CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No.159/TT/2014

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

Date of Hearing: 17.09.2015 Date of Order: 07.10.2015

In the Matter of

Approval under regulation-86 of CERC (Conduct of Business) Regulations'1999, CERC (Terms and Conditions of Tariff) Regulations, 2009 and CERC (Terms and Conditions of Tariff) Regulations' 2014 for determination of (i) Truing up Transmission tariff for 2009-14 tariff block and (ii) Transmission tariff for 2014-19 tariff block for combined assets of Tarapur transmission System associated with Tarapur Atomic Station Stages 3 & 4 in Western Region.

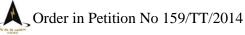
And in the Matter of

Power Grid Corporation of India Ltd, <u>Registered office</u>: B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi. 110 016. <u>Corporate Centre</u>: 'SAUDAMINI', Plot No-2, Sector-29, Gurgaon-122 001 (Haryana).

.....Petitioner

Versus

- Madhya Pradesh Power Trading Co. Ltd. Shakti bhawan, Rampur Jabalpur - 482 008
- Maharashtra State Electricity Distribution Co. Ltd. Prakashgad, 4th floor Andheri (east), Mumbai - 400 052
- Gujarat Urja Vikas Nigam Ltd. Sardar Patel Vidyut Bhawan, Race Course Road Vadodara - 390 007



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

.....Respondents

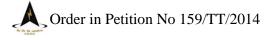
The following were present:

For Petitioner: Shri A.M.Pavgi, PGCIL Shri M.M. Mondal, PGCIL Shri R.Prasad, PGCIL Shri Mohd. Mohsin, PGCIL

For Respondents: None

<u>ORDER</u>

The petition has been preferred by Power Grid Corporation of India Ltd, 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 Regulations") based on truing up of 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 Regulations") for the period



from 1.4.2014 to 31.3.2019 in respect of combined assets of Tarapur transmission System associated with Tarapur Atomic Station Stages 3 & 4 in Western Region.(hereinafter referred to as "transmission system").

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

3. The petitioner has built the transmission system in Western Region and the same has been put under commercial operation w.e.f. dated 1.9.2005. The petitioner had approached the Commission vide Petition No. 194/2010 for determination of tariff for 2009-14 tariff period. The Commission, on 11.3.2011, had approved the tariff based on the admitted capital cost of ₹ 26,854.06 lakh as on 31.3.2009 as given below:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	1344.57	1344.57	1344.57	1344.57	1344.57
Interest on Loan	1194.41	1097.82	1000.72	903.67	806.73
Return on Equity	1090.55	1090.55	1090.55	1090.55	1090.55
Interest on Working Capital	133.82	135.14	136.64	138.33	140.24
O & M Expenses	1163.00	1229.59	1299.98	1374.27	1452.81
Total	4926.35	4897.67	4872.45	4851.39	4834.90

4. As per Regulation 6 of the 2009 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 Regulations, the petitioner is required to adjust the yearly impact of MAT rate in the truing up petition for 2009-14 tariff period. The petitioner has submitted that in case interest on loan was calculated on basis of prevailing rates for the determination of tariff, any change in the rate of interest subsequently during the tariff period will be considered at the time of truing up. In this context, the petitioner has relied upon the Commission's order dated 8.6.2011 in Petition No. 238/2010.

5. The petitioner has made following submissions in regard to revision of tariff in accordance with Regulation 6 of the 2009 Regulations for 2009-14:

- a) The additional capital expenditure during the 2009-14 tariff period is NIL and hence, the tariff has been claimed based on the admitted capital cost of ₹
 26,854.06 lakh by the Commission in order dated 11.3.2011 in Petition No 194/2010;
- b) 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 ROE has been furnished as under:

Year	MAT Rate (in %)	Grossed up ROE (Base rate/(1-t) (in %)
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

c) The petitioner has claimed the interest on loan based on actual interest rates for each year during the 2009-14 period and also submitted relevant documents vide affidavit dated 26.6.2014.

6. Based on aforesaid, the petitioner has claimed the revision of tariff for 2009-14 tariff period as under:

(₹in lakh)

Period	2009-10	2010-11	2011-12	2012–13	2013-14
Revised AFC based on	5002.32	5017.21	4993.20	4972.15	4970.50
truing up	3002.32	3017.21	4993.20	4972.13	4970.30

7. The petitioner has further claimed the transmission tariff for the period 2014-19 in accordance with the 2014 Regulations as follows:

(₹in lakh)

Period	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Cost	4763.32	4711.56	4662.22	4618.42	3674.57

8. The petitioner has made following submissions in regard to determination of tariff for 2014-19 :

- a) The depreciation has been claimed in accordance with Regulation 27 of the 2014 Regulations;
- b) The petitioner has prayed for grossing up of ROE at MAT rate of 20.961% prevailing in 2013-14 which shall be trued up with actual tax rate in accordance with clause 25 (3) of the 2014 Regulations;
- c) The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future;
- d) The petitioner has considered interest on loan on the basis of rate prevailing as on 1.4.2014 and prayed that the change in Interest Rate due to floating rate of interest applicable, if any, during 2014-19 period will be adjusted;
- e) The wage revision of the employees of the petitioner company is due during 2014-19 and actual impact of wage hike will be effective from a future date. The scheme of wage revision applicable to CPSUs being binding on the petitioner, the petitioner sought liberty to approach the Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike, if any, during 2014-19.

9. The petitioner has served the petition to the respondents and notice of this application has been published in the news paper in accordance with the CERC (Procedure for making of application for determination of tariff, Publication of the

application and other related matters) Regulations, 2004. No submissions have been made by the Respondents. No comments/objections have been received from the public in response to the notice in newspaper. The hearing in this matter was held on 17.9.2015.

TRUE UP ANNUAL FIXED CHARGES FOR 2009-14 PERIOD

10. We have considered the submissions of the petitioner in respect of truing up of annual fixed charged for 2009-14 tariff period. The revision of tariff for 2009-14 period has been determined as discussed below:

- a) The capital cost of ₹ 26,854.06 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 tariff in accordance with Regulation 7 of the 2009 Regulations;
- b) The petitioner has not claimed any additional capital expenditure for 2009-14 period;
- c) The Regulation 15 of the 2009 Regulations provides for the grossing up of ROE with the actual tax rate for the purpose of return on equity. The petitioner has submitted the MAT rate applicable during the various years. Return on equity has been worked out by considering year wise MAT rate submitted by the petitioner in accordance with Regulation 15 of the 2009 Regulations;
- d) Regulation 16 of the 2009 Regulations provide the methodology for working out weighted average rate of interest on loan. The Commission in its earlier order dated 8.6.2011 in Petition No. 238/2010 has 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. Accordingly, the interest on loan has been worked out;

e) Depreciation, Interest on Working Capital and Operation & Maintenance Expenses has been considered in accordance with the 2009 Regulations.

11. Accordingly, the annual fixed charges for the transmission system under the petition has been worked out and allowed as under:

(₹in lakh)

				-	·
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Block					
Opening Gross Block	26854.06	26854.06	26854.06	26854.06	26854.06
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	26854.06	26854.06	26854.06	26854.06	26854.06
Average Gross Block	26854.06	26854.06	26854.06	26854.06	26854.06
Depreciation					
Rate of Depreciation	5.0069%	5.0069%	5.0069%	5.0069%	5.0069%
Depreciable Value	23430.24	23430.24	23430.24	23430.24	23430.24
Remaining Depreciable Value	19944.35	18599.78	17255.21	15910.64	14566.07
Depreciation	1344.57	1344.57	1344.57	1344.57	1344.57
Interest on Loan					
Gross Normative Loan	20615.58	20615.58	20615.58	20615.58	20615.58
Cumulative Repayment upto	3485.89	4830.46	6175.03	7519.60	8864.17
Previous Year					
Net Loan-Opening	17129.69	15785.12	14440.55	13095.98	11751.41
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	1344.57	1344.57	1344.57	1344.57	1344.57
Net Loan-Closing	15785.12	14440.55	13095.98	11751.41	10406.84
Average Loan	16457.41	15112.84	13768.27	12423.70	11079.13
Weighted Average Rate of	7.2576%	7.2642%	7.2683%	7.2738%	7.2815%
Interest on Loan #					
Interest	1194.41	1097.82	1000.72	903.67	806.73
Determine Freedom					
Return on Equity	(229.49	(229.49	(220.40	(220.40	(220.40
Opening Equity Additions	6238.48	6238.48	6238.48	6238.48	6238.48
	0.00 6238.48	0.00 6238.48	0.00 6238.48	0.00 6238.48	0.00 6238.48
Closing Equity					
Average Equity	6238.48	6238.48	6238.48	6238.48	6238.48
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for the respective	16.9950%	19.9305%	20.0078%	20.0078%	20.9605
year Data of Datum on Equity	19 67 40/	10.2590/	10.2770/	10.2770/	% 19.610%
Rate of Return on Equity	18.674%	19.358%	19.377%	19.377%	19.010%

Return on Equity	1164.97	1207.64	1208.83	1208.83	1223.37
Interest on Working Capital					
Maintenance Spares	174.45	184.44	195.00	206.14	217.92
O & M expenses	96.92	102.47	108.33	114.52	121.07
Receivables	833.72	836.20	832.20	828.69	828.41
Total	1,105.09	1,123.11	1,135.53	1,149.35	1,167.40
Interest	135.37	137.58	139.10	140.80	143.01
Annual Transmission Charges					
Depreciation	1344.57	1344.57	1344.57	1344.57	1344.57
Interest on Loan	1194.41	1097.82	1000.72	903.67	806.73
Return on Equity	1164.97	1207.64	1208.83	1208.83	1223.37
Interest on Working Capital	135.37	137.58	139.10	140.80	143.01
O & M Expenses	1163.00	1229.59	1299.98	1374.27	1452.81
Total	5002.32	5017.21	4993.20	4972.14	4970.48

Details enclosed in Annexure-1

ANNUAL FIXED CHARGES FOR 2014-19

12. We have considered the submissions of the petitioner in respect of tariff for 2014-19 tariff period. The tariff for 2014-19 period has been determined as discussed below:

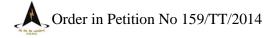
- a) The capital cost of ₹ 26,854.06 lakh admitted by the Commission as on 31.3.2014 has been considered as opening capital cost as on 1.4.2014 for determination of tariff in accordance with Regulation 9 of the 2014 Regulations;
- b) The petitioner has not claimed any projected additional capital expenditure during 2014-19 period;
- c) The Regulation 24 read with Regulation 25 of the 2014 Regulations provides the grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on

equity. 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 return on equity which shall be trued up with actual tax rate in accordance with clause 25 (3) of the 2014 Regulations;

- d) The weighted average interest on loan 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 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 interest on loan has been worked out in accordance with Regulation 26 of the 2014 Regulations;
- e) Life of the assets covered in the instant petition works out to 31 years as per Regulation 27 of the 2014 Regulations. Further, asset has completed 12 years on 31.8.2017, thus depreciation till 2017-18 has been calculated by straight line method and for 2018-19 has been calculated based on the remaining depreciable value to be recovered in the balance useful life.
- f) Interest on Working Capital and Operation & Maintenance Expenses have been considered in accordance with the 2014 Regulations.

13. Accordingly, the annual fixed charges for the transmission asset under the petition has been worked out and allowed as under:

					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Block					
Opening Gross Block	26854.06	26854.06	26854.06	26854.06	26854.06
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	26854.06	26854.06	26854.06	26854.06	26854.06
Average Gross Block	26854.06	26854.06	26854.06	26854.06	26854.06



Depreciation	5.00(00/	5 00 000	5.00/00/	5.00/00/	5.00000
Rate of Depreciation	5.0069%	5.0069%	5.0069%	5.0069%	5.0069%
Depreciable Value	23430.24	23430.24	23430.24	23430.24	23430.24
Elapsed Life (Beginning of the year)	8	9	10	11	12
Weighted Balance Useful life of					
the combine assets	23	22	21	20	19
Remaining Depreciable Value	13221.50	11876.93	10532.37	9187.80	7843.23
Depreciation	1344.57	1344.57	1344.57	1344.57	412.80
Interest on Loan					
Gross Normative Loan	20615.58	20615.58	20615.58	20615.58	20615.58
Cumulative Repayment upto	10208.74	11553.31	12897.87	14242.44	15587.01
Previous Year					
Net Loan-Opening	10406.84	9062.27	7717.71	6373.14	5028.57
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	1344.57	1344.57	1344.57	1344.57	412.80
Net Loan-Closing	9062.27	7717.71	6373.14	5028.57	4615.77
Average Loan	9734.56	8389.99	7045.42	5700.85	4822.17
Weighted Average Rate of Interest	7.2932%	7.3128%	7.3527%	7.4798%	7.9871%
on Loan ##					
Interest	709.96	613.55	518.03	426.41	385.15
Return on Equity					
Opening Equity	6238.48	6238.48	6238.48	6238.48	6238.48
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	6238.48	6238.48	6238.48	6238.48	6238.48
Average Equity	6238.48	6238.48	6238.48	6238.48	6238.48
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for FY 2014-15	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	1223.37	1223.37	1223.37	1223.37	1223.37
Interest on Working Capital					
Maintenance Spares	200.42	207.09	213.96	221.06	228.39
O & M expenses	111.35	115.05	118.87	122.81	126.88
Receivables	793.89	785.26	777.03	769.73	612.43
Total	1,105.66	1,107.39	1,109.86	1,113.60	967.70
Interest	1,105.00	1,107.59	1,109.80	1,113.00	<u> </u>
Interest	147.20	147.50	147.05	150.54	130.04
Annual Transmission Charges					
Depreciation	1344.57	1344.57	1344.57	1344.57	412.80
Interest on Loan	709.96	613.55	518.03	426.41	385.15
Return on Equity	1223.37	1223.37	1223.37	1223.37	1223.37
Interest on Working Capital	149.26	149.50	149.83	150.34	130.64
O & M Expenses	1336.16	1380.57	1426.41	1473.72	1522.61
Total	4763.32	4711.55	4662.21	4618.40	3674.57

Details enclosed in Annexure-2



14. 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 42 of the 2009 Tariff Regulations.

15. The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future. In our view, the petitioner's prayer is premature at this stage and cannot be entertained.

16. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42A (1) (b) of the 2009 Regulations for 2009-14 period and in accordance with Regulation 52 (2) (b) of the 2014 Regulations.

17. The petitioner has submitted that O&M Expenses for the year 2014-19 had been arrived at on the basis of normalized actual O&M Expenses during the period 2008-13. 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 tariff block 2014-19. 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 have considered the submission of the petitioner. We would like to clarify that any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Regulations.

18. The petitioner is directed to work out the tax on return on equity and the deferred tax liability for the period 2014-19 as per the observations made in order dated 15.4.2015 in Petition No. 532/TT/2014.



Sharing of Transmission Charges

19. 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 Regulations.

20. This order disposes of Petition No. 159/TT/2014.

sd/-

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sd/-

(Dr. M.K. Iyer) Member (A.S. Bakshi) Member (A.K. Singhal) Member

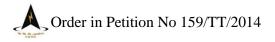


Annexure-1

	CALCULATION OF WEIGH	ITED AVEI	RAGE RATE	OF INTERE	ST ON LOA	N
		-	-	-	-	(₹ in lakh)
	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
1	BOND XII					
	Gross loan opening	39.00	39.00	39.00	39.00	39.00
	Cumulative Repayment upto	13.00	16.25	19.50	22.75	26.00
	DOCO/previous year					
	Net Loan-Opening	26.00	22.75	19.50	16.25	13.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	3.25	3.25	3.25	3.25	3.25
	Net Loan-Closing	22.75	19.50	16.25	13.00	9.75
	Average Loan	24.38	21.13	17.88	14.63	11.38
	Rate of Interest	9.70%	9.70%	9.70%	9.70%	9.70%
	Interest	2.36	2.05	1.73	1.42	1.10
	Repayment Schedule	2.30			om 28.03.200	
	Repayment Schedule				JII 20.05.200	
2	Bond XV					
	Gross loan opening	2650.00	2650.00	2650.00	2650.00	2650.00
	Cumulative Repayment upto	441.66	662.49	883.33	1104.16	1324.99
	DOCO/previous year					
	Net Loan-Opening	2208.34	1987.51	1766.67	1545.84	1325.01
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	220.83	220.83	220.83	220.83	220.83
	Net Loan-Closing	1987.51	1766.67	1545.84	1325.01	1104.17
	Average Loan	2097.92	1877.09	1656.26	1435.42	1214.59
	Rate of Interest	6.68%	6.68%	6.68%	6.68%	6.68%
	Interest	140.14	125.39	110.64	95.89	81.13
	Repayment Schedule	110111			om 28.02.200	
					<u>JIII 20.02.200</u>	
3	Bond XVI					
	Gross loan opening	12330.00	12330.00	12330.00	12330.00	12330.00
	Cumulative Repayment upto	1233.00	2466.00	3699.00	4932.00	6165.00
	DOCO/previous year					
	Net Loan-Opening	11097.00	9864.00	8631.00	7398.00	6165.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	1233.00	1233.00	1233.00	1233.00	1233.00
	Net Loan-Closing	9864.00	8631.00	7398.00	6165.00	4932.00
	Average Loan	10480.50	9247.50	8014.50	6781.50	5548.50
	Rate of Interest	7.10%	7.10%	7.10%	7.10%	7.10%
	Interest	744.12	656.57	569.03	481.49	393.94
	Repayment Schedule	,			om 18.02.200	
						-
4	Bond XVIII (Add Cap for 2005-06)					
	Gross loan opening	250.00	250.00	250.00	250.00	250.00
	Cumulative Repayment upto	0.00	20.83	41.67	62.50	83.33
	DOCO/previous year					
	Net Loan-Opening	250.00	229.17	208.33	187.50	166.67



	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	20.83	20.83	20.83	20.83	20.83
	Net Loan-Closing	229.17	208.33	187.50	166.67	145.83
	Average Loan	239.58	218.75	197.92	177.08	156.25
	Rate of Interest	8.15%	8.15%	8.15%	8.15%	8.15%
	Interest	19.53	17.83	16.13	14.43	12.73
	Repayment Schedule		12 Annual In	stalments fro	om 09.03.2010)
5	Bond XIII - option I					
	Gross loan opening	950.00	950.00	950.00	950.00	950.00
	Cumulative Repayment upto DOCO/previous year	237.50	316.67	395.83	475.00	554.17
	Net Loan-Opening	712.50	633.33	554.17	475.00	395.83
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	79.17	79.17	79.17	79.17	79.17
	Net Loan-Closing	633.33	554.17	475.00	395.83	316.67
	Average Loan	672.92	593.75	514.58	435.42	356.25
	Rate of Interest	8.63%	8.63%	8.63%	8.63%	8.63%
	Interest	58.07	51.24	44.41	37.58	30.74
	Repayment Schedule		12 Annual In	stalments fro	om 31.07.2006	5
6	Bond XIX (Add Cap for 2006-07)					
	Gross loan opening	160.00	160.00	160.00	160.00	160.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	13.33	26.67	40.00
	Net Loan-Opening	160.00	160.00	146.67	133.33	120.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	13.33	13.33	13.33	13.33
	Net Loan-Closing	160.00	146.67	133.33	120.00	106.67
	Average Loan	160.00	153.33	140.00	126.67	113.33
	Rate of Interest	9.25%	9.25%	9.25%	9.25%	9.25%
	Interest	14.80	14.18	12.95	11.72	10.48
	Repayment Schedule		12 Annual In	stalments fro	om 24.07.2010)
7	Bond XXII (Add Cap for 2006-07)					
	Gross loan opening	735.00	735.00	735.00	735.00	735.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	61.25	122.50	183.75
	Net Loan-Opening	735.00	735.00	673.75	612.50	551.25
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	61.25	61.25	61.25	61.25
	Net Loan-Closing	735.00	673.75	612.50	551.25	490.00
	Average Loan	735.00	704.38	643.13	581.88	520.63
	Rate of Interest	8.68%	8.68%	8.68%	8.68%	8.68%
	Interest	63.80	61.14	55.82	50.51	45.19
	Repayment Schedule		12 Annual In	stalments fro	om 07.12.2010)



8	Bridge Financing from IOB w.e.f. 01.08.2005 upto 21.09.2005 /Bond-XVII w.e.f 22.09.2005					
	Gross loan opening	2400.00	2400.00	2400.00	2400.00	2400.00
	Cumulative Repayment upto	0.00	240.00	480.00	720.00	960.00
	DOCO/previous year					
	Net Loan-Opening	2400.00	2160.00	1920.00	1680.00	1440.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	240.00	240.00	240.00	240.00	240.00
	Net Loan-Closing	2160.00	1920.00	1680.00	1440.00	1200.00
	Average Loan	2280.00	2040.00	1800.00	1560.00	1320.00
	Rate of Interest	7.39%	7.39%	7.39%	7.39%	7.39%
	Interest	168.49	150.76	133.02	115.28	97.55
	Repayment Schedule		10 Annual In	stalments fro	om 22.09.200	9
	Total Loan					
	Gross loan opening	19514.00	19514.00	19514.00	19514.00	19514.00
	Cumulative Repayment upto	1925.16	3722.24	5593.91	7465.58	9337.24
	DOCO/previous year					
	Net Loan-Opening	17588.84	15791.76	13920.09	12048.42	10176.76
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	1797.08	1871.67	1871.67	1871.67	1871.67
	Net Loan-Closing	15791.76	13920.09	12048.42	10176.76	8305.09
	Average Loan	16690.30	14855.92	12984.26	11112.59	9240.92
	Weighted Average Rate of Interest	7.2576%	7.2642%	7.2683%	7.2738%	7.2815%
	Interest	1211.31	1079.16	943.73	808.31	672.88



Annexure-2

	CALCULATION OF WEIGHTE	D AVERAG	E RATE OF	F INTERES	T ON LOAN	N
						(₹ in lakh)
	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
1	BOND XII					
	Gross loan opening	39.00	39.00	39.00	39.00	39.00
	Cumulative Repayment upto DOCO/previous year	29.25	32.50	35.75	39.00	39.00
	Net Loan-Opening	9.75	6.50	3.25	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	3.25	3.25	3.25	0.00	0.00
	Net Loan-Closing	6.50	3.25	0.00	0.00	0.00
	Average Loan	8.13	4.88	1.63	0.00	0.00
	Rate of Interest	9.70%	9.70%	9.70%	9.70%	9.70%
	Interest	0.79	0.47	0.16	0.00	0.00
	Repayment Schedule		Annual Inst			
		12			111 20.03.200	
2	Bond XV					
	Gross loan opening	2650.00	2650.00	2650.00	2650.00	2650.00
	Cumulative Repayment upto DOCO/previous year	1545.83	1766.67	1987.50	2208.33	2429.17
	Net Loan-Opening	1104.17	883.33	662.50	441.67	220.83
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	220.83	220.83	220.83	220.83	220.83
	Net Loan-Closing	883.33	662.50	441.67	220.83	0.00
	Average Loan	993.75	772.92	552.08	331.25	110.42
	Rate of Interest	6.68%	6.68%	6.68%	6.68%	6.68%
	Interest	66.38	51.63	36.88	22.13	7.38
	Repayment Schedule	12	Annual Inst	talments fro	m 28.02.200	08
3	Bond XVI	10000.00	10000.00	10000.00	10000.00	10000.00
	Gross loan opening	12330.00	12330.00	12330.00	12330.00	12330.00
	Cumulative Repayment upto DOCO/previous year	7398.00	8631.00	9864.00	11097.00	12330.00
	Net Loan-Opening	4932.00	3699.00	2466.00	1233.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	1233.00	1233.00	1233.00	1233.00	0.00
	Net Loan-Closing	3699.00	2466.00	1233.00	0.00	0.00
	Average Loan	4315.50	3082.50	1849.50	616.50	0.00
	Rate of Interest	7.10%	7.10%	7.10%	7.10%	7.10%
	Interest	306.40	218.86	131.31	43.77	0.00
	Repayment Schedule	10	m 18.02.200)9		
4	Bond XVIII (Add Cap for 2005 06)					
4	Bond XVIII (Add Cap for 2005-06)	250.00	250.00	250.00	250.00	250.00
	Gross loan opening	250.00	250.00	250.00	250.00	250.00
	Cumulative Repayment upto DOCO/previous year	104.17	125.00	145.83	166.67	187.50
	Net Loan-Opening	145.83	125.00	104.17	83.33	62.50



	Additions during the year	0.00	0.00	0.00	0.00	0.00		
	Repayment during the year	20.83	20.83	20.83	20.83	20.83		
	Net Loan-Closing	125.00	104.17	83.33	62.50	41.67		
	Average Loan	135.42	114.58	93.75	72.92	52.08		
	Rate of Interest	8.15%	8.15%	8.15%	8.15%	8.15%		
	Interest	11.04	9.34	7.64	5.94	4.24		
	Repayment Schedule							
5	Bond XIII - option I							
	Gross loan opening	950.00	950.00	950.00	950.00	950.00		
	Cumulative Repayment upto	633.33	712.50	791.67	870.83	950.00		
	DOCO/previous year							
	Net Loan-Opening	316.67	237.50	158.33	79.17	0.00		
	Additions during the year	0.00	0.00	0.00	0.00	0.00		
	Repayment during the year	79.17	79.17	79.17	79.17	0.00		
	Net Loan-Closing	237.50	158.33	79.17	0.00	0.00		
	Average Loan	277.08	197.92	118.75	39.58	0.00		
	Rate of Interest	8.63%	8.63%	8.63%	8.63%	8.63%		
	Interest	23.91	17.08	10.25	3.42	0.00		
	Repayment Schedule	12 Annual Instalments from 31.07.2006						
6	Bond XIX (Add Cap for 2006-07)							
	Gross loan opening	160.00	160.00	160.00	160.00	160.00		
	Cumulative Repayment upto	53.33	66.67	80.00	93.33	106.67		
	DOCO/previous year							
	Net Loan-Opening	106.67	93.33	80.00	66.67	53.33		
	Additions during the year	0.00	0.00	0.00	0.00	0.00		
	Repayment during the year	13.33	13.33	13.33	13.33	13.33		
	Net Loan-Closing	93.33	80.00	66.67	53.33	40.00		
	Average Loan	100.00	86.67	73.33	60.00	46.67		
	Rate of Interest	9.25%	9.25%	9.25%	9.25%	9.25%		
	Interest	9.25	8.02	6.78	5.55	4.32		
	Repayment Schedule	12 Annual Instalments from 24.07.2010						
7	Bond XXII (Add Cap for 2006-07)							
	Gross loan opening	735.00	735.00	735.00	735.00	735.00		
	Cumulative Repayment upto	245.00	306.25	367.50	428.75	490.00		
	DOCO/previous year							
	Net Loan-Opening	490.00	428.75	367.50	306.25	245.00		
	Additions during the year	0.00	0.00	0.00	0.00	0.00		
	Repayment during the year	61.25	61.25	61.25	61.25	61.25		
	Net Loan-Closing	428.75	367.50	306.25	245.00	183.75		
	Average Loan	459.38	398.13	336.88	275.63	214.38		
	Rate of Interest	8.68%	8.68%	8.68%	8.68%	8.68%		
	Interest	39.87	34.56	29.24	23.92	18.61		
	Repayment Schedule	12	Annual Inst	alments from	m 07.12.201	0		
-								
8	Bridge Financing from IOB w.e.f.							
	01.08.2005 upto 21.09.2005							
	/Bond-XVII w.e.f 22.09.2005							



Gross loan opening	2400.00	2400.00	2400.00	2400.00	2400.00	
Cumulative Repayment upto	1200.00	1440.00	1680.00	1920.00	2160.00	
DOCO/previous year						
Net Loan-Opening	1200.00	960.00	720.00	480.00	240.00	
Additions during the year	0.00	0.00	0.00	0.00	0.00	
Repayment during the year	240.00	240.00	240.00	240.00	240.00	
Net Loan-Closing	960.00	720.00	480.00	240.00	0.00	
Average Loan	1080.00	840.00	600.00	360.00	120.00	
Rate of Interest	7.39%	7.39%	7.39%	7.39%	7.39%	
Interest	79.81	62.08	44.34	26.60	8.87	
Repayment Schedule	10 Annual Instalments from 22.09.2009					
Total Loan						
Gross loan opening	19514.00	19514.00	19514.00	19514.00	19514.00	
Cumulative Repayment upto	11208.92	13080.58	14952.25	16823.92	18692.33	
DOCO/previous year						
Net Loan-Opening	8305.08	6433.42	4561.75	2690.08	821.67	
Additions during the year	0.00	0.00	0.00	0.00	0.00	
Repayment during the year	1871.67	1871.67	1871.67	1868.42	556.25	
Net Loan-Closing	6433.42	4561.75	2690.08	821.67	265.42	
Average Loan	7369.25	5497.58	3625.92	1755.88	543.54	
Weighted Average Rate of Interest	7.2932%	7.3128%	7.3527%	7.4798%	7.9871%	
Interest	537.46	402.03	266.60	131.34	43.41	

