

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO. 357/TT/2014

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

Date of Hearing: 21.12.2015
Date of Order : 30.12.2015

In the Matter of:

Truing up of transmission tariff for 2009-14 tariff block and determination of transmission tariff for 2014-19 tariff block for the Combined Asset: (i) Extension of 400/220 kV Kohlapur (MSEB) substation (ii) 220kV D/C VAPI-MAGARWADA Transmission Line along with associated bays (iii) 220kV D/C VAPI-KHARDPADA Transmission Line along with associated bays under WRSS-III Transmission System in Western India under Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999, Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2014

And in the Matter of:

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

.....Petitioner

Versus

1. Madhya Pradesh Power Management Company Ltd.
Shakti Bhawan, Rampur
Jabalpur - 482 008
2. Maharashtra State Electricity Distribution Co. Ltd.
Prakashgad, 4th Floor
Andheri (East), Mumbai - 400 052
3. Gujarat Urja Vikas Nigam Ltd.
Sardar Patel Vidyut Bhawan,
Race Course Road



Vadodara - 390 007

4. Electricity Department Govt. Of Goa
Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa - 403 001
5. Electricity Department
Administration of Daman & Diu
Daman - 396 210
6. Electricity Department
Administration Of Dadra Nagar Haveli
U.T., Silvassa - 396 230
7. Chhattisgarh State Electricity Board
P.O.Sunder Nagar, Dangania, Raipur
Chhatisgarh-492013
8. Madhya Pradesh Audyogik Kendra
Vikas Nigam (Indore) Ltd.
3/54, Press Complex, Agra-Bombay Road,
Indore-452 008

.....Respondent(s)

The following were present:

For Petitioner: Shri S S Raju
Shri Rakesh Prasad
Shri M M Mondal
Shri S K Venkatesan
Shri Avinash M Pavgi
Shri Piyush Awasthi
Shri Anshul Garg
Shri S K Venkatesan
Shri Mohd Mohsin
Shri S K Niranjana

For Respondents: None

ORDER

The petition has been preferred by Power Grid Corporation of India Limited (hereinafter referred to as “the petitioner”), a transmission licensee, for revision of tariff under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 Tariff



Regulations”) based on truing up of capital expenditure for the period 1.4.2009 to 31.3.2014 and for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) for the period from 1.4.2014 to 31.3.2019 in respect of of the Combined Asset: (i) Extension of 400/220 kV Kohlapur (MSEB) substation (DOCO:01.12.2006) (ii) 220kV D/C VAPI-MAGARWADA Transmission Line along with associated bays (DOCO: 01.05.2008) (iii) 220kV D/C VAPI-KHARDPADA Transmission Line along with associated bays (DOCO: 01.07.2008) under WRSS-III Transmission System in Western Region (hereinafter referred to as “the transmission asset”).

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

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

a) The investment approval for the transmission asset was accorded by Board of Directors of the petitioner company vide Memorandum dated 20.2.2006 at an estimated cost of ₹7565 lakh which included IDC of ₹219 lakh.

b) The COD of the transmission assets is 1.7.2008. The Commission vide its order dated 11.2.2011 in Petition No. 175/2010 had approved the capital cost of ₹3834.54 lakh as on 31.3.2009 as under:-

Admitted as on 31.3.2009			
		₹ in lakh	%
Asset I	Debt	334.93	70.00
	Equity	143.54	30.00
	Total	478.47	100.00
Asset II	Debt	1321.99	70.01
	Equity	566.28	29.99



Admitted as on 31.3.2009			
		₹ in lakh	%
	Total	1888.27	100.00
Asset III	Debt	1027.46	70.00
	Equity	440.34	30.00
	Total	1467.8	100.00
Combined	Debt	2684.38	70.01
	Equity	1150.16	29.99
	Total	3834.54	100.00

c) The petitioner had approached the Commission vide Petition No. 175/2010 for approval of additional capital expenditure of ₹51.49 lakh and ₹781.21 lakh towards balance and retention payments during 2009-10 and 2010-11 respectively and determination of tariff for 2009-14 tariff period.

d) The commission had admitted the additional capital expenditure of ₹51.49 lakh and ₹781.21 lakh during 2009-10 and 2010-11 in view of the reasons recorded and decision taken in its order dated 11.2.2011 in Petition No. 175/2010.

e) The Commission determined the tariff for the transmission asset for tariff period 2009-14, based on admitted capital cost of ₹3834.54 lakh as on 31.3.2009 and estimated additional capital expenditure of ₹51.49 lakh and ₹781.21 lakh during 2009-10 and 2010-11 respectively, as given below:-

	(₹ in lakh)				
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	204.09	226.08	246.71	246.71	246.71
Interest on Loan	232.80	239.99	243.52	220.46	197.42
Return on Equity	202.41	224.24	244.73	244.73	244.73
Interest on Working Capital	24.03	25.70	27.29	27.49	27.73
O & M Expenses	214.01	226.25	239.24	252.89	267.34
Total	877.34	942.27	1001.48	992.27	983.93



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 7.8.2014, 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. The petitioner has submitted the reply to the Commission's query vide affidavit dated 28.12.2015. No comments/objections have been received from the public in response to the notice in newspaper. No submissions have been made by the respondents. The hearing in this matter was held on 21.12.2015. 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 ₹3834.54 lakh as on 31.3.2009 for the purpose of tariff determination.

10. The last proviso to Regulation 7(2) of the 2009 Tariff Regulations provides that:-

“Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2009 duly trued up by excluding un-discharged liability, if any, as on 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14, as may be admitted by the Commission, shall form the basis for determination of tariff”.

11. The capital cost of ₹3834.54 lakh admitted by the Commission as on 31.3.2009 has been considered as opening capital cost as on 1.4.2009 for determination of trued up tariff in accordance with Regulation 7 of the 2009 Tariff Regulations.

Additional Capital Expenditure

12. 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”



13. The petitioner has submitted that it has incurred an additional capital expenditure of ₹51.50 lakh, ₹405.59 lakh, ₹44.16 lakh and ₹69.56 lakh in 2009-10, 2010-11, 2011-12 and 2012-13 towards final payment of undischarged liabilities as depicted below:-

(₹ in lakh)

Particulars	Capital cost as admitted on 31.3.2009	Additional capital expenditure approved vide order dated 11.2.2011		Actual Additional capital expenditure during 2009-14				Actual capital cost as on 31.3.2014
		2009-10	2010-11	2009-10	2010-11	2011-12	2012-13	
Asset I: Substation	478.47	0.00	0.00	0.00	0.00	0.00	0.00	478.47
Asset II: Transmission Line	1888.27	29.30	380.40	29.30	197.50	21.50	33.87	2170.44
Asset III: Transmission Line	1467.80	22.19	400.81	22.20	208.09	22.66	35.69	1756.44
Total	3834.54	51.49	781.21	51.50	405.59	44.16	69.56	4405.35

14. The petitioner has submitted the Auditor's Certificate dated 19.7.2014 certifying the actual capital cost. The Commission had directed the petitioner to submit the details of undischarged liabilities, if any, to be recovered in future in respect of the transmission assets. The petitioner vide its affidavit dated 28.12.2015 has clarified that no undischarged liabilities are left to be recovered in future in respect of the transmission assets in the instant petition.

15. We have considered the submissions of the petitioner with regard to the actual capital expenditure in 2009-10, 2010-11, 2011-12 and 2012-13. The additional capital expenditure during 2010-14 period, which lies beyond the cut-off date is ₹519.31 lakh against the additional capital expenditure of ₹781.21 lakh admitted by the Commission vide order dated 11.2.2011 in Petition No. 175/2010. Further, since the total capital



addition of ₹570.81 lakh during the aforesaid period is based on actual capital expenditure incurred as per the Auditor Certificate dated 19.7.2014, and is within the original scope of work and the total capital expenditure during 2009-14 is within the limits of the total approved capital expenditure, the same is allowed for the purpose of revision of tariff in accordance with Regulation 6 of the 2009 Tariff Regulations.

16. 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

17. 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.”

18. The debt:equity ratio of 70.01:29.99 admitted by the Commission vide order dated 11.2.2011 in Petition No. 175/2010 as on 31.3.2009 has been considered as on 1.4.2009 for determination of tariff in accordance with the Regulation 12 of the 2009

Tariff Regulations. In respect of the additional capitalization, debt: equity ratio of 70:30 has been considered in line with the 2009 Tariff Regulations.

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

Capital cost admitted as on 31.3.2009				Additional capital expenditure during 2009-14		Total Cost as on 31.3.2014	
		₹ in lakh	%	₹ in lakh	%	₹ in lakh	%
Asset I	Debt	334.93	70.00	0.00	0.00	334.93	70.00
	Equity	143.54	30.00	0.00	0.00	143.54	30.00
	Total	478.47	100.00	0.00	0.00	478.47	100.00
Asset II	Debt	1321.99	70.01	197.52	70.00	1519.51	70.01
	Equity	566.28	29.99	84.65	30.00	650.93	29.99
	Total	1888.27	100.00	282.17	100.00	2170.44	100.00
Asset III	Debt	1027.46	70.00	202.05	70.00	1229.51	70.00
	Equity	440.34	30.00	86.59	30.00	526.93	30.00
	Total	1467.8	100.00	288.64	100.00	1756.44	100.00
Combined	Debt	2684.38	70.01	399.57	70.00	3083.95	70.00
	Equity	1150.16	29.99	171.24	30.00	1321.40	30.00
	Total	3834.54	100.00	570.81	100.00	4405.35	100.00

Return on Equity (ROE)

20. 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.”

21. 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%

22. The Commission had directed the petitioner to indicate the actual equity infused for the 2009-14 tariff period. The petitioner has submitted, vide affidavit dated 28.12.2015, that the actual equity infused for the additional capitalisation during 2009-14 tariff period is not less than 30% for the instant transmission asset. 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.

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

(₹ in lakh)

Return on Equity	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 11.2.2011	202.41	224.24	244.73	244.73	244.73
Claimed by the petitioner	216.22	237.42	250.72	254.03	259.13
Allowed after truing up in this order	216.22	237.42	250.72	254.03	259.13

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.

Interest on Loan (IoL)

24. 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”.

25. 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)

Interest on Loan	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 11.2.2011	232.80	239.99	243.52	220.46	197.42
Claimed by the petitioner	232.80	227.60	221.04	203.19	183.75
Allowed after truing up in this order	232.80	227.60	221.04	203.19	183.75



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

26. 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)

Depreciation	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 11.2.2011	204.09	226.08	246.71	246.71	246.71
Claimed by the petitioner	204.10	216.17	228.04	231.05	232.88
Allowed after truing up in this order	204.09	216.17	228.04	231.04	232.88

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

Interest on Working Capital (IWC)

27. 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	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 11.2.2011	24.03	25.70	27.29	27.49	27.73
Claimed by the petitioner	24.32	25.51	26.55	26.99	27.46
Allowed after truing up in this order	24.32	25.51	26.55	26.99	27.46

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

Operation & Maintenance Expenses (O&M Expenses)

28. Clause (g) of Regulation 19 of the 2009 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The normative O&M Expenses are not required to be trued up. Accordingly, the total allowable O&M expenses for the instant assets have been worked out based on norms of O&M Expenses and the details are as follows:-

	(₹ in lakh)				
O&M Expenses	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 11.2.2011	214.01	226.25	239.24	252.89	267.34
Claimed by the petitioner	214.01	226.25	239.24	252.89	267.34
Allowed after truing up in this order	214.01	226.25	239.24	252.89	267.34

APPROVED ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

29. The detailed computation of the various components of the trued up annual fixed charges for the instant transmission assets for the tariff period 2009-14 is summarised below:-

	(₹ in lakh)				
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation					
Opening Gross Block	3834.54	3886.04	4291.63	4335.79	4405.35
Additional capitalisation	51.50	405.59	44.16	69.56	0.00
Closing Gross Block	3886.04	4291.63	4335.79	4405.35	4405.35
Average Gross Block	3860.29	4088.84	4313.71	4370.57	4405.35
Rate of Depreciation (%)	5.29	5.29	5.29	5.29	5.29
Depreciable Value	3474.26	3703.13	4064.85	3953.39	3996.12
Balance useful life of the asset	31	30	29	28	27
Elapsed life	0	1	2	3	4
Remaining Depreciable Value	3366.73	3368.33	3354.55	3177.68	2977.94
Depreciation during the year	204.09	216.17	228.04	231.04	232.88

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Cumulative depreciation (incl. of AAD)	311.62	527.79	755.83	986.87	1219.75
Interest on Loan					
Gross Normative Loan	2684.38	2720.43	3004.34	3035.26	3083.95
Cumulative Repayments upto Previous Year	107.53	311.62	527.79	755.83	986.87
Net Loan-Opening	2576.85	2408.81	2476.55	2279.42	2097.07
Additions	36.05	283.91	30.91	48.69	0.00
Repayment during the year	204.09	216.17	228.04	231.04	232.88
Net Loan-Closing	2408.81	2476.55	2279.42	2097.07	1864.19
Average Loan	2492.83	2442.68	2377.99	2188.25	1980.63
Weighted Average Rate of Interest on Loan (%)	9.3389	9.3178	9.2954	9.2855	9.2774
Interest on Loan	232.80	227.60	221.04	203.19	183.75
Return on Equity					
Opening Equity	1150.16	1165.61	1287.29	1300.54	1321.40
Additions	15.45	121.68	13.25	20.87	0.00
Closing Equity	1165.61	1287.29	1300.54	1321.40	1321.40
Average Equity	1157.89	1226.45	1293.91	1310.97	1321.40
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	216.22	237.42	250.72	254.03	259.13
Interest on Working Capital					
O & M Expenses	17.83	18.85	19.93	21.07	22.27
Maintenance Spares	32.10	33.94	35.89	37.93	40.10
Receivables	148.57	155.49	160.93	161.36	161.76
Total Working Capital	198.50	208.27	216.75	220.36	224.13
Rate of Interest (%)	12.25	12.25	12.25	12.25	12.25
Interest of working capital	24.32	25.51	26.55	26.99	27.46
Annual Transmission Charges					
Depreciation	204.09	216.17	228.04	231.04	232.88
Interest on Loan	232.80	227.60	221.04	203.19	183.75
Return on Equity	216.22	237.42	250.72	254.03	259.13
Interest on Working Capital	24.32	25.51	26.55	26.99	27.46
O & M Expenses	214.01	226.25	239.24	252.89	267.34
Total	891.45	932.95	965.59	968.14	970.56



DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	232.88	232.88	232.88	232.88	232.88
Interest on Loan	162.10	140.48	118.87	97.26	75.65
Return on Equity	259.13	259.13	259.13	259.13	259.13
Interest on Working Capital	28.64	28.59	28.56	28.55	28.55
O & M Expenses	245.92	254.07	262.55	271.20	280.27
Total	928.67	915.15	901.99	889.02	876.48

31. 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	20.49	21.17	21.88	22.60	23.36
Maintenance Spares	36.89	38.11	39.38	40.68	42.04
Receivables	154.78	152.53	150.33	148.17	146.08
Total	212.16	211.81	211.59	211.45	211.48
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	28.64	28.59	28.56	28.55	28.55

Capital Cost

32. Clause (3) and (6) of Regulation 9 of 2014 Tariff Regulation provide as follows:-

“(3) The Capital cost of an existing project shall include the following:

- (a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;
- (b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and
- (c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15.”

“(6) The following shall be excluded or removed from the capital cost of the existing and new project:

- (a) The assets forming part of the project, but not in use; (b) Decapitalisation of Asset;”



33. The capital cost of ₹4405.35 lakh worked out by the Commission as on 31.3.2014 has been considered as opening capital cost as on 1.4.2014 for determination of tariff in accordance with Regulation 9 of the 2014 Tariff Regulations.

Additional Capital Expenditure

34. The petitioner has not claimed any additional capital expenditure during 2014-19 tariff period.

Debt: Equity

35. 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 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.”

36. The petitioner has considered the debt:equity ratio of 70:30 as on 31.3.2014, which is in line with the 2014 Tariff Regulations.

37. The petitioner has not claimed any additional capital expenditure during 2014-19 tariff period. The details of the debt:equity considered for the purpose of tariff for 2014-19 tariff period is as follows:-

(₹ in lakh)

Funding	Total Capital cost as on 31.3.2014	(%)	Additional capital expenditure during 2014-19	Total Capital cost as on 31.3.2019	(%)
Debt	3083.95	70.00	-	3083.95	70.00
Equity	1321.40	30.00	-	1321.40	30.00
Total	4405.35	100.00	-	4405.35	100.00

Return on Equity (ROE)

38. 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.”

39. 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 tried 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	1321.40	1321.40	1321.40	1321.40	1321.40
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	1321.40	1321.40	1321.40	1321.40	1321.40
Average Equity	1321.40	1321.40	1321.40	1321.40	1321.40
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	259.13	259.13	259.13	259.13	259.13

Interest on Loan (IoL)

40. 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.”

41. 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)

Interest on Loan	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	3083.95	3083.95	3083.95	3083.95	3083.95
Cumulative Repayment upto Previous Year	1219.75	1452.63	1685.51	1918.39	2151.27
Net Loan-Opening	1864.19	1631.31	1398.43	1165.56	932.68
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	232.88	232.88	232.88	232.88	232.88
Net Loan-Closing	1631.31	1398.43	1165.56	932.68	699.80
Average Loan	1747.75	1514.87	1281.99	1049.12	816.24
Weighted Average Rate of Interest on Loan (%)	9.2747	9.2737	9.2723	9.2705	9.2679
Interest on Loan	162.10	140.48	118.87	97.26	75.65

Depreciation

42. 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."



43. 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 asset will complete 12 years beyond the 2014-19 period. The detailed calculations for depreciation for the transmission asset are worked out and allowed as follows:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	4405.35	4405.35	4405.35	4405.35	4405.35
Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	4405.35	4405.35	4405.35	4405.35	4405.35
Average Gross Block	4405.35	4405.35	4405.35	4405.35	4405.35
Rate of Depreciation (%)	5.29%	5.29%	5.29%	5.29%	5.29%
Balance Useful life of the asset	26	25	24	23	22
Elapsed life	5	6	7	8	9
Remaining Depreciable Value	2745.06	2512.18	2279.30	2046.42	1813.54
Depreciation during the year	232.88	232.88	232.88	232.88	232.88

Operation & Maintenance Expenses (O&M Expenses)

44. 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:-

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
220 kV Bays:					
No. of Bays	4	4	4	4	4
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.10
400 kV Bay:					
No. of Bays	1	1	1	1	1
Norms (₹ lakh/Bay)	60.3	62.3	64.37	66.51	68.71
Line: D/C Single Conductor:					
Line Length (km)	55.37	55.37	55.37	55.37	55.37
Norms (₹ lakh/km)	0.303	0.313	0.324	0.334	0.346
Total O&M Expenses (₹ lakh)	245.92	254.07	262.55	271.20	280.27



45. The petitioner has further submitted that the wage revision of the employees of the petitioner company is due during 2014-19 and actual impact of wage hike which will be effective from a future date has also not been factored in fixation of the normative O&M rate specified for the 2014-19 tariff period. The petitioner has also prayed that it will approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase. We would like to clarify that any application filed by the petitioner for revision of O&M Expenses on account of wage revision will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations. The O&M Expenses are allowed for the instant transmission asset as per prevailing norms.

Interest on Working Capital (IWC)

46. 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;”

47. 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%.

48. 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	20.48	21.16	21.87	22.59	23.35
Maintenance Spares	36.89	38.11	39.38	40.68	42.04
Receivables	154.78	152.53	150.33	148.17	146.08
Total	212.15	211.80	211.59	211.44	211.47
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	28.64	28.59	28.56	28.54	28.55

ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

49. 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	4405.35	4405.35	4405.35	4405.35	4405.35
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	4405.35	4405.35	4405.35	4405.35	4405.35
Average Gross Block	4405.35	4405.35	4405.35	4405.35	4405.35
Rate of Depreciation (%)	5.29	5.29	5.29	5.29	5.29
Depreciable Value	3964.82	3964.82	3964.82	3964.82	3964.82
Balance useful life of the asset	26	25	24	23	22
Elapsed life	5	6	7	8	9
Remaining Depreciable Value	2745.06	2512.18	2279.30	2046.42	1813.54
Depreciation during the year	232.88	232.88	232.88	232.88	232.88
Cumulative depreciation (incl. of AAD)	1452.63	1685.51	1918.39	2151.27	2384.15
Interest on Loan					
Gross Normative Loan	3083.95	3083.95	3083.95	3083.95	3083.95
Cumulative	1219.75	1452.63	1685.51	1918.39	2151.27



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Repayments upto Previous Year					
Net Loan-Opening	1864.19	1631.31	1398.43	1165.56	932.68
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	232.88	232.88	232.88	232.88	232.88
Net Loan-Closing	1631.31	1398.43	1165.56	932.68	699.80
Average Loan	1747.75	1514.87	1281.99	1049.12	816.24
Weighted Average Rate of Interest on Loan (%)	9.2747	9.2737	9.2723	9.2705	9.2679
Interest on Loan	162.10	140.48	118.87	97.26	75.65
Return on Equity					
Opening Equity	1321.40	1321.40	1321.40	1321.40	1321.40
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	1321.40	1321.40	1321.40	1321.40	1321.40
Average Equity	1321.40	1321.40	1321.40	1321.40	1321.40
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	259.13	259.13	259.13	259.13	259.13
Interest on Working Capital					
O & M Expenses	20.48	21.16	21.87	22.59	23.35
Maintenance Spares	36.89	38.11	39.38	40.68	42.04
Receivables	154.78	152.53	150.33	148.17	146.08
Total Working Capital	212.15	211.80	211.59	211.44	211.47
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	28.64	28.59	28.56	28.54	28.55
Annual Transmission Charges					
Depreciation	232.88	232.88	232.88	232.88	232.88
Interest on Loan	162.10	140.48	118.87	97.26	75.65
Return on Equity	259.13	259.13	259.13	259.13	259.13
Interest on Working Capital	28.64	28.59	28.56	28.54	28.55
O & M Expenses	245.92	254.07	262.55	271.20	280.27
Total	928.67	915.16	902.00	889.02	876.48



Deferred Tax Liability

50. 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

51. 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

52. 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

53. The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future. We are of the view that the petitioner's prayer is premature.



Sharing of Transmission Charges

54. 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.

55. This order disposes of Petition No. 357/TT/2014.

(Dr. M.K. Iyer)

Member

(A.S. Bakshi)

Member



CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
BOND XXI-DOCO-01-DEC-2006					
Gross Opening Loan	270.00	270.00	270.00	270.00	270.00
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	22.50	45.00	67.50
Net Loans Opening	270.00	270.00	247.50	225.00	202.50
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	0.00	22.50	22.50	22.50	22.50
Net Closing Loan	270.00	247.50	225.00	202.50	180.00
Average Net Loan	270.00	258.75	236.25	213.75	191.25
Rate of Interest on Loan (%)	8.73	8.73	8.73	8.73	8.73
Interest on Loan	23.57	22.59	20.62	18.66	16.70
BOND XXII-DOCO-01-MAY-2008-					
Gross Opening Loan	50.00	50.00	50.00	50.00	50.00
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	4.17	8.34	12.51
Net Loans Opening	50.00	50.00	45.83	41.66	37.49
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	0.00	4.17	4.17	4.17	4.17
Net Closing Loan	50.00	45.83	41.66	37.49	33.32
Average Net Loan	50.00	47.92	43.75	39.58	35.41
Rate of Interest on Loan (%)	8.68	8.68	8.68	8.68	8.68
Interest on Loan	4.34	4.16	3.80	3.44	3.07
BOND XXII-DOCO DRAWL ON 01-JUL-2008-01-JUL-2008					
Gross Opening Loan	28.00	28.00	28.00	28.00	28.00
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	2.33	4.66	6.99
Net Loans Opening	28.00	28.00	25.67	23.34	21.01
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	0.00	2.33	2.33	2.33	2.33
Net Closing Loan	28.00	25.67	23.34	21.01	18.68
Average Net Loan	28.00	26.84	24.51	22.18	19.85
Rate of Interest on Loan (%)	8.68	8.68	8.68	8.68	8.68
Interest on Loan	2.43	2.33	2.13	1.92	1.72

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
BOND XXVII-ADDCAP FOR 2008-2009 DRAWL ON 31-MAR-2008-02-MAY-2008					
Gross Opening Loan	265.00	265.00	265.00	265.00	265.00
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	22.09	44.18
Net Loans Opening	265.00	265.00	265.00	242.91	220.82
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	0.00	0.00	22.09	22.09	22.09
Net Closing Loan	265.00	265.00	242.91	220.82	198.73
Average Net Loan	265.00	265.00	253.96	231.87	209.78
Rate of Interest on Loan (%)	9.47	9.47	9.47	9.47	9.47
Interest on Loan	25.10	25.10	24.05	21.96	19.87
BOND XXVII-DOCO DRAWL ON 01-JUL-2008 01-JUL-2008-					
Gross Opening Loan	754.00	754.00	754.00	754.00	754.00
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	62.83	125.66
Net Loans Opening	754.00	754.00	754.00	691.17	628.34
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	0.00	0.00	62.83	62.83	62.83
Net Closing Loan	754.00	754.00	691.17	628.34	565.51
Average Net Loan	754.00	754.00	722.59	659.76	596.93
Rate of Interest on Loan (%)	9.47	9.47	9.47	9.47	9.47
Interest on Loan	71.40	71.40	68.43	62.48	56.53
BOND XXVII-DOCO DRAWL ON 01-MAY-2008-01-MAY-2008-					
Gross Opening Loan	883.00	883.00	883.00	883.00	883.00
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	73.58	147.16
Net Loans Opening	883.00	883.00	883.00	809.42	735.84
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	0.00	0.00	73.58	73.58	73.58
Net Closing Loan	883.00	883.00	809.42	735.84	662.26
Average Net Loan	883.00	883.00	846.21	772.63	699.05
Rate of Interest on Loan (%)	9.47	9.47	9.47	9.47	9.47
Interest on Loan	83.62	83.62	80.14	73.17	66.20
BOND XXVIII-ADDCAP FOR 2008-2009 DRAWL ON 15-DEC-2008-15-DEC-2008					
Gross Opening Loan	450.00	450.00	450.00	450.00	450.00



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	37.50
Net Loans Opening	450.00	450.00	450.00	450.00	412.50
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	0.00	0.00	0.00	37.50	37.50
Net Closing Loan	450.00	450.00	450.00	412.50	375.00
Average Net Loan	450.00	450.00	450.00	431.25	393.75
Rate of Interest on Loan (%)	9.33	9.33	9.33	9.33	9.33
Interest on Loan	41.99	41.99	41.99	40.24	36.74
BOND XXIX-ADDCAP FOR 2008-2009 DRAWL ON 12-MAR-2009-12-MAR-2009-					
Gross Opening Loan	191.01	191.01	191.01	191.01	191.01
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	15.92
Net Loans Opening	191.01	191.01	191.01	191.01	175.09
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	0.00	0.00	0.00	15.92	15.92
Net Closing Loan	191.01	191.01	191.01	175.09	159.17
Average Net Loan	191.01	191.01	191.01	183.05	167.13
Rate of Interest on Loan (%)	9.20	9.20	9.20	9.20	9.20
Interest on Loan	17.57	17.57	17.57	16.84	15.38
BOND XXIX-ADDCAP FOR 2009-2010 DRAWL ON 31-MAR -2010-					
Gross Opening Loan	0.00	32.99	32.99	32.99	32.99
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	2.75
Net Loans Opening	0.00	32.99	32.99	32.99	30.24
Add: Draw(s) during the Year	32.99	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	0.00	0.00	0.00	2.75	2.75
Net Closing Loan	32.99	32.99	32.99	30.24	27.49
Average Net Loan	16.50	32.99	32.99	31.62	28.87
Rate of Interest on Loan (%)	9.20	9.20	9.20	9.20	9.20
Interest on Loan	1.52	3.04	3.04	2.91	2.66
BOND XXX-ADDCAP FOR 2009-2010 DRAWL ON 29-SEP-2009-					
Gross Opening Loan	0.00	3.05	3.05	3.05	3.05
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	0.00
Net Loans Opening	0.00	3.05	3.05	3.05	3.05



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Add: Draw(s) during the Year	3.05	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	0.00	0.00	0.00	0.00	0.25
Net Closing Loan	3.05	3.05	3.05	3.05	2.80
Average Net Loan	1.53	3.05	3.05	3.05	2.93
Rate of Interest on Loan (%)	8.80	8.80	8.80	8.80	8.80
Interest on Loan	0.13	0.27	0.27	0.27	0.26
BOND XXX-ADDCAP FOR 2010-2011 LOAN 1-					
Gross Opening Loan	0.00	0.00	44.95	44.95	44.95
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	0.00
Net Loans Opening	0.00	0.00	44.95	44.95	44.95
Add: Draw(s) during the Year	0.00	44.95	0.00	0.00	0.00
Less: Repayments of Loan during the year	0.00	0.00	0.00	0.00	3.75
Net Closing Loan	0.00	44.95	44.95	44.95	41.20
Average Net Loan	0.00	22.48	44.95	44.95	43.08
Rate of Interest on Loan (%)	0.00	8.80	8.80	8.80	8.80
Interest on Loan	0.00	1.98	3.96	3.96	3.79
BOND XXXI-ADDCAP FOR 2010-2011 LOAN 2-					
Gross Opening Loan	0.00	0.00	46.00	46.00	46.00
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	0.00
Net Loans Opening	0.00	0.00	46.00	46.00	46.00
Add: Draw(s) during the Year	0.00	46.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	0.00	0.00	0.00	0.00	3.83
Net Closing Loan	0.00	46.00	46.00	46.00	42.17
Average Net Loan	0.00	23.00	46.00	46.00	44.09
Rate of Interest on Loan	0.00	8.90	8.90	8.90	8.90
Interest on Loan	0.00	2.05	4.09	4.09	3.92
BOND XXXIV-ADDCAP FOR 2010-2011 LOAN 3-					
Gross Opening Loan	0.00	0.00	192.96	192.96	192.96
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	0.00
Net Loans Opening	0.00	0.00	192.96	192.96	192.96
Add: Draw(s) during the Year	0.00	192.96	0.00	0.00	0.00
Less: Repayments of Loan during the year	0.00	0.00	0.00	0.00	0.00
Net Closing Loan	0.00	192.96	192.96	192.96	192.96



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Average Net Loan	0.00	96.48	192.96	192.96	192.96
Rate of Interest on Loan	0.00	8.84	8.84	8.84	8.84
Interest on Loan	0.00	8.53	17.06	17.06	17.06
BOND XXIV-ADDCAP FOR 2010-2011 LOAN 4-					
Gross Opening Loan	0.00	0.00	0.00	30.91	30.91
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	0.00
Net Loans Opening	0.00	0.00	0.00	30.91	30.91
Add: Draw(s) during the Year	0.00	0.00	30.91	0.00	0.00
Less: Repayments of Loan during the year	0.00	0.00	0.00	0.00	0.00
Net Closing Loan	0.00	0.00	30.91	30.91	30.91
Average Net Loan	0.00	0.00	15.46	30.91	30.91
Rate of Interest on Loan	0.00	0.00	8.84	8.84	8.84
Interest on Loan	0.00	0.00	1.37	2.73	2.73
BOND XXXIV-ADDCAP FOR 2012-2013 LOAN 5-					
Gross Opening Loan	0.00	0.00	0.00	0.00	48.69
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	0.00
Net Loans Opening	0.00	0.00	0.00	0.00	48.69
Add: Draw(s) during the Year	0.00	0.00	0.00	48.69	0.00
Less: Repayments of Loan during the year	0.00	0.00	0.00	0.00	0.00
Net Closing Loan	0.00	0.00	0.00	48.69	48.69
Average Net Loan	0.00	0.00	0.00	24.35	48.69
Rate of Interest on Loan	0.00	0.00	0.00	8.84	8.84
Interest on Loan	0.00	0.00	0.00	2.15	4.30
Summary					
Gross Opening Loan	2891.01	2927.05	3210.96	3241.87	3290.56
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	29.00	216.50	460.17
Net Loans Opening	2891.01	2927.05	3181.96	3025.37	2830.39
Add: Draw(s) during the Year	36.04	283.91	30.91	48.69	0.00
Less: Repayments of Loan during the year	0.00	29.00	187.50	243.67	251.50
Net Closing Loan	2927.05	3181.96	3025.37	2830.39	2578.89
Average Net Loan	2909.03	3054.51	3103.67	2927.88	2704.64
Rate of Interest on Loan (%)	9.3389	9.3178	9.2954	9.2855	9.2774
Interest on Loan	271.67	284.61	288.50	271.87	250.92



Annexure – 2

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
BOND XXI-DOCO-01-DEC-2006					
Gross Opening Loan	270.00	270.00	270.00	270.00	270.00
Cumulative Repayments of Loans upto Previous Year	90.00	112.50	135.00	157.50	180.00
Net Loans Opening	180.00	157.50	135.00	112.50	90.00
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	22.50	22.50	22.50	22.50	22.50
Net Closing Loan	157.50	135.00	112.50	90.00	67.50
Average Net Loan	168.75	146.25	123.75	101.25	78.75
Rate of Interest on Loan (%)	8.73	8.73	8.73	8.73	8.73
Interest on Loan	14.73	12.77	10.80	8.84	6.87
BOND XXII-DOCO-01-MAY-2008-					
Gross Opening Loan	50.00	50.00	50.00	50.00	50.00
Cumulative Repayments of Loans upto Previous Year	16.68	20.85	25.02	29.19	33.36
Net Loans Opening	33.32	29.15	24.98	20.81	16.64
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	4.17	4.17	4.17	4.17	4.17
Net Closing Loan	29.15	24.98	20.81	16.64	12.47
Average Net Loan	31.24	27.07	22.90	18.73	14.56
Rate of Interest on Loan (%)	8.68	8.68	8.68	8.68	8.68
Interest on Loan	2.71	2.35	1.99	1.63	1.26
BOND XXII-DOCO DRAWL ON 01-JUL-2008-01-JUL-2008					
Gross Opening Loan	28.00	28.00	28.00	28.00	28.00
Cumulative Repayments of Loans upto Previous Year	9.32	11.65	13.98	16.31	18.64
Net Loans Opening	18.68	16.35	14.02	11.69	9.36
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	2.33	2.33	2.33	2.33	2.33
Net Closing Loan	16.35	14.02	11.69	9.36	7.03
Average Net Loan	17.52	15.19	12.86	10.53	8.20
Rate of Interest on Loan (%)	8.68	8.68	8.68	8.68	8.68
Interest on Loan	1.52	1.32	1.12	0.91	0.71



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
BOND XXVII-ADDCAP FOR 2008-2009 DRAWL ON 31-MAR-2008-02-MAY-2008					
Gross Opening Loan	265.05	265.05	265.05	265.05	265.05
Cumulative Repayments of Loans upto Previous Year	66.27	88.36	110.45	132.54	154.63
Net Loans Opening	198.78	176.69	154.60	132.51	110.42
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	22.09	22.09	22.09	22.09	22.09
Net Closing Loan	176.69	154.60	132.51	110.42	88.33
Average Net Loan	187.74	165.65	143.56	121.47	99.38
Rate of Interest on Loan (%)	9.47	9.47	9.47	9.47	9.47
Interest on Loan	17.78	15.69	13.59	11.50	9.41
BOND XXVII-DOCO DRAWL ON 01-JUL-2008 01-JUL-2008-					
Gross Opening Loan	754.00	754.00	754.00	754.00	754.00
Cumulative Repayments of Loans upto Previous Year	188.49	251.32	314.15	376.98	439.81
Net Loans Opening	565.51	502.68	439.85	377.02	314.19
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	62.83	62.83	62.83	62.83	62.83
Net Closing Loan	502.68	439.85	377.02	314.19	251.36
Average Net Loan	534.10	471.27	408.44	345.61	282.78
Rate of Interest on Loan (%)	9.47	9.47	9.47	9.47	9.47
Interest on Loan	50.58	44.63	38.68	32.73	26.78
BOND XXVII-DOCO DRAWL ON 01-MAY-2008-01-MAY-2008-					
Gross Opening Loan	883.00	883.00	883.00	883.00	883.00
Cumulative Repayments of Loans upto Previous Year	220.74	294.32	367.90	441.48	515.06
Net Loans Opening	662.26	588.68	515.10	441.52	367.94
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	73.58	73.58	73.58	73.58	73.58
Net Closing Loan	588.68	515.10	441.52	367.94	294.36
Average Net Loan	625.47	551.89	478.31	404.73	331.15
Rate of Interest on Loan (%)	9.47	9.47	9.47	9.47	9.47
Interest on Loan	59.23	52.26	45.30	38.33	31.36



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
BOND XXVIII-ADDCAP FOR 2008-2009 DRAWL ON 15-DEC-2008-15-DEC-2008					
Gross Opening Loan	450.00	450.00	450.00	450.00	450.00
Cumulative Repayments of Loans upto Previous Year	75.00	112.50	150.00	187.50	225.00
Net Loans Opening	375.00	337.50	300.00	262.50	225.00
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	37.50	37.50	37.50	37.50	37.50
Net Closing Loan	337.50	300.00	262.50	225.00	187.50
Average Net Loan	356.25	318.75	281.25	243.75	206.25
Rate of Interest on Loan (%)	9.33	9.33	9.33	9.33	9.33
Interest on Loan	33.24	29.74	26.24	22.74	19.24
BOND XXIX-ADDCAP FOR 2008-2009 DRAWL ON 12-MAR-2009-12-MAR-2009-					
Gross Opening Loan	191.01	191.01	191.01	191.01	191.01
Cumulative Repayments of Loans upto Previous Year	31.84	47.76	63.68	79.60	95.52
Net Loans Opening	159.17	143.25	127.33	111.41	95.49
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	15.92	15.92	15.92	15.92	15.92
Net Closing Loan	143.25	127.33	111.41	95.49	79.57
Average Net Loan	151.21	135.29	119.37	103.45	87.53
Rate of Interest on Loan (%)	9.20	9.20	9.20	9.20	9.20
Interest on Loan	13.91	12.45	10.98	9.52	8.05
BOND XXIX-ADDCAP FOR 2009-2010 DRAWL ON 31-MAR-2010-					
Gross Opening Loan	32.99	32.99	32.99	32.99	32.99
Cumulative Repayments of Loans upto Previous Year	5.50	8.25	11.00	13.75	16.50
Net Loans Opening	27.49	24.74	21.99	19.24	16.49
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	2.75	2.75	2.75	2.75	2.75
Net Closing Loan	24.74	21.99	19.24	16.49	13.74
Average Net Loan	26.12	23.37	20.62	17.87	15.12
Rate of Interest on Loan (%)	9.20	9.20	9.20	9.20	9.20
Interest on Loan	2.40	2.15	1.90	1.64	1.39



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
BOND XXX-ADDCAP FOR 2009-2010 DRAWL ON 29-SEP-2009-					
Gross Opening Loan	3.05	3.05	3.05	3.05	3.05
Cumulative Repayments of Loans upto Previous Year	0.25	0.50	0.75	1.00	1.25
Net Loans Opening	2.80	2.55	2.30	2.05	1.80
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	0.25	0.25	0.25	0.25	0.25
Net Closing Loan	2.55	2.30	2.05	1.80	1.55
Average Net Loan	2.68	2.43	2.18	1.93	1.68
Rate of Interest on Loan (%)	8.80	8.80	8.80	8.80	8.80
Interest on Loan	0.24	0.21	0.19	0.17	0.15
BOND XXX-ADDCAP FOR 2010-2011 LOAN 1-					
Gross Opening Loan	44.95	44.95	44.95	44.95	44.95
Cumulative Repayments of Loans upto Previous Year	3.75	7.50	11.25	15.00	18.75
Net Loans Opening	41.20	37.45	33.70	29.95	26.20
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	3.75	3.75	3.75	3.75	3.75
Net Closing Loan	37.45	33.70	29.95	26.20	22.45
Average Net Loan	39.33	35.58	31.83	28.08	24.33
Rate of Interest on Loan (%)	8.80	8.80	8.80	8.80	8.80
Interest on Loan	3.46	3.13	2.80	2.47	2.14
BOND XXXI-ADDCAP FOR 2010-2011 LOAN 2-					
Gross Opening Loan	46.00	46.00	46.00	46.00	46.00
Cumulative Repayments of Loans upto Previous Year	3.83	7.66	11.49	15.32	19.15
Net Loans Opening	42.17	38.34	34.51	30.68	26.85
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	3.83	3.83	3.83	3.83	3.83
Net Closing Loan	38.34	34.51	30.68	26.85	23.02
Average Net Loan	40.26	36.43	32.60	28.77	24.94
Rate of Interest on Loan	8.90	8.90	8.90	8.90	8.90
Interest on Loan	3.58	3.24	2.90	2.56	2.22



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
BOND XXXIV-ADDCAP FOR 2010-2011 LOAN 3-					
Gross Opening Loan	192.96	192.96	192.96	192.96	192.96
Cumulative Repayments of Loans upto Previous Year	0.00	16.08	32.16	48.24	64.32
Net Loans Opening	192.96	176.88	160.80	144.72	128.64
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	16.08	16.08	16.08	16.08	16.08
Net Closing Loan	176.88	160.80	144.72	128.64	112.56
Average Net Loan	184.92	168.84	152.76	136.68	120.60
Rate of Interest on Loan	8.84	8.84	8.84	8.84	8.84
Interest on Loan	16.35	14.93	13.50	12.08	10.66
BOND XXIV-ADDCAP FOR 2010-2011 LOAN 4-					
Gross Opening Loan	30.91	30.91	30.91	30.91	30.91
Cumulative Repayments of Loans upto Previous Year	0.00	2.58	5.16	7.74	10.32
Net Loans Opening	30.91	28.33	25.75	23.17	20.59
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	2.58	2.58	2.58	2.58	2.58
Net Closing Loan	28.33	25.75	23.17	20.59	18.01
Average Net Loan	29.62	27.04	24.46	21.88	19.30
Rate of Interest on Loan	8.84	8.84	8.84	8.84	8.84
Interest on Loan	2.62	2.39	2.16	1.93	1.71
BOND XXXIV-ADDCAP FOR 2012-2013 LOAN 5-					
Gross Opening Loan	48.69	48.69	48.69	48.69	48.69
Cumulative Repayments of Loans upto Previous Year	0.00	4.06	8.12	12.18	16.24
Net Loans Opening	48.69	44.63	40.57	36.51	32.45
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	4.06	4.06	4.06	4.06	4.06
Net Closing Loan	44.63	40.57	36.51	32.45	28.39
Average Net Loan	46.66	42.60	38.54	34.48	30.42
Rate of Interest on Loan	8.84	8.84	8.84	8.84	8.84
Interest on Loan	4.12	3.77	3.41	3.05	2.69



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Summary					
Gross Opening Loan	3290.61	3290.61	3290.61	3290.61	3290.61
Cumulative Repayments of Loans upto Previous Year	711.67	985.89	1260.11	1534.33	1808.55
Net Loans Opening	2578.94	2304.72	2030.50	1756.28	1482.06
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	274.22	274.22	274.22	274.22	274.22
Net Closing Loan	2304.72	2030.50	1756.28	1482.06	1207.84
Average Net Loan	2441.83	2167.61	1893.39	1619.17	1344.95
Rate of Interest on Loan (%)	9.2747	9.2737	9.2723	9.2705	9.2679
Interest on Loan	226.47	201.02	175.56	150.11	124.65

