-DOCO DRAWL ON 01-JUL-2012-	9.6400	200.00	0.00	200.00
BOND XXXVI-DOCO DRAWL ON 01-JUL-2012-	9.3500	200.00	0.00	200.00
BOND XXXVII-loan6-'	9.2500	244.00	0.00	244.00
BOND XXXVIII-loan7-	9.2500	199.10	0.00	199.10
SBI (21.03.2012)-ADDCAP FOR 2013-2014 loan9-	10.2900	0.00	296.49	296.49
FC-BOND (17.01.2013)-ADDCAP FOR 2012-2013 loan8-53.38	4.0965	0.00	1006.53	1006.53
Total		1629.10	1303.02	2932.12

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

(₹in lakh)

Asset-III		
Particulars	2012-13 (pro-rata)	2013-14
Gross Opening Loan	1629.10	2635.63
Cumulative Repayments of Loans up to Previous Year	0.00	0.00
Net Loans Opening	1629.10	2635.63
Add: Drawl(s) during the Year	1006.53	296.49
Less: Repayments during the year	0.00	33.33
Net Closing Loan	2635.63	2898.79
Average Net Loan	2132.37	2767.21
Rate of Interest on Loan (%)*	7.9192%	7.3454%
Interest on Loan	168.87	203.26



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

(₹in lakh)

Asset-IV				
Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXXIII-DOCO DRAWL ON 01-JUN-2012-	8.6400	220.00	0.00	220.00
BOND XXXII-DOCO DRAWL ON 01-JUN-2012-	8.8400	450.00	0.00	450.00
BOND-XXXIV-DOCO DRAWL ON 01-JUN-2012-	8.8400	450.00	0.00	450.00
BOND-XXXV-DOCO DRAWL ON 01-JUN-2012-	9.6400	500.00	0.00	500.00
BOND XXXVI-DOCO DRAWL ON 01-JUN-2012-	9.3500	500.00	0.00	500.00
BOND XXXVII-loan6-	9.2500	500.00	0.00	500.00
BOND XXXVIII-DOCO DRAWL ON 01-JUN-2012-	9.2500	300.00	0.00	300.00
BOND XL-loan8-	9.3000	9.91	0.00	9.91
FC- BOND (17.01.2013)-ADDCAP FOR 2012-2013 Loan9-53.38	4.0965	0.00	355.56	355.56
BOND - XLIII-ADDCAP FOR 2013-2014 loan10-	7.9300	0.00	83.05	83.05
Total		2929.91	438.61	3368.52

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

(₹in lakh)

Asset-IV		
Particulars	2012-13 (pro-rata)	2013-14
Gross Opening Loan	2929.91	3285.47
Cumulative Repayments of Loans up to Previous Year	0.00	0.00
Net Loans Opening	2929.91	3285.47
Add: Drawl(s) during the Year	355.56	83.05
Less: Repayments during the year	0.00	37.50
Net Closing Loan	3285.47	3331.02
Average Net Loan	3107.69	3308.25
Rate of Interest on Loan (%)*	8.8723%	8.6040%
Interest on Loan	275.72	284.64



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

(₹in lakh)

Asset-V				
Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXXIII-DOCOC DRAWL ON 01-JUL-2012-	8.6400	100.00	0.00	100.00
BOND XXXII-DOCOC DRAWL ON 01-JUL-2012-	8.8400	100.00	0.00	100.00
BOND-XXXIV-DOCOC DRAWL ON 01-JUL-2012-	8.8400	309.00	0.00	309.00
BOND-XXXV-DOCOC DRAWL ON 01-JUL-2012-	9.6400	175.00	0.00	175.00
BOND XXXVI-DOCOC DRAWL ON 01-JUL-2012-	9.3500	175.00	0.00	175.00
BOND XXXVII-loan6-	9.2500	480.42	0.00	480.42
SBI (21.03.2012)-ADDCAP FOR 2013-2014 loan7-	10.2900	0.00	62.10	62.10
BOND XL-loan6-	9.3000	4.89	0.00	4.89
FC- BOND (17.01.2013)-ADDCAP FOR 2012-2013 loan8-53.38	4.0965	0.00	271.17	271.17
Total		1344.31	333.27	1677.58

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

(₹in lakh)

Asset-V		
Particulars	2012-13 (pro-rata)	2013-14
Gross Opening Loan	1344.31	1615.48
Cumulative Repayments of Loans up to Previous Year	0.00	0.00
Net Loans Opening	1344.31	1615.48
Add: Drawl(s) during the Year	271.17	62.10
Less: Repayments during the year	0.00	8.33
Net Closing Loan	1615.48	1669.25
Average Net Loan	1479.90	1642.37
Rate of Interest on Loan (%)*	8.6814%	8.3329%
Interest on Loan	128.48	136.86



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

(₹in lakh)

Asset-VI				
Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXXIII-loan2-	8.6400	103.00	0.00	103.00
BOND XXXII-DOCO DRAWL ON 01-FEB-2013-	8.8400	100.00	0.00	100.00
BOND-XXXIV-loan3-	8.8400	309.00	0.00	309.00
BOND-XXXV-loan4-	9.6400	175.00	0.00	175.00
BOND XXXVI-loan5-	9.3500	61.15	0.00	61.15
BOND XXXVII-loan6-	9.2500	109.00	0.00	109.00
BOND XL-ADDCAP FOR 2012-2013 loan8-	9.3000	0.00	9.30	9.30
FC - BOND (17.01.2013)-loan7-53.79	4.0965	757.52	0.00	757.52
BOND - XLIII-ADDCAP FOR 2013-2014 loan9-	7.9300	0.00	76.45	76.45
Total		1614.67	85.75	1700.42

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

(₹in lakh)

Asset-VI		
Particulars	2012-13 (pro-rata)	2013-14
Gross Opening Loan	1614.67	1623.97
Cumulative Repayments of Loans up to Previous Year	0.00	0.00
Net Loans Opening	1614.67	1623.97
Add: Drawl(s) during the Year	9.30	76.45
Less: Repayments during the year	0.00	8.33
Net Closing Loan	1623.97	1692.09
Average Net Loan	1619.32	1658.03
Rate of Interest on Loan (%)*	6.743%	6.772%
Interest on Loan	109.19	112.28



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

(₹in lakh)

Asset-VII				
Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXXIII-DOCO DRAWL ON 01-SEP-2012-	8.6400	220.00	0.00	220.00
BOND XXXII-DOCO DRAWL ON 01-SEP-2012-	8.8400	450.00	0.00	450.00
BOND-XXXIV-DOCO DRAWL ON 01-SEP-2012-	8.8400	450.00	0.00	450.00
BOND-XXXV-DOCO DRAWL ON 01-SEP-2012-	9.6400	500.00	0.00	500.00
BOND XXXVI-DOCO DRAWL ON 01-SEP-2012-	9.3500	500.00	0.00	500.00
BOND XXXVII-loan6-	9.2500	500.00	0.00	500.00
BOND XXXVIII-DOCO DRAWL ON 01-SEP-2012-	9.2500	300.00	0.00	300.00
BOND XL-loan8-	9.3000	227.73	0.00	227.73
FC- BOND (17.01.2013)-ADDCAP FOR 2012-2013 loan9 53.38	4.1000	0.00	179.52	179.52
BOND - XLIII-ADDCAP FOR 2013-2014 loan10-	7.9300	0.00	83.05	83.05
Total		3147.73	262.57	3410.30

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

(₹in lakh)

Asset-VII		
Particulars	2012-13 (pro-rata)	2013-14
Gross Opening Loan	3147.73	3327.25
Cumulative Repayments of Loans up to Previous Year	0.00	0.00
Net Loans Opening	3147.73	3327.25
Add: Drawl(s) during the Year	179.52	83.05
Less: Repayments during the year	0.00	37.50
Net Closing Loan	3327.25	3372.80
Average Net Loan	3237.49	3350.03
Rate of Interest on Loan (%)*	9.0309%	8.8861%
Interest on Loan	292.37	297.69

*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
BOND XXXIII-DOCO Loan-	8.6400	843.00	0.00	843.00
BOND XXXII-DOCO Loan-	8.8400	1800.00	0.00	1800.00
BOND-XXXIV-DOCO Loan-	8.8400	2180.00	0.00	2180.00
BOND-XXXV-DOCO Loan-	9.6400	1950.00	0.00	1950.00
BOND XXXVI-DOCO Loan-	9.3500	1836.15	0.00	1836.15
BOND XXXVII-DOCO Loan-	9.2500	1833.42	0.00	1833.42
BOND XXXVIII-DOCO Loan-	9.2500	1207.69	0.00	1207.69
BOND XXXIX-DOCO Loan-	9.4000	83.00	0.00	83.00
SBI (21.03.2012)-DOCO Loan-	10.2500	358.59	0.00	358.59
BOND XL-DOCO Loan-	9.3000	384.44	0.00	384.44
FC - BOND (17.01.2013)-19.19.ADDCAP FOR 2012-2013 loan7-53.38	4.0965	223.93	0.00	223.93
FC- BOND (17.01.2013)-31.31.ADDCAP FOR 2012-2013 loan9-53.38	4.0965	355.56	0.00	355.56
FC-BOND (17.01.2013)-40.40.ADDCAP FOR 2012-2013 loan8-53.38	4.0965	271.17	0.00	271.17
FC-BOND (17.01.2013)-52.52.ADDCAP FOR 2012-2013 loan9-53.38	4.0965	179.52	0.00	179.52
FC - BOND (17.01.2013)-60.60.ADDCAP FOR 2012-2013 loan8-53.38	4.0965	439.05	0.00	439.05
FC-BOND (17.01.2013)-68.68.loan7-53.79	4.0965	757.52	0.00	757.52
FC - BOND (17.01.2013)-8.8.ADDCAP FOR 2012-2013 loan8-53.38	4.0965	1006.53	0.00	1006.53
BOND - XLIII-DOCO LOAN-	7.9300	481.10	0.00	481.10
SBI (2014-15)-ADDCAP FOR 2014-2015 Add Cap .-	10.2500	0.00	773.44	773.44
Total		16190.67	773.44	16964.11

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	16190.67	16964.11	16964.11	16964.11	16964.11
Cumulative Repayments of Loans up to Previous Year	150.00	551.92	1269.13	2173.39	3117.74
Net Loans Opening	16040.67	16412.19	15694.98	14790.72	13846.37
Add: Drawl(s) during the Year	773.44	0.00	0.00	0.00	0.00



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Less: Repayments during the year	401.92	717.21	904.26	944.35	944.35
Net Closing Loan	16412.19	15694.98	14790.72	13846.37	12902.02
Average Net Loan	16226.43	16053.59	15242.85	14318.55	13374.20
Rate of Interest on Loan (%)*	8.1671%	8.1887%	8.1383%	8.0732%	7.9992%
Interest on Loan	1325.23	1314.58	1240.51	1155.96	1069.83

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

