

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO.500/TT/2014

Coram:
Shri A.S. Bakshi, Member
Dr. M. K. Iyer, Member

Date of Hearing: 13.01.2016
Date of Order : 11.02.2016

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 Region under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2014 for (i) **Asset A:** (a) 400 kV D/C Agra –Bassi Transmission Line with associated bays, (b) 3x105MVA 400/220/33 kV ICT-III along with associated bays at Wagoora Sub-Station and (c) 220 kV Zankot III & IV bays at Wagoora Sub-Station and (ii) **Asset B:** 40% FSC on Allahabad-Mainpuri 400 kV D/C line at Mainpuri under transmission system associated with Northern Region System Strengthening Scheme II in Northern Region and Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999

And in the Matter of:

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

.....Petitioner

Versus

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Vidyut Marg, Jaipur - 302005
2. Ajmer Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur
3. Jaipur Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur



4. Jodhpur VidyutVitrان Nigam Limited,
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur
5. Himachal Pradesh State Electricity Board,
VidyutBhawan, Kumar House Complex Building II,
Shimla-171 004
6. Punjab State Power Corporation Limited,
Thermal Shed TIA,
Near 22 Phatak, Patiala-147001
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula, Haryana - 134109
8. Power Development Department,
Govt. Of Jammu & Kashmir,
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board),
Shakti Bhawan, 14, Ashok Marg,
Lucknow - 226 001
10. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110002
11. BSES Yamuna Power Limited,
BSESBhawan, Nehru Place , New Delhi.
12. BSESRajdhani Power Limited,
BSESBhawan, Nehru Place, New Delhi
13. North Delhi Power Limited,
Power Trading & Load Dispatch Group Cennet Building,
Adjacent To 66/11 kV Pitampura-3,
Grid Building, Near PP Jewellers Pitampura,
New Delhi - 110034
14. Chandigarh Administration,
Sector -9, Chandigarh
15. Uttarakhand Power Corporation Limited,
UrjaBhawan, Kanwali Road, Dehradun
16. North Central Railway,

Allahabad

17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002

....Respondent(s)

The following were present:

For Petitioner: Shri S.S. Raju, PGCIL
Shri Jasbir Singh, PGCIL
Shri Rakesh Prasad, PGCIL
Shri M.M. Mondal, PGCIL
Shri Vivek Kumar Singh, PGCIL
Shri D. K. Karma, PGCIL
Shri J Majumder, PGCIL
Shri Shashi Bhushan, PGCIL
Smt. Sangeeta Edwards, PGCIL
Shri S.C. Taneja, PGCIL
Shri Ved Prakash Rastogi, PGCIL
Smt. Sonam Gangwar, PGCIL
Shri. Avinash Pavgi, PGCIL
Mohd. Mohsin, PGCIL

For Respondents: Shri S.K. Agarawal, Advocate, Rajasthan Discoms
Shri S.P. Das, Advocate, Rajasthan Discoms
Smt. Neelam, Advocate, Rajasthan Discoms

ORDER

The petition has been preferred by Power Grid Corporation of India Limited (hereinafter referred to as “the petitioner”) 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 (or DOCO) 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 i) combined assets of (a) 400 kV D/C Agra –Bassi Transmission Line with associated bays, (b) 3x105 MVA



400/220/33 kV ICT-III along with associated bays at Wagoora Sub-Station and(c) 220 kV Zankot III & IV bays at Wagoora Sub-Station (hereinafter referred to as "Asset A") and (ii)40% FSC on Allahabad-Mainpuri 400 kV D/C line at Mainpuri (hereinafter referred to as "Asset B")under transmission system associated with Northern Region System Strengthening Scheme II in Northern Region (hereinafter collectively 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 investment approval for the Asset A was accorded by Board of Directors of the petitioner vide Memorandum ref: C/CP/N69-00 dated 25.2.2004 at an estimated cost of ₹24778 lakh including interest during construction of ₹1501 lakh, at 4thQuarter, 2003 price level. Subsequently, the Revised Cost Estimate for the subject project was approved by Board of Directors of the petitioner vide the memorandum ref: C/CP/RCE-NRSS-II dated 7.12.2007 at an estimated cost of ₹29281 lakh including interest during construction of ₹1929 lakh, at 1stQuarter, 2007 price level.

b) The DOCO of Asset A is 1.4.2008 and the DOCO for Asset B is 1.5.2011. The Commission vide its order dated 11.1.2011 in Petition No. 163/2010had considered the capital cost of ₹23363.57 lakh for Asset A and in order dated 25.4.2013 in Petition No. 33/TT/2011 the Commission had considered the capital cost of ₹2898.92 lakh for Asset B as on DOCO as mentioned below:-

Asset A		
Admitted as on 31.3.2009	Amount (₹ in lakh)	Percentage (%)
Debt	16354.09	70.00
Equity	7009.48	30.00
Capital Cost	23363.57	100.00
Asset B		
Admitted as on DOCO	Amount (₹ in lakh)	Percentage (%)
Debt	2029.24	70.00
Equity	869.68	30.00
Capital Cost	2898.92	100.00

c) The Commission had allowed the additional capital expenditure of ₹74.55 lakh for 2009-10, ₹429.51 lakh for 2010-11, ₹94.63 for 2011-12 and ₹58.14 lakh in 2012-13 for Asset A in its order in Petition No. 163/2010 and ₹249.46 lakh in 2011-12 and ₹253.67 lakh in 2012-13 for Asset B in its order in Petition No. 33/TT/2011.

d) The annual transmission charges for the transmission assets for 2009-14 tariff period were determined based on admitted capital cost of ₹23363.57 lakh for Asset A as on 31.3.2009 and estimated additional capital expenditure of ₹74.55 lakh for 2009-10, ₹429.51 lakh for 2010-11, ₹94.63 lakh for 2011-12 and ₹58.14 lakh in 2012-13 in its order in Petition No. 163/2010 and an admitted capital cost of ₹2898.92 lakh for Asset B as on DOCO and estimated additional capital expenditure of ₹249.46 lakh in 2011-12 and ₹253.67 lakh in 2012-13 in its order in Petition No. 33/TT/2011 as given below:-

(₹ in lakh)

Asset A					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	1237.01	1250.22	1263.92	1267.85	1269.34
Interest on Loan	1147.81	1066.33	982.64	887.34	788.98
Return on Equity	1227.28	1240.5	1254.24	1258.25	1259.77
Interest on Working Capital	100.71	101.02	101.39	101.19	100.92
O & M Expenses	508.37	537.49	568.27	600.73	635.01
Total	4221.18	4195.57	4170.46	4115.37	4054.02



(₹ in lakh)

Asset B			
Particulars	2011-12	2012-13	2013-14
Depreciation	146.34	172.93	179.63
Interest on Loan	161.62	178.26	171.31
Return on Equity	145.36	171.76	178.41
Interest on Working Capital	14.2	16.38	16.85
O & M Expenses	107.38	123.84	130.92
Total	574.90	663.18	677.12

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 14.11.2014, 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. In response to the instant petition, replies were filed by Respondent No. 2, AVVNL, Respondent No. 3, JVVNL and Respondent No.4, JDVVNL (hereinafter collectively referred to as "Rajasthan Discoms") vide a common affidavit dated 11.1.2016. The respondents have requested to do a prudence check of

the tariff claimed by the petitioner and have raised issues on several elements of transmission charges claimed by the petitioner. Suffice it to say that the requisite prudence check is an integral part of the tariff determination process. Specific concerns expressed by these respondents are addressed in the respective paras. The hearing in this matter was held on 13.1.2016. The Commission had directed the petitioner to submit additional information regarding additional capital expenditure claimed during 2009-14 and 2014-19 tariff period and details of un-discharged liabilities through its letter dated 14.1.2016. In response to the Commission's queries, the petitioner has made its submission vide affidavit dated 28.1.2016. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

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

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 claimed admitted capital cost of ₹23363.57 lakh for Asset A as on 31.3.2009 and a capital cost of ₹2898.92 lakh for Asset B as on DOCO for the purpose of tariff determination.



10. Clause (1) of Regulation 7 of the 2009 Tariff Regulations provides that:-

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

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

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

(c) additional capital expenditure determined under regulation 9:

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

11. The time over-run in case of Asset B was on account of delay in executions of the work by BHEL and as per LOA, maximum 5% of contract price can be recovered as liquidated damages from BHEL. Taking into consideration the submissions made by the petitioner, the Commission in its order dated 25.4.2013 in Petition No. 33/TT/2011, in case of Asset B held that IDC and IEDC for the period from 1.12.2006 and 1.5.2011 and the liquidated damages received from BHEL will be shared in equal proportion between the petitioner and the respondents. As the LD amount was not available at that time, the Commission observed that the same will be adjusted at the time of truing up.

The relevant portion of the order is extracted hereunder:-

“In our view, the petitioner cannot totally absolve itself of the responsibility for the delay as proper monitoring the works of the contractor and sub-vendor would have curtailed the delay in execution of work to a large extent. Accordingly, we are of the view that the petitioner should be equally held liable for the delay in execution of the asset. We direct that both the petitioner and the beneficiaries shall share the IDC and IEDC for the period 1.12.2006 to 1.5.2011 and the liquidated damages received from BHEL in equal proportion. We direct that both the petitioner and the beneficiaries shall share the IDC and IEDC for the period 1.12.2006 to 1.5.2011 and the liquidated damages received from BHEL in equal proportion. Consequently, IDC and IEDC to the extent of 50% are capitalised. As regards liquidated damages, the petitioner has submitted that the amount of liquidated damages is yet to be finalised as contract of this package is not yet closed. Proportionate sharing of liquidated damages between the petitioner and the beneficiaries shall be considered at the time of truing up, once the amount is finalised.”

12. The petitioner in its affidavit dated 9.2.2016 has submitted that the contract with BHEL is yet to be closed, however, the petitioner has worked out the provisional LD amount expected to be recovered from BHEL is approximately ₹ 171.03 lakh. The petitioner submitted that 50 % of IDC/IEDC have been restricted vide order dated 25.04.2013 in petition no. 33/TT/2011 and on the same principle, 50 % of LD amount i.e. ₹85.51 lakh is may be adjusted against balance & retention payment (Projected Add. Cap.) during the year 2014-15 of ₹356.75 lakh of Asset B. Further, the petitioner submitted that the actual LD amount (50%) shall be adjusted against the project cost at the time of truing up of 2014-19 period.

13. We have considered the submission of the petitioner. The petitioner has proposed the actual LD amount shall be adjusted against the project cost at the time of truing up of 2014-19 period. However, as directed by the Commission in order dated 25.4.2013 in Petition No. 33/TT/2011 both the petitioner and the beneficiaries shall share the IDC and IEDC for the period 1.12.2006 to 1.5.2011 and the liquidated damages received from BHEL in equal proportion. Since the provisional LD amount submitted by the petitioner is ₹171.03 lakh, 50% of the amount i.e ₹85.51 lakh is being adjusted against the capital cost as on COD subject to actual realization.

14. Accordingly, the capital cost of ₹23363.57 lakh for Asset A admitted by the Commission as on 31.3.2009 and a capital cost of ₹2813.41(2898.92-85.51) lakh for Asset B admitted by the Commission as on COD has been considered as opening

capital cost as on 1.4.2009 for truing up of tariff in accordance with Regulation 7 of the 2009 Tariff Regulations.

Additional Capital Expenditure

15. 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”

16. The petitioner has submitted that it has incurred an additional capital expenditure of ₹99.46 lakh in 2009-10, ₹93.25 lakh in 2010-11 and ₹32.83 lakh for Asset A towards balance and retention payments, and an additional capital expenditure of ₹72.62 lakh in 2012-13 and ₹7.50 lakh in 2013-14 for Asset B towards balance and retention payments as depicted below:-

(₹ in lakh)

Assets	Capital cost admitted as on 31.3.2009 / DOCO	Approved / Claimed	Additional capital expenditure during 2009-14					Total cost as on 31.3.2014
			2009-10	2010-11	2011-12	2012-13	2013-14	
Asset A	23363.57	Approved vide order dated 11.1.2011	74.55	429.51	94.63	58.14	-	24020.40
		Actual incurred during 2009-14	99.46	93.25	32.83	-	-	23589.11
Asset B	2898.92	Approved vide order dated 25.4.2013	-	-	249.46	253.67	-	3402.05
		Actual incurred during 2009-14	-	-	-	72.62	7.50	2893.53

17. The Rajasthan Discoms have submitted that the petitioner has not clearly specified the reasons for time overrun. Further, the respondents have objected that the petitioner has not complied with the Commission's order dated 25.4.2013 where the Commission had stated that:-

“We direct that both the petitioner and the beneficiaries shall share the IDC and IEDC for the period 1.12.2006 to 1.5.2011 and the liquidated damages received from BHEL in equal proportion.”

18. The Rajasthan Discoms have submitted that the Commission had held in this order that proportionate sharing of the liquidated damages between the petitioner and the beneficiaries shall be considered at the time of truing up once the amount is finalised, but the petitioner has not made any submission against the amount of liquidated damages.

19. The petitioner in its affidavit dated 28.1.2016 has submitted that the additional capital expenditure the petitioner has submitted that the capital addition during 2009-14 in Asset A & B is due to retention payments made to M/s BHEL and M/s IRCON. The petitioner has submitted the Auditor's Certificates dated 9.9.2014, 14.7.2014 and 31.7.2014 certifying the actual capital cost.

20. We have considered the submissions of the petitioner with regard to the actual capital expenditure during 2009-14 tariff period for Asset A & B. The capital addition of ₹99.46 lakh in 2009-10, ₹93.25 lakh in 2010-11 and ₹32.83 lakh for Asset A and the capital addition of ₹72.62 lakh in 2012-13 and ₹7.50 lakh in 2013-14 for Asset B is based on actual capital expenditure incurred as per the Auditor Certificates dated

9.9.2014, 14.7.2014 and 31.7.2014 and is within the original scope of work and also within the approved cost of the assets.

21. The additional capital expenditure of ₹99.46 lakh in 2009-10 and ₹93.25 lakh in 2010-11 for Asset A towards balance and retention payments is before the cut off date and the same is allowed under Regulation 9 (1) (i) of 2009 Tariff Regulations, whereas the additional capital expenditure of ₹32.83 lakh in 2011-12 for Asset A towards balance and retention payments is after the cut off date and is allowed under the 9 (2) (viii) of 2009 Tariff Regulations. In case of Asset B the additional capital expenditure of ₹80.12 during 2009-14 towards balance and retention payments is within the cut off date and is allowed under Regulation 9 (1) (i) of 2009 Tariff Regulations for the purpose of revision of tariff in accordance with Regulation 6 of the 2009 Tariff Regulations.

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

Debt: Equity

23. 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.”

24. The debt:equity ratio of 70:30 admitted by the Commission vide order dated 11.1.2011 in Petition No. 163/2010 as on 31.3.2009 for Asset A and a debt:equity ratio of 70:30 admitted by the Commission vide order dated 25.4.2013 in Petition No. 33/TT/2010 as on DOCO has been considered as on 1.5.2011 (DOCO) for determination of tariff in accordance with the Regulation 12 of the 2009 Tariff Regulations. In respect of the additional capitalization, debt: equity ratio of 70:30 has been considered in line with the 2009 Tariff Regulations.

25. 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 31.3.2009 / DOCO	(%)	Additional capital expenditure during 2009-14	(%)	Total Cost as on 31.3.2014	(%)
Asset A						
Debt	16354.10	70.00	157.88	70.00	16511.98	70.00
Equity	7009.47	30.00	67.66	30.00	7077.13	30.00
Total	23363.57	100.00	225.54	100.00	23589.11	100.00
Asset B						
Debt	1969.39	70.00	56.08	70.00	2025.47	70.00
Equity	844.02	30.00	24.04	30.00	868.06	30.00
Total	2813.41	100.00	80.12	100.00	2893.53	100.00

Return on Equity (“ROE”)

26. 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.”

27. 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%

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

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

(₹ in lakh)

Asset A					
Return on Equity	2009-10	2010-11	2011-12	2012-13	2013-14
As approved vide Order dated 11.1.2011	1227.28	1240.50	1254.24	1258.25	1259.77
Claimed by the petitioner	1311.73	1365.38	1370.38	1371.34	1387.83
Allowed after true up in this order	1311.70	1365.40	1370.38	1371.33	1387.86

(₹ in lakh)

Asset B			
Return on Equity	2011-12	2012-13	2013-14
As approved vide Order dated 25.4.2013	145.36	171.76	178.41
Claimed by the petitioner	154.47	170.63	175.04
Allowed after true up in this order	149.92	165.66	170.01

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 also due to adjustment of the LD amount in capital cost in case of Asset B.

Interest on Loan (“IoL”)

30. 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”.

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

(₹ in lakh)

Asset A					
Interest on Loan	2009-10	2010-11	2011-12	2012-13	2013-14
As approved vide Order dated 11.1.2011	1147.81	1066.33	982.64	887.34	788.98
Claimed by the petitioner	1148.86	1059.63	966.19	869.06	770.61
Allowed after true up in this order	1148.86	1059.63	966.19	869.07	770.61

(₹ in lakh)

Asset B			
Interest on Loan	2011-12	2012-13	2013-14
As approved vide Order dated 25.4.2013	161.62	178.26	171.31
Claimed by the petitioner	154.85	158.95	148.50
Allowed after true up in this order	150.28	154.33	144.25

The difference in the approved IoL and that allowed after trueing 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 also due to adjustment of the LD amount in capital cost of Asset B.

Depreciation

32. 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 A					
Depreciation	2009-10	2010-11	2011-12	2012-13	2013-14
As approved vide Order dated 11.1.2011	1237.01	1250.22	1263.92	1267.85	1269.34
Claimed by the petitioner	1237.68	1242.77	1246.09	1246.96	1246.96
Allowed after true up in this order	1237.67	1242.76	1246.09	1246.95	1246.95

(₹ in lakh)

Asset B			
Depreciation	2011-12	2012-13	2013-14
As approved vide Order dated 25.4.2013	146.34	172.93	179.63
Claimed by the petitioner	140.31	154.98	157.10
Allowed after true up in this order	136.17	150.47	152.58



The difference in the approved depreciation and that allowed after true up is on account of change in gross block during the 2009-14 tariff period and also due to adjustment of the LD amount in capital cost of Asset B.

Operation & Maintenance Expenses (O&M Expenses)

33. 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 true 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)

Asset A					
O&M Expenses	2009-10	2010-11	2011-12	2012-13	2013-14
As approved vide Order dated 11.1.2011	508.37	537.49	568.27	600.73	635.01
Claimed by the petitioner	508.37	537.49	568.27	600.73	635.01
Allowed after true up in this order	508.37	537.49	568.27	600.73	635.01

(₹ in lakh)

Asset B			
O&M Expenses	2011-12	2012-13	2013-14
As approved vide Order dated 25.4.2013	107.38	123.84	130.92
Claimed by the petitioner	107.38	123.84	130.92
Allowed after true up in this order	107.38	123.84	130.92

Interest on Working Capital (IWC)

34. 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)

Asset A					
Interest on Working Capital	2009-10	2010-11	2011-12	2012-13	2013-14
As approved vide Order dated 11.1.2011	100.71	101.02	101.39	101.19	100.92
Claimed by the petitioner	102.51	103.33	103.10	102.73	102.74
Allowed after true up in this order	102.51	103.33	103.10	102.73	102.74

(₹ in lakh)

Asset B			
Interest on Working Capital	2011-12	2012-13	2013-14
As approved vide Order dated 25.4.2013	14.20	16.38	16.85
Claimed by the petitioner	14.13	15.62	15.88
Allowed after true up in this order	13.86	15.33	15.60

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 and also due to adjustment of LD amount in capital cost of Asset B.

APPROVED ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

35. 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)

Asset A					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation					
Opening Gross Block	23363.57	23463.03	23556.28	23589.11	23589.11
Additional Capitalisation	99.46	93.25	32.83	0.00	0.00
Closing Gross Block	23463.03	23556.28	23589.11	23589.11	23589.11
Average Gross Block	23413.30	23509.66	23572.70	23589.11	23589.11
Rate of Depreciation (%)	5.29	5.29	5.29	5.29	5.29
Depreciable Value	21071.97	21203.45	21257.39	21244.97	21230.20
Balance useful life of the asset	33.00	32.00	31.00	30.00	29.00
Elapsed life	0.00	1.00	2.00	3.00	4.00
Remaining Depreciable Value	19674.55	18523.60	17337.58	16106.26	14859.31
Depreciation during the year	1237.67	1242.76	1246.09	1246.95	1246.95



Asset A					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Cumulative depreciation (incl. of AAD)	2635.09	3877.85	5123.94	6370.89	7617.85
Interest on Loan					
Gross Normative Loan	16354.10	16423.72	16489.00	16511.98	16511.98
Cumulative Repayments upto Previous Year	1397.42	2635.09	3877.85	5123.94	6370.89
Net Loan-Opening	14956.68	13788.63	12611.15	11388.04	10141.09
Additions	69.62	65.28	22.98	0.00	0.00
Repayment during the year	1237.67	1242.76	1246.09	1246.95	1246.95
Net Loan-Closing	13788.63	12611.15	11388.04	10141.09	8894.13
Average Loan	14372.66	13199.89	11999.59	10764.56	9517.61
Weighted Average Rate of Interest on Loan (%)	7.9934	8.0276	8.0519	8.0734	8.0967
Interest on Loan	1148.86	1059.63	966.19	869.07	770.61
Return on Equity					
Opening Equity	7009.47	7039.31	7067.28	7077.13	7077.13
Additions	29.84	27.98	9.85	0.00	0.00
Closing Equity	7039.31	7067.28	7077.13	7077.13	7077.13
Average Equity	7024.39	7053.30	7072.21	7077.13	7077.13
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	16.995	19.931	20.008	20.008	20.961
Rate of Return on Equity (%)	18.674	19.358	19.377	19.377	19.610
Return on Equity	1311.70	1365.40	1370.38	1371.33	1387.86
Interest on Working Capital					
O & M Expenses	42.36	44.79	47.36	50.06	52.92
Maintenance Spares	76.26	80.62	85.24	90.11	95.25
Receivables	718.18	718.10	709.00	698.47	690.53
Total Working Capital	836.80	843.52	841.60	838.64	838.70
Rate of Interest (%)	12.25	12.25	12.25	12.25	12.25
Interest of working capital	102.51	103.33	103.10	102.73	102.74
Annual Transmission Charges					
Depreciation	1237.67	1242.76	1246.09	1246.95	1246.95
Interest on Loan	1148.86	1059.63	966.19	869.07	770.61
Return on Equity	1311.70	1365.40	1370.38	1371.33	1387.86
Interest on Working Capital	102.51	103.33	103.10	102.73	102.74
O & M Expenses	508.37	537.49	568.27	600.73	635.01
Total	4309.11	4308.61	4254.02	4190.82	4143.16



(₹ in lakh)

Asset B			
Particulars	2011-12	2012-13	2013-14
Depreciation			
Opening Gross Block	2813.41	2813.41	2886.03
Additional Capitalisation	0.00	72.62	7.50
Closing Gross Block	2813.41	2886.03	2893.53
Average Gross Block	2813.41	2849.72	2889.78
Rate of Depreciation (%)	5.28	5.28	5.28
Depreciable Value	2532.07	2564.75	2633.48
Balance useful life of the asset	25	24	23
Elapsed life	0	1	2
Remaining Depreciable Value	2532.07	2428.58	2314.17
Depreciation during the year	136.17	150.47	152.58
Cumulative depreciation (incl. of AAD)	136.17	286.63	439.21
Interest on Loan			
Gross Normative Loan	1969.39	1969.39	2020.22
Cumulative Repayments upto Previous Year	0.00	136.17	286.63
Net Loan-Opening	1969.39	1833.22	1733.59
Additions	0.00	50.83	5.25
Repayment during the year	136.17	150.47	152.58
Net Loan-Closing	1833.22	1733.59	1586.26
Average Loan	1901.30	1783.40	1659.92
Weighted Average Rate of Interest on Loan (%)	8.6228	8.6536	8.6900
Interest on Loan	150.28	154.33	144.25
Return on Equity			
Opening Equity	844.02	844.02	865.81
Additions	0.00	21.79	2.25
Closing Equity	844.02	865.81	868.06
Average Equity	844.02	854.92	866.93
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
MAT Rate for respective year (%)	20.008	20.008	20.961
Rate of Return on Equity (%)	19.377	19.377	19.610
Return on Equity	149.92	165.66	170.01
Interest on Working Capital			
O & M Expenses	9.76	10.32	10.91
Maintenance Spares	17.57	18.58	19.64
Receivables	101.38	101.60	102.23
Total Working Capital	128.72	130.50	132.77
Rate of Interest (%)	11.75	11.75	11.75
Interest of working capital	13.86	15.33	15.60



Asset B			
Particulars	2011-12	2012-13	2013-14
Annual Transmission Charges			
Depreciation	136.17	150.47	152.58
Interest on Loan	150.28	154.33	144.25
Return on Equity	149.92	165.66	170.01
Interest on Working Capital	13.86	15.33	15.60
O & M Expenses	107.38	123.84	130.92
Total	557.61	609.62	613.36

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

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

(₹ in lakh)

Asset A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1246.96	1246.96	1246.96	1246.96	1246.96
Interest on Loan	672.25	574.06	476.20	379.00	283.75
Return on Equity	1387.83	1387.83	1387.83	1387.83	1387.83
Interest on Working Capital	108.26	107.08	105.93	104.83	103.81
O & M Expenses	581.85	601.27	621.19	641.79	663.10
Total	3997.15	3917.20	3838.11	3760.41	3685.45

(₹ in lakh)

Asset B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	166.71	176.13	176.13	176.13	176.13
Interest on Loan	146.17	142.96	128.59	114.47	100.91
Return on Equity	185.75	196.25	196.25	196.25	196.25
Interest on Working Capital	18.14	18.74	18.64	18.55	18.48
O & M Expenses	120.60	124.60	128.74	133.02	137.42
Total	637.37	658.68	648.35	638.42	629.19

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

(₹ in lakh)

Asset A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	48.49	50.11	51.77	53.48	55.26
Maintenance Spares	87.28	90.19	93.18	96.27	99.47
Receivables	666.19	652.87	639.69	626.74	614.24
Total working capital	801.96	793.17	784.64	776.49	768.97
Rate of Interest	13.50	13.50	13.50	13.50	13.50
Interest of working capital	108.26	107.08	105.93	104.83	103.81

(₹inlakh)

Asset B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	10.05	10.38	10.73	11.09	11.45
Maintenance Spares	18.09	18.69	19.31	19.95	20.61
Receivables	106.23	109.78	108.06	106.40	104.87
Total working capital	134.37	138.85	138.10	137.44	136.93
Rate of Interest	13.50	13.50	13.50	13.50	13.50
Interest of working capital	18.14	18.74	18.64	18.55	18.49

Capital Cost

38. 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;”

39. The capital cost of ₹23589.11 lakh for Asset A and ₹2893.53 lakh for Asset B worked out by the Commission as on 31.3.2014 has been considered as opening capital cost as on 1.4.2014 for determination of tariff in accordance with Regulation 9 of the 2014 Tariff Regulations.



Additional Capital Expenditure

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

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

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

41. 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.”

42. The petitioner vide affidavit dated 28.1.2016 the petitioner had revised the tariff forms for Asset B for 20-14-19 tariff period and has projected an additional capital expenditure amounting to ₹356.75 lakh during 2014-15 for Asset B towards retention payments to be made to M/s BHEL for sub-station equipments. The Commission has considered the submission of the petitioner and has allowed the same subject to true up on actual basis.

Debt: Equity

43. Clause (1) and (3) of Regulation 19 of the 2014 Tariff Regulations provides 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.”

44. The petitioner has considered the debt:equity ratio of 70.00:30.00 as on 31.3.2014, which is in line with the 2014 Tariff Regulations.

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

(₹ in lakh)

Funding	Capital cost as on 31.3.2014	(%)	Additional capital expenditure during 2014-19	(%)	Total Cost as on 31.3.2019	(%)
Asset A						
Debt	16511.98	70.00	0.00	0.00	16511.98	70.00
Equity	7077.13	30.00	0.00	0.00	7077.13	30.00
Total	23589.11	100.00	0.00	0.00	23589.11	100.00
Asset B						
Debt	2025.47	70.00	249.73	70.00	2275.20	70.00
Equity	868.06	30.00	107.03	30.00	975.08	30.00
Total	2893.53	100.00	356.75	100.00	3250.28	100.00

Return on Equity (ROE)

46. 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.”

47. 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)

Asset A					
Return on Equity	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	7077.13	7077.13	7077.13	7077.13	7077.13
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	7077.13	7077.13	7077.13	7077.13	7077.13
Average Equity	7077.13	7077.13	7077.13	7077.13	7077.13
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	1387.86	1387.86	1387.86	1387.86	1387.86



(₹in lakh)

Asset B					
Return on Equity	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	868.06	975.08	975.08	975.08	975.08
Additions	107.03	0.00	0.00	0.00	0.00
Closing Equity	975.08	975.08	975.08	975.08	975.08
Average Equity	921.57	975.08	975.08	975.08	975.08
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	180.72	191.22	191.22	191.22	191.22

Interest on Loan (“IoL”)

48. 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.”

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

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

(₹ in lakh)

Asset A					
Interest on Loan	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	16511.98	16511.98	16511.98	16511.98	16511.98
Cumulative Repayment upto Previous Year	7617.85	8864.80	10111.75	11358.71	12605.66
Net Loan-Opening	8894.13	7647.18	6400.22	5153.27	3906.32
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	1246.95	1246.95	1246.95	1246.95	1246.95
Net Loan-Closing	7647.18	6400.22	5153.27	3906.32	2659.36
Average Loan	8270.66	7023.70	5776.75	4529.79	3282.84
Weighted Average Rate of Interest on Loan (%)	8.1281	8.1733	8.2434	8.3670	8.6437
Interest on Loan	672.25	574.07	476.20	379.01	283.76

(₹ in lakh)

Asset B					
Interest on Loan	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	2025.47	2275.20	2275.20	2275.20	2275.20
Cumulative Repayment upto Previous Year	439.21	601.41	773.03	944.64	1116.26
Net Loan-Opening	1586.26	1673.78	1502.17	1330.56	1158.94
Additions	249.73	0.00	0.00	0.00	0.00
Repayment during the year	162.20	171.61	171.61	171.61	171.61
Net Loan-Closing	1673.78	1502.17	1330.56	1158.94	987.33
Average Loan	1630.02	1587.98	1416.36	1244.75	1073.13
Weighted Average Rate of Interest on Loan (%)	8.7293	8.7821	8.8574	8.9739	9.1779
Interest on Loan	142.29	139.46	125.45	111.70	98.49

Depreciation

50. 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.”

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

(₹ in lakh)

Asset A					
Depreciation	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	23589.11	23589.11	23589.11	23589.11	23589.11
Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	23589.11	23589.11	23589.11	23589.11	23589.11
Average Gross Block	23589.11	23589.11	23589.11	23589.11	23589.11
Freehold Land (Av. Cost)	0.00	0.00	0.00	0.00	0.00
Rate of Depreciation (%)	5.29	5.29	5.29	5.29	5.29
Elapsed life	5	6	7	8	9
Balance Useful life of the asset	28	27	26	25	24
Remaining Depreciable Value	13612.35	12365.40	11118.45	9871.49	8624.54
Depreciation during the year	1246.95	1246.95	1246.95	1246.95	1246.95

(₹ in lakh)

Asset B					
Depreciation	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	2893.53	3250.28	3250.28	3250.28	3250.28
Additional Capitalization	356.75	0.00	0.00	0.00	0.00
Closing Gross Block	3250.28	3250.28	3250.28	3250.28	3250.28
Average Gross Block	3071.91	3250.28	3250.28	3250.28	3250.28
Freehold Land (Av. Cost)	0.00	0.00	0.00	0.00	0.00
Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Elapsed life	3	4	5	6	7
Balance Useful life of the asset	22	21	20	19	18
Remaining Depreciable Value	2325.50	2323.84	2152.23	1980.61	1809.00



Depreciation during the year	162.20	171.61	171.61	171.61	171.61
Cumulative depreciation (incl. of AAD)	601.41	773.03	944.64	1116.26	1287.87

Operation & Maintenance Expenses (O&M Expenses)

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

Asset A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
220 kV Bays:					
No. of Bays	3	3	3	3	3
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.10
400 kV Bays:					
No. of Bays	5	5	5	5	5
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
Line: D/C (Twin/Triple Conductor):					
Line Length (km)	217.43	217.43	217.43	217.43	217.43
Norms (₹ lakh/km)	0.707	0.731	0.755	0.780	0.806
Total O&M Expenses (₹ lakh)	581.85	601.27	621.19	641.79	663.10

Asset B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
400kV Bays:					
No. of Bays	2	2	2	2	2
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
Total O&M Expenses (₹ lakh)	120.60	124.60	128.74	133.02	137.42

53. 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. Rajasthan Discoms have sought proper scrutiny before allowing any expected wage rise in future. The O&M Expenses are allowed for the instant transmission asset as per prevailing norms.

Interest on Working Capital (IWC)

54. 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;”

55. 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%.

56. 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)

Asset A					
Interest on Working Capital	2014-15	2015-16	2016-17	2017-18	2018-19
O & M expenses	48.49	50.11	51.77	53.48	55.26
Maintenance Spares	87.28	90.19	93.18	96.27	99.46
Receivables	666.20	652.87	639.69	626.74	614.25
Total	801.96	793.17	784.63	776.49	768.97
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	108.26	107.08	105.93	104.83	103.81

(₹ in lakh)

Asset B					
Interest on Working Capital	2014-15	2015-16	2016-17	2017-18	2018-19
O & M expenses	10.05	10.38	10.73	11.09	11.45
Maintenance Spares	18.09	18.69	19.31	19.95	20.61
Receivables	103.94	107.56	105.90	104.30	102.83
Total	132.08	136.63	135.94	135.34	134.89
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	17.83	18.44	18.35	18.27	18.21

ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

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

(₹ in lakh)

Asset A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	23589.11	23589.11	23589.11	23589.11	23589.11
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	23589.11	23589.11	23589.11	23589.11	23589.11
Average Gross Block	23589.11	23589.11	23589.11	23589.11	23589.11
Rate of Depreciation (%)	5.29	5.29	5.29	5.29	5.29
Depreciable Value	21230.20	21230.20	21230.20	21230.20	21230.20
Balance useful life of the asset	28.00	27.00	26.00	25.00	24.00
Elapsed life	5.00	6.00	7.00	8.00	9.00
Remaining Depreciable Value	13612.35	12365.40	11118.45	9871.49	8624.54
Depreciation during the year	1246.95	1246.95	1246.95	1246.95	1246.95
Cumulative depreciation (incl. of AAD)	8864.80	10111.75	11358.71	12605.66	13852.62
Interest on Loan					
Gross Normative Loan	16511.98	16511.98	16511.98	16511.98	16511.98
Cumulative Repayments upto Previous Year	7617.85	8864.80	10111.75	11358.71	12605.66



Asset A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Net Loan-Opening	8894.13	7647.18	6400.22	5153.27	3906.32
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	1246.95	1246.95	1246.95	1246.95	1246.95
Net Loan-Closing	7647.18	6400.22	5153.27	3906.32	2659.36
Average Loan	8270.66	7023.70	5776.75	4529.79	3282.84
Weighted Average Rate of Interest on Loan (%)	8.1281	8.1733	8.2434	8.3670	8.6437
Interest on Loan	672.25	574.07	476.20	379.01	283.76
Return on Equity					
Opening Equity	7077.13	7077.13	7077.13	7077.13	7077.13
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	7077.13	7077.13	7077.13	7077.13	7077.13
Average Equity	7077.13	7077.13	7077.13	7077.13	7077.13
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	1387.86	1387.86	1387.86	1387.86	1387.86
Interest on Working Capital					
O & M Expenses	48.49	50.11	51.77	53.48	55.26
Maintenance Spares	87.28	90.19	93.18	96.27	99.46
Receivables	666.20	652.87	639.69	626.74	614.25
Total Working Capital	801.96	793.17	784.63	776.49	768.97
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	108.26	107.08	105.93	104.83	103.81
Annual Transmission Charges					
Depreciation	1246.95	1246.95	1246.95	1246.95	1246.95
Interest on Loan	672.25	574.07	476.20	379.01	283.76
Return on Equity	1387.86	1387.86	1387.86	1387.86	1387.86
Interest on Working Capital	108.26	107.08	105.93	104.83	103.81
O & M Expenses	581.85	601.27	621.19	641.79	663.10
Total	3997.18	3917.22	3838.12	3760.44	3685.48

(₹ in lakh)

Asset B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	2893.53	3250.28	3250.28	3250.28	3250.28
Additional Capitalisation	356.75	0.00	0.00	0.00	0.00
Closing Gross Block	3250.28	3250.28	3250.28	3250.28	3250.28
Average Gross Block	3071.91	3250.28	3250.28	3250.28	3250.28



Asset B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Depreciable Value	2768.09	3085.79	2925.25	2925.25	2925.25
Balance useful life of the asset	22.00	21.00	20.00	19.00	18.00
Elapsed life	3.00	4.00	5.00	6.00	7.00
Remaining Depreciable Value	2325.50	2323.84	2152.23	1980.61	1809.00
Depreciation during the year	162.20	171.61	171.61	171.61	171.61
Cumulative depreciation (incl. of AAD)	601.41	773.03	944.64	1116.26	1287.87
Interest on Loan					
Gross Normative Loan	2025.47	2275.20	2275.20	2275.20	2275.20
Cumulative Repayments upto Previous Year	439.21	601.41	773.03	944.64	1116.26
Net Loan-Opening	1586.26	1673.78	1502.17	1330.56	1158.94
Additions	249.73	0.00	0.00	0.00	0.00
Repayment during the year	162.20	171.61	171.61	171.61	171.61
Net Loan-Closing	1673.78	1502.17	1330.56	1158.94	987.33
Average Loan	1630.02	1587.98	1416.36	1244.75	1073.13
Weighted Average Rate of Interest on Loan (%)	8.7293	8.7821	8.8574	8.9739	9.1779
Interest on Loan	142.29	139.46	125.45	111.70	98.49
Return on Equity					
Opening Equity	868.06	975.08	975.08	975.08	975.08
Additions	107.03	0.00	0.00	0.00	0.00
Closing Equity	975.08	975.08	975.08	975.08	975.08
Average Equity	921.57	975.08	975.08	975.08	975.08
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	180.72	191.22	191.22	191.22	191.22
Interest on Working Capital					
O & M Expenses	10.05	10.38	10.73	11.09	11.45
Maintenance Spares	18.09	18.69	19.31	19.95	20.61
Receivables	103.94	107.56	105.90	104.30	102.83
Total Working Capital	132.08	136.63	135.94	135.34	134.89
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	17.83	18.44	18.35	18.27	18.21
Annual Transmission Charges					
Depreciation	162.20	171.61	171.61	171.61	171.61
Interest on Loan	142.29	139.46	125.45	111.70	98.49
Return on Equity	180.72	191.22	191.22	191.22	191.22
Interest on Working Capital	17.83	18.44	18.35	18.27	18.21



Asset B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	120.60	124.60	128.74	133.02	137.42
Total	623.64	645.34	635.38	625.83	616.95

Deferred Tax Liability

58. The petitioner has sought recovery of deferred tax liability before 1.4.2009 from the beneficiaries or long term consumers/ DICs as and when materialized. The deferred tax liability shall be dealt as per Regulations 49 of the 2014 Tariff Regulations, as amended. Accordingly, the petitioner is entitled to recover the deferred tax liability upto 31.3.2009 whenever the same gets materialized directly from the beneficiaries or long term transmission customers /DICs.

Filing Fee and the Publication Expenses

59. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. Rajasthan Discoms have raised the issue of lack of clarity on the expenses sought. 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

60. Rajasthan Discoms have raised the issue of lack of clarity on the expenses sought. 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

61. The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future. Rajasthan Discoms have raised the issue of lack of clarity on the expenses sought. We are of the view that the petitioner's prayer is premature.

Sharing of Transmission Charges

62. 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.

63. This order disposes of Petition No.500/TT/2014.

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

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

ASSET A - DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2009-14

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Repayment	Total
BOND XV-DOCO - 01-JAN-2007-	6.68	229.00	0.00	95.40	229.00
BOND XVII-DOCO - 01-JAN-2007-	7.39	9627.00	0.00	4813.50	9627.00
BOND XVIII-DOCO - 01-JAN-2007-	8.15	1300.00	0.00	541.65	1300.00
BOND XIX-DOCO - 01-JAN-2007-	9.25	600.00	0.00	200.00	600.00
BOND XX-DOCO - 01-JAN-2007-	8.93	2520.00	0.00	840.00	2520.00
BOND XX-DOCO - 01-JUN-2007-	8.93	441.00	0.00	147.00	441.00
BOND XXI-DOCO - 01-JAN-2007-	8.73	100.00	0.00	33.32	100.00
BOND XXI-DOCO - 01-JUN-2007-	8.73	204.00	0.00	68.00	204.00
BOND XXII-DOCO - 01-JUN-2007-	8.68	128.00	0.00	42.68	128.00
BOND XXIII-DOCO - 01-APR-2008-	9.25	80.00	0.00	26.68	80.00
BOND XXIII-DOCO - 09-FEB-2007-	9.25	66.00	0.00	22.00	66.00
BOND XXIII-DOCO DRAWL ON 09-FEB-2007 - 09-FEB-2007-	9.25	48.00	0.00	16.00	48.00
BOND XXV-DOCO DRAWL ON 01-JUN-2007 - 01-JUN-2007-	10.10	28.00	0.00	6.99	28.00
BOND XXVII-ADDCAP FOR 2007-2008 DRAWL ON 31-MAR-2008 - 31-MAR-2008-	9.47	124.00	0.00	30.99	124.00
BOND XXVII-ADDCAP FOR 2008-2009 DRAWL ON 02-APR-2008 - 02-APR-2008-	9.47	63.00	0.00	15.75	63.00
BOND XXVII-DOCO - 01-APR-2008-	9.47	254.00	0.00	63.51	254.00
BOND XXVIII-ADDCAP FOR 2008-2009 DRAWL ON 15-DEC-2008 - 15-DEC-2008-	9.33	324.42	0.00	54.08	324.42
BOND XXVIII-ADDCAP FOR 2008-2009 DRAWL ON 29-SEP-2008 - 29-SEP-2008-	9.33	101.58	0.00	16.94	101.58

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Repayment	Total
BOND XXIX-ADDCAP FOR 2008-2009 DRAWL ON 12-MAR-2009 - 12-MAR-2009-	9.20	129.72	0.00	21.62	129.72
BOND XXIX-ADDCAP FOR 2009-2010 Add cap 1-	9.20	0.00	69.62	11.60	69.62
BOND XXIX-ADDCAP FOR 2010-2011 Add cap 2-	0.00	0.00	65.28	10.88	65.28
BOND XXIX-ADDCAP FOR 2011-2012 Add cap 3-	0.00	0.00	22.98	3.84	22.98
Total		16367.72	157.88	7082.43	16525.60

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

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	16367.72	16437.34	16502.62	16525.60	16525.60
Cumulative Repayments of Loans upto Previous Year	38.17	1128.28	2567.31	4045.42	5583.01
Net Loans Opening	16329.55	15309.06	13935.31	12480.18	10942.59
Add: Draw(s) during the Year	69.62	65.28	22.98	0.00	0.00
Less: Repayments of Loan during the year	1090.11	1439.03	1478.11	1537.59	1537.59
Net Closing Loan	15309.06	13935.31	12480.18	10942.59	9405.00
Average Net Loan	15819.31	14622.19	13207.75	11711.39	10173.80
Rate of Interest on Loan (%)	7.9934	8.0276	8.0519	8.0734	8.0967
Interest on Loan	1264.49	1173.81	1063.47	945.51	823.74

ASSET B - DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2009-14

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Repayment	Total
BOND XV-DOCO DRAWL ON 01-MAY-7011-	6.68	21.00	0.00	5.25	21.00
BOND XVII-DOCO DRAWL ON 01-MAY-2011-	7.39	873.00	0.00	261.90	873.00
BOND XXIII-DOCO-	9.25	212.00	0.00	53.01	212.00
BOND XXV-DOCO DRAWL ON 01-MAY-2011-	10.10	48.00	0.00	12.00	48.00



Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Repayment	Total
BOND XXVII-DOCO DRAWL ON 01-MAY-2011-	9.47	759.00	0.00	189.75	759.00
BOND XXIX-ADDCAP FOR 2012-2013 Addcap 1-	9.20	0.00	12.40	2.06	12.40
BOND XXXI-ADDCAP FOR 2012-2013 Addcap 1-	8.90	0.00	38.43	3.20	38.43
BOND XXXI-ADDCAP FOR 2013-2014 Addcap 2-	8.90	0.00	5.25	0.44	5.25
BOND XXXI-DOCO-	8.90	116.24	0.00	9.69	116.24
Total		2029.24	56.08	537.30	2085.32

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

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	0.00	0.00	2029.24	2029.24	2080.07
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	199.27	373.24	548.24
Net Loans Opening	0.00	0.00	1829.97	1656.00	1531.83
Add: Draw(s) during the Year	0.00	0.00	0.00	50.83	5.25
Less: Repayments of Loan during the year	0.00	0.00	173.97	175.00	188.33
Net Closing Loan	0.00	0.00	1656.00	1531.83	1348.75
Average Net Loan	0.00	0.00	1742.99	1593.92	1440.29
Rate of Interest on Loan (%)	0.0000	0.0000	8.6228	8.6536	8.6900
Interest on Loan	0.00	0.00	150.29	137.93	125.16



ASSET A - DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2014-19

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Repayment	Total
BOND XV-DOCO - 01-JAN-2007-	6.68	229.00	0.00	95.40	229.00
BOND XVII-DOCO - 01-JAN-2007-	7.39	9627.00	0.00	4813.50	9627.00
BOND XVIII-DOCO - 01-JAN-2007-	8.15	1300.00	0.00	541.65	1300.00
BOND XIX-DOCO - 01-JAN-2007-	9.25	600.00	0.00	250.00	600.00
BOND XX-DOCO - 01-JAN-2007-	8.93	2520.00	0.00	1050.00	2520.00
BOND XX-DOCO - 01-JUN-2007-	8.93	441.00	0.00	183.75	441.00
BOND XXI-DOCO - 01-JAN-2007-	8.73	100.00	0.00	41.65	100.00
BOND XXI-DOCO - 01-JUN-2007-	8.73	204.00	0.00	85.00	204.00
BOND XXII-DOCO - 01-JUN-2007-	8.68	128.00	0.00	53.35	128.00
BOND XXIII-DOCO - 01-APR-2008-	9.25	80.00	0.00	33.35	80.00
BOND XXIII-DOCO - 09-FEB-2007-	9.25	66.00	0.00	27.50	66.00
BOND XXIII-DOCO DRAWL ON 09-FEB-2007 - 09-FEB-2007-	9.25	48.00	0.00	20.00	48.00
BOND XXV-DOCO DRAWL ON 01-JUN-2007 - 01-JUN-2007-	10.10	28.00	0.00	11.65	28.00
BOND XXVII-ADDCAP FOR 2007-2008 DRAWL ON 31-MAR-2008 - 31-MAR-2008-	9.47	124.00	0.00	51.65	124.00
BOND XXVII-ADDCAP FOR 2008-2009 DRAWL ON 02-APR-2008 - 02-APR-2008-	9.47	63.00	0.00	26.25	63.00
BOND XXVII-DOCO - 01-APR-2008-	9.47	254.00	0.00	105.85	254.00
BOND XXVIII-ADDCAP FOR 2008-2009 DRAWL ON 15-DEC-2008 - 15-DEC-2008-	9.33	324.42	0.00	135.20	324.42
BOND XXVIII-ADDCAP FOR 2008-2009 DRAWL ON 29-SEP-2008 - 29-SEP-2008-	9.33	101.58	0.00	42.35	101.58
BOND XXIX-ADDCAP FOR 2008-2009 DRAWL ON 12-MAR-2009 - 12-MAR-2009-	9.20	129.72	0.00	54.05	129.72

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Repayment	Total
BOND XXIX-ADDCAP FOR 2009-2010 Add cap 1-	9.20	69.62	0.00	29.00	69.62
BOND XXIX-ADDCAP FOR 2010-2011 Add cap 2-	9.20	65.28	0.00	27.20	65.28
BOND XXIX-ADDCAP FOR 2011-2012 Add cap 3-	9.20	22.98	0.00	9.60	22.98
Total		16525.60	0.00	7687.95	16525.60

**ASSET A - 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	16525.60	16525.60	16525.60	16525.60	16525.60
Cumulative Repayments of Loans upto Previous Year	7120.60	8658.19	10195.78	11733.37	13270.96
Net Loans Opening	9405.00	7867.41	6329.82	4792.23	3254.64
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	1537.59	1537.59	1537.59	1537.59	1537.59
Net Closing Loan	7867.41	6329.82	4792.23	3254.64	1717.05
Average Net Loan	8636.21	7098.62	5561.03	4023.44	2485.85
Rate of Interest on Loan (%)	8.1281	8.1733	8.2434	8.3670	8.6437
Interest on Loan	701.96	580.19	458.42	336.64	214.87

ASSET B - DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2014-19

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Repayment	Total
BOND XV-DOCO DRAWL ON 01-MAY-7011-	6.68	21.00	0.00	8.75	21.00
BOND XVII-DOCO DRAWL ON 01-MAY-2011-	7.39	873.00	0.00	436.50	873.00
BOND XXIII-DOCO-	9.25	212.00	0.00	88.35	212.00
BOND XXV-DOCO DRAWL ON 01-MAY-2011-	10.10	48.00	0.00	20.00	48.00



Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Repayment	Total
BOND XXVII-DOCO DRAWL ON 01-MAY-2011-	9.47	759.00	0.00	316.25	759.00
BOND XXIX-ADDCAP FOR 2012-2013 Addcap 1-	9.20	12.40	0.00	5.15	12.40
BOND XXXI-ADDCAP FOR 2012-2013 Addcap 1-	8.90	38.43	0.00	16.00	38.43
BOND XXXI-ADDCAP FOR 2013-2014 Addcap 2-	8.90	5.25	0.00	2.20	5.25
BOND XXXI-DOCO-	8.90	116.24	0.00	48.45	116.24
Total		2085.32	0.00	941.65	2085.32

ASSET B - 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	2085.32	2085.32	2085.32	2085.32	2085.32
Cumulative Repayments of Loans upto Previous Year	736.57	924.90	1113.23	1301.56	1489.89
Net Loans Opening	1348.75	1160.42	972.09	783.76	595.43
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	188.33	188.33	188.33	188.33	188.33
Net Closing Loan	1160.42	972.09	783.76	595.43	407.10
Average Net Loan	1254.59	1066.26	877.93	689.60	501.27
Rate of Interest on Loan (%)	8.7293	8.7821	8.8574	8.9739	9.1779
Interest on Loan	109.52	93.64	77.76	61.88	46.01

