CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 150/TT/2014

Coram:
Shri Gireesh B. Pradhan, Chairman
Shri A.K. Singhal, Member
Shri A.S. Bakshi, Member
Dr. M. K.lyer, Member

Date of Hearing: 28.01.2016 Date of Order : 16.02.2016

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 LILO of 400 kV S/C Chamera -1 Kishenpur transmission line at Chamera-II under transmission system associated with Chamera HEP Stage – II Transmission System in Northern Region.

And in the Matter of

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

.....Petitioner

Versus

- Rajasthan Rajya Vidyut Prasaran Nigam Ltd. Vidyut Bhawan, Vidyut Marg, Jaipur – 302 005.
- Ajmer Vidyut Vitran Nigam Ltd., 400 kV GSS Building (Ground Floor), Ajmer Road, Heerapura, Jaipur

- Jaipur Vidyut Vitran Nigam Ltd, 400 kV GSS Building (Ground Floor), Ajmer Road, Heerapura, Jaipur
- Jodhpur Vidyut Vitran Nigam Ltd, 400 kV GSS Building (Ground Floor), Ajmer Road, Heerapura, Jaipur
- Himachal Pradesh State Electricity Board, Vidyut Bhawan, Kumar House Complex Buidling II Shimla – 171 004
- Punjab State Power Corporation Ltd., Thermal SHED TIA Near 22 PHATAK Patiala – 147 001
- 7. Haryana Power Purchase Centre, Shakti Bhawan, Sector – 6 Panchkula (Haryana) 134109
- Power Development Deptt. Govt.of Jammu & Kashmir Mini Secretariat, Jammu
- Uttar Pradesh Power COrporation Ltd. (Formerly Uttar Pradesh State Electricity Board) Shakti Bhawan, 14, Ashok Marg, Lucknow – 226 001
- 10. Delhi Transco Ltd Shakti Sadan, Kotla Road, New Delhi – 110 002
- 11.BSES Yamuna Power Ltd. BSES Bhawan, Nehru Place, New Delhi
- 12. BSES Rajdhani Power Ltd. BSES Bhawan, Nehru Place, New Delhi

- 13. Tata Power Delhi Distribution Ltd.33 kV Substation, Building,Hudson Lane, Kingsway CampNew Delhi 110 009
- 14. Chandigarh AdministrationSector 9,Chandigarh
- 15. Uttarakhand Power Corporation Ltd.Urja BhawanKanwali RoadDehradun
- 16. North Central Railway Allahabad
- 17. New Delhi Municipal Council Palika Kendra, Sansad Marg, New Delhi – 110 002

.....Respondents

The following were present:

For Petitioner : Ms. Sangeeta Edwards, PGCIL

Sh. S.S.Raju, PGCIL

Sh. S.K. Venkatesan, PGCIL Sh. M.M. Mondal, PGCIL Sh. Rakesh Prasad, 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 Tariff 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 Tariff Regulations") for the period from 1.4.2014 to 31.3.2019 in respect of block for LILO of 400 kV S/C Chamera -1 Kishenpur transmission line at Chamera-II under transmission system associated with Chamera HEP Stage – II Transmission System in Northern Region. (hereinafter referred to as "transmission system").

- 2. The respondents are distribution licensees, who are procuring transmission service from the petitioner, mainly beneficiaries of Northern Region.
- 3. The petitioner has built the transmission system in Northern Region and the same has been put under commercial operation w.e.f. dated 1.8.2003. The petitioner had approached the Commission vide Petition No. 115/2010 for determination of tariff for 2009-14 tariff period. The Commission, on 20.10.2010 had approved the tariff based on the admitted capital cost of ₹4678.43 lakh for the instant asset as on 31.3.2009 as given below:

(₹in Lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	247.59	247.59	247.59	247.59	247.59
Interest on Loan	189.59	169.93	150.26	130.58	110.90
Return on Equity	208.65	208.65	208.65	208.65	208.65
Interest on Working Capital	14.58	14.23	13.89	13.55	13.21
O & M Expenses	22.30	23.58	24.93	26.35	27.84
Total	682.71	663.98	645.32	626.72	608.19

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. 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 20.10.2010 in Petition No. 115/2010.

- 5. The petitioner has made following submissions in regard to revision of tariff in accordance with Regulation 6 of the 2009 Tariff 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 ₹4678.43 lakh for the instant asset by the Commission in order dated 20.10.2010 in Petition No 115/2010.
 - 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 follows:

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)

Particulars	2009-10	2010 – 11	2011 -12	2012 – 13	2013 - 14
Revised AFC based	697.25	686.85	668.42	649.83	634.14
on truing up					

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

(₹ in Lakh)

Period	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Cost	612.57	593.27	395.36	389.09	380.31

- 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 Tariff 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 Tariff Regulations;
- 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.
- f) The petitioner has prayed for recovery of deferred tax liability before 1.4.2009 from the beneficiaries or the long term customers / DICs as and when the same gets materialized.
- g) The petitioner has prayed for recovery of the application fee, filing fee, expenses incurred on publication of Notices in News papers and License fee from the respondents in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014. The fees and charges to be paid by the petitioner as ISTS licensee (deemed ISTS licensee) under CERC (Fees and Charges of RLDC and other matters) Regulations as amended from time to time have also been prayed to be recoverable from the DICs as provided under clause 52(2) (a).
 - 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.

Further, submissions were made vide affidavit dated 7.8.2014 and 5.2.2016. Further, UPPCL has made its submission vide affidavit submitted on 17.12.2014. No submissions have been made by other 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 28.1.2016.

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 ₹4678.43 lakh for the instant Asset 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 Tariff Regulations;
 - b) The petitioner has not claimed any additional capital expenditure for 2009-14 period;
 - c) The Regulation 15 of the 2009 Tariff 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 Tariff Regulations;

- d) Regulation 16 of the 2009 Tariff 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 and details of weighted average rate of interest are placed at Annexure-1.
- 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	4678.43	4678.43	4678.43	4678.43	4678.43
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	4678.43	4678.43	4678.43	4678.43	4678.43
Average Gross Block	4678.43	4678.43	4678.43	4678.43	4678.43
Depreciation					
Rate of Depreciation	5.2922%	5.2922%	5.2922%	5.2922%	5.2922%
Depreciable Value	4210.59	4210.59	4210.59	4210.59	4210.59
Elapsed Life (Beginning of the year)	5	6	7	8	9
Weighted Balance Useful life of	30	29	28	27	26
the combine assets					
Remaining Depreciable Value	3253.45	3005.86	2758.27	2510.68	2263.08
Depreciation	247.59	247.59	247.59	247.59	247.59
Interest on Loan					
Gross Normative Loan	3484.86	3484.86	3484.86	3484.86	3484.86
Cumulative Repayment upto Previous Year	957.14	1204.73	1452.32	1699.91	1947.50
Net Loan-Opening	2527.72	2280.13	2032.54	1784.95	1537.36
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	247.59	247.59	247.59	247.59	247.59
Net Loan-Closing	2280.13	2032.54	1784.95	1537.36	1289.77
Average Loan	2403.92	2156.33	1908.74	1661.15	1413.56

Weighted Average Rate of	7.8869%	7.8804%	7.8721%	7.8610%	7.8453%
Interest on Loan	100.50	400.00	450.00	400.50	440.00
Interest	189.59	169.93	150.26	130.58	110.90
Return on Equity					
Opening Equity	1193.57	1193.57	1193.57	1193.57	1193.57
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	1193.57	1193.57	1193.57	1193.57	1193.57
Average Equity	1193.57	1193.57	1193.57	1193.57	1193.57
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for the 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	222.89	231.05	231.28	231.28	234.06
Interest on Working Capital					
Maintenance Spares	3.35	3.54	3.74	3.95	4.18
O & M expenses	1.86	1.97	2.08	2.20	2.32
Receivables	116.21	114.47	111.40	108.30	105.69
Total	121.41	119.98	117.22	114.45	112.18
Interest	14.87	14.70	14.36	14.02	13.74
Annual Transmission Charges					
Depreciation	247.59	247.59	247.59	247.59	247.59
Interest on Loan	189.59	169.93	150.26	130.58	110.90
Return on Equity	222.89	231.05	231.28	231.28	234.06
Interest on Working Capital	14.87	14.70	14.36	14.02	13.74
O & M Expenses	22.30	23.58	24.93	26.35	27.84
Total	697.24	686.85	668.42	649.82	634.13

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 ₹4678.43 lakh for the instant Asset 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 Tariff 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 Tariff 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 Tariff 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 and details of weighted average rate of interest are placed at Annexure-2.
- e) As the asset has completed 12 years of life during FY 2015-16. Accordingly, the remaining depreciable value of the Asset has been spread over based on the remaining depreciable value to be recovered in the balance useful life. from FY 2016-17 onwards.
- 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	(Kin lakn) 2018-19
Gross Block	2014-13	2013-10	2010-17	2017-10	2010-13
Opening Gross Block	4678.43	4678.43	4678.43	4678.43	4678.43
Opening Cross Block	4070.43	4070.43	4070.43	4070.43	4070.43
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	4678.43	4678.43	4678.43	4678.43	4678.43
Average Gross Block	4678.43	4678.43	4678.43	4678.43	4678.43
Depreciation					
Rate of Depreciation	5.2922%	5.2922%	1.4129%	1.4129%	1.4129%
Depreciable Value	4210.59	4210.59	4210.59	4210.59	4210.59
Elapsed Life (Beginning of the	10	11	12	13	14
year)					
Weighted Balance Useful life of	25	24	23	22	21
the combine assets	2015 40	1767.00	1500.01	1454 04	1200 11
Remaining Depreciable Value	2015.49	1767.90	1520.31	1454.21	1388.11
Depreciation	247.59	247.59	66.10	66.10	66.10
Interest on Loan	0.40.4.00	0.40.4.00	0.40.4.00	0.40.4.00	0.40.4.00
Gross Normative Loan	3484.86	3484.86	3484.86	3484.86	3484.86
Cumulative Repayment upto Previous Year	2195.09	2442.68	2690.27	2756.37	2822.47
Net Loan-Opening	1289.77	1042.18	794.59	728.49	662.39
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	247.59	247.59	66.10	66.10	66.10
Net Loan-Closing	1042.18	794.59	728.49	662.39	596.29
Average Loan	1165.97	918.38	761.54	695.44	629.34
Weighted Average Rate of Interest	7.8214%	7.7809%	7.6965%	7.4151%	6.6806%
on Loan	7.021470	7.700970	7.090576	7.413170	0.000078
Interest	91.20	71.46	58.61	51.57	42.04
Return on Equity				I .	
Opening Equity	1193.57	1193.57	1193.57	1193.57	1193.57
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	1193.57	1193.57	1193.57	1193.57	1193.57
Average Equity	1193.57	1193.57	1193.57	1193.57	1193.57
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	234.06	234.06	234.06	234.06	234.06
Interest on Working Capital	, .	, .			
Maintenance Spares	3.77	3.90	4.03	4.16	4.30
O & M expenses	2.10	2.17	2.24	2.31	2.39
Receivables	102.09	98.88	65.89	64.85	63.39
Total	107.96	104.94	72.14	71.31	70.06
Interest	14.57	14.17	9.74	9.63	9.46

Annual Transmission Charges					
Depreciation	247.59	247.59	66.10	66.10	66.10
Interest on Loan	91.20	71.46	58.61	51.57	42.04
Return on Equity	234.06	234.06	234.06	234.06	234.06
Interest on Working Capital	14.57	14.17	9.74	9.63	9.46
O & M Expenses	25.14	25.99	26.85	27.74	28.66
Total	612.56	593.26	395.36	389.10	380.32

- 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 52 (1) of the 2014 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.
- 16. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42A (1) (b) of the 2009 Tariff Regulations for 2009-14 period and in accordance with Regulation 52 (2) (b) of the 2014 Tariff Regulations. The petitioner shall also be entitled for recovery of RLDC fee & charges in accordance with 42 A (1) (a) of 2009 Tariff Regulations for 2009-14 period and Regulations 52 (2) (a) of the Tariff 2014 Tariff Regulations for 2014-19 period.
- 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 Tariff Regulations.

Sharing of Transmission Charges

- 18. 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.
- 19. This order disposes of Petition No.150/TT/2014.

Sd/- Sd/- Sd/- Sd/
(Dr. M.K. Iyer) (A.S. Bakshi) (A.K. Singhal) (Gireesh B. Pradhan)

Member Member Chairperson

Annexure - 1

Cumulative Repayment upto DOCO/previous year 554.50 739.33 924.16 1108.99 1293.82 Net Loan-Opening 1663.50 1478.67 1293.84 1109.01 924.18 Additions during the year 0.00 0.00 0.00 0.00 0.00 Repayment during the year 184.83 184.10 184.10		CALCULATION OF WEIGH	ΓED AVERA	GE RATE C	F INTERES	ST ON LOA	N
1 Bond XIII Option						(Rs	s. in Lacs)
Gross loan opening 2218.00 200.00 20.00		Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
Gross loan opening 2218.00 200.00 20.00							
Cumulative Repayment upto DOCO/previous year 554.50 739.33 924.16 1108.99 1293.82 Net Loan-Opening 1663.50 1478.67 1293.84 1109.01 924.18 Additions during the year 0.00 0.00 0.00 0.00 0.00 Repayment during the year 184.83	1	Bond XIII Option I					
DOCO/previous year Net Loan-Opening 1663.50 1478.67 1293.84 1109.01 924.18 Additions during the year 184.83 184.83 184.83 184.83 184.83 184.83 Net Loan-Closing 1478.67 1293.84 1109.01 924.18 739.35 Average Loan 1571.09 1386.26 1201.43 1016.60 831.77 Rate of Interest 8.63% 8.63% 8.63% 8.63% 8.63% 8.63% 8.63% Rep Schedule 12 Annual Installments w.e.f 31.07.2006		. ,					2218.00
Additions during the year 0.00		DOCO/previous year	554.50	739.33	924.16	1108.99	1293.82
Repayment during the year 184.83 183.75 183.07			1663.50	1478.67	1293.84	1109.01	924.18
Net Loan-Closing		Additions during the year	0.00	0.00	0.00	0.00	0.00
Average Loan		Repayment during the year	184.83	184.83	184.83	184.83	184.83
Rate of Interest 8.63% 71.78 70.78 80.79 80.79 80.79 80.79 80.79 80.79 80.79 80.79 80.79 80.79 80.79 80.79 80.79 80.79 80.79 80.79 80.79 80.79 80.79		Net Loan-Closing	1478.67	1293.84	1109.01	924.18	739.35
Interest		Average Loan	1571.09	1386.26	1201.43	1016.60	831.77
Rep Schedule 12 Annual Installments w.e.f 31.07.2006 2 Bond XV Coross loan opening 1222.00 1242.00 1242.00 1242.00 124		Rate of Interest	8.63%	8.63%	8.63%	8.63%	8.63%
2 Bond XV Gross loan opening 1222.00 611.02 611.02 611.02 611.02 611.02 611.02 611.02 611.03 611.03 611.03 611.03 611.03 611.03 611.03 611.03 611.03 611.03 611.03 611.03 611.03 61.03 61.03 61.03 61.03 61.03 61.03		Interest	135.58	119.63	103.68	87.73	71.78
Gross loan opening 1222.00 10.08 610.98 610.98 610.98 611.02 611.02 611.02 611.02 611.02 601.03 611.03 611.03 611.03 611.03 611.03 611.03 611.03 611.02 509.19 60.11 611.02 509.19 60.11 611.02 509.19 60.11 61.02 509.19 60.11 61.02 60.11 60.11 60.11 60.11 60.11 60.11 60.11		Rep Schedule	Rep Schedule 12 Annual Installments w.e.f 31.07.200			06	
Gross loan opening 1222.00 10.08 610.98 610.98 610.98 611.02 611.02 611.02 611.02 611.02 601.03 611.03 611.03 611.03 611.03 611.03 611.03 611.03 611.02 509.19 60.11 611.02 509.19 60.11 611.02 509.19 60.11 61.02 509.19 60.11 61.02 60.11 60.11 60.11 60.11 60.11 60.11 60.11							
Cumulative Repayment upto DOCO/previous year 203.66 305.49 407.32 509.15 610.98 Net Loan-Opening 1018.34 916.51 814.68 712.85 611.02 Additions during the year 0.00 0.00 0.00 0.00 0.00 Repayment during the year 101.83 101.83 101.83 101.83 101.83 Net Loan-Closing 916.51 814.68 712.85 611.02 509.19 Average Loan 967.43 865.60 763.77 661.94 560.11 Rate of Interest 6.68% 6.68% 6.68% 6.68% Interest 64.62 57.82 51.02 44.22 37.42 Rep Schedule 12 Annual Installments w.e.f 23.02.2008 Total Loan 3440.00	2	Bond XV					
DOCO/previous year Net Loan-Opening 1018.34 916.51 814.68 712.85 611.02 Additions during the year 0.00 0.00 0.00 0.00 0.00 0.00 Repayment during the year 101.83		Gross loan opening	1222.00	1222.00	1222.00	1222.00	1222.00
Additions during the year 0.00 0.00 0.00 0.00 Repayment during the year 101.83 101.93 100.11 100.11 100.11 100.11 100.11 100.11 100.11 100.11 100.11 100.11 100.11 100.11 100.11			203.66	305.49	407.32	509.15	610.98
Repayment during the year 101.83 101.183 101.183 101.183 101.183 101.183 101.183 101.11 101.11 101.11 101.11 101.11 101.11 101.11 101.11 101.11 101.11 101.11 101.11 101.11		Net Loan-Opening	1018.34	916.51	814.68	712.85	611.02
Net Loan-Closing 916.51 814.68 712.85 611.02 509.19 Average Loan 967.43 865.60 763.77 661.94 560.11 Rate of Interest 6.68% 6.68% 6.68% 6.68% 6.68% Interest 64.62 57.82 51.02 44.22 37.42 Rep Schedule 12 Annual Installments w.e.f 23.02.2008 Total Loan 2000 3440.00 <		Additions during the year	0.00	0.00	0.00	0.00	0.00
Average Loan 967.43 865.60 763.77 661.94 560.11 Rate of Interest 6.68% 6.68% 6.68% 6.68% 6.68% Interest 64.62 57.82 51.02 44.22 37.42 Rep Schedule 12 Annual Installments w.e.f 23.02.2008 Total Loan 2000 3440.00 340.00 340.00 340.00 <t< td=""><td></td><td>Repayment during the year</td><td>101.83</td><td>101.83</td><td>101.83</td><td>101.83</td><td>101.83</td></t<>		Repayment during the year	101.83	101.83	101.83	101.83	101.83
Rate of Interest 6.68% 7.8721 7.8610% 7.8453% Rep Schedule 12 Annual Installments w.e.f 23.02.2008 23.02.2008		Net Loan-Closing	916.51	814.68	712.85	611.02	509.19
Interest 64.62 57.82 51.02 44.22 37.42 Rep Schedule 12 Annual Installments w.e.f 23.02.2008		Average Loan	967.43	865.60	763.77	661.94	560.11
Rep Schedule 12 Annual Installments w.e.f 23.02.2008 Total Loan 3440.00 Gross loan opening 3440.00 Cumulative Repayment upto DOCO/previous year 758.16 Net Loan-Opening 2681.84 Additions during the year 0.00 Repayment during the year 286.66 Net Loan-Closing 2395.18 248.66 286.66 286.66 286.66 2395.18 2108.52 1821.86 1535.20 2485.4 Average Loan 2538.51 2251.85 1965.19 1678.53 1391.87 7.8869% 7.8804% 7.8721% 7.8610% 7.8453%		Rate of Interest	6.68%	6.68%	6.68%	6.68%	6.68%
Total Loan Gross loan opening 3440.00 3440.00 3440.00 3440.00 3440.00 Cumulative Repayment upto DOCO/previous year Net Loan-Opening 2681.84 2395.18 2108.52 1821.86 1535.20 Additions during the year 0.00 0.00 0.00 0.00 0.00 Repayment during the year 286.66 286.66 286.66 286.66 286.66 Net Loan-Closing 2395.18 2108.52 1821.86 1535.20 1248.54 Average Loan 2538.51 2251.85 1965.19 1678.53 1391.87 Rate of Interest 7.8869% 7.8804% 7.8721% 7.8610% 7.8453%		Interest	64.62	57.82	51.02	44.22	37.42
Gross loan opening 3440.00 3440.80 3400.00 3420.00 3420.00 3420.00 3420.00 3420.00 3420.00 3420.00 3420.00 3420.00 3420.00 3420.00 3420.00 3420.00		Rep Schedule	12	Annual Inst	allments w.	e.f 23.02.20	08
Gross loan opening 3440.00 3440.80 3400.00 3420.00 3420.00 3420.00 3420.00 3420.00 3420.00 3420.00 3420.00 3420.00 3420.00 3420.00 3420.00 3420.00		Total Loan					
Cumulative Repayment upto DOCO/previous year 758.16 1044.82 1331.48 1618.14 1904.80 Net Loan-Opening Additions during the year 2681.84 2395.18 2108.52 1821.86 1535.20 Repayment during the year 0.00 0.00 0.00 0.00 0.00 Net Loan-Closing 2395.18 2108.52 1821.86 1535.20 1248.54 Average Loan 2538.51 2251.85 1965.19 1678.53 1391.87 Rate of Interest 7.8869% 7.8804% 7.8721% 7.8610% 7.8453%			3440.00	3440 00	3440 00	3440 00	3440 00
Net Loan-Opening 2681.84 2395.18 2108.52 1821.86 1535.20 Additions during the year 0.00 0.00 0.00 0.00 0.00 Repayment during the year 286.66 <t< td=""><td></td><td>Cumulative Repayment upto</td><td></td><td></td><td></td><td></td><td>1904.80</td></t<>		Cumulative Repayment upto					1904.80
Additions during the year 0.00 0.00 0.00 0.00 0.00 Repayment during the year 286.66 <td></td> <td></td> <td>2681.84</td> <td>2395.18</td> <td>2108.52</td> <td>1821.86</td> <td>1535.20</td>			2681.84	2395.18	2108.52	1821.86	1535.20
Repayment during the year 286.66							0.00
Net Loan-Closing 2395.18 2108.52 1821.86 1535.20 1248.54 Average Loan 2538.51 2251.85 1965.19 1678.53 1391.87 Rate of Interest 7.8869% 7.8804% 7.8721% 7.8610% 7.8453%		• •					286.66
Average Loan 2538.51 2251.85 1965.19 1678.53 1391.87 Rate of Interest 7.8869% 7.8804% 7.8721% 7.8610% 7.8453%							
Rate of Interest 7.8869% 7.8804% 7.8721% 7.8610% 7.8453%							
							7.8453%
		Interest	200.21	177.46	154.70	131.95	109.20

Annexure - 2

	CALCULATION OF WEIGH	TED AVERA	GE RATE C	F INTERES	ST ON LOA	N.
					(R	s. in Lacs)
	Details of Loan	2014-15	2015-16	2016-17	2017-18	2018-19
1	Bond XIII Option I					
	Gross loan opening	2218.00	2218.00	2218.00	2218.00	2218.00
	Cumulative Repayment upto DOCO/previous year	1478.65	1663.48	1848.32	2033.15	2217.98
	Net Loan-Opening	739.35	554.52	369.68	184.85	0.02
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	184.83	184.83	184.83	184.83	0.00
	Net Loan-Closing	554.52	369.68	184.85	0.02	0.02
	Average Loan	646.93	462.10	277.27	92.43	0.02
	Rate of Interest	8.63%	8.63%	8.63%	8.63%	8.63%
	Interest	55.83	39.88	23.93	7.98	0.00
	Rep Schedule	12	Annual Inst	allments w.	e.f 31.07.20	006
2	Bond XV					
	Gross loan opening	1222.00	1222.00	1222.00	1222.00	1222.00
	Cumulative Repayment upto DOCO/previous year	712.81	814.64	916.48	1018.31	1120.14
	Net Loan-Opening	509.19	407.36	305.52	203.69	101.86
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	101.83	101.83	101.83	101.83	101.83
	Net Loan-Closing	407.36	305.52	203.69	101.86	0.02
	Average Loan	458.27	356.44	254.61	152.77	50.94
	Rate of Interest	6.68%	6.68%	6.68%	6.68%	6.68%
	Interest	30.61	23.81	17.01	10.21	3.40
	Rep Schedule	12	Annual Inst	allments w.	e.f 23.02.20	800
	Total Loan					
	Gross loan opening	3440.00	3440.00	3440.00	3440.00	3440.00
	Cumulative Repayment upto DOCO/previous year	2191.46	2478.13	2764.79	3051.46	3338.13
	Net Loan-Opening	1248.54	961.87	675.21	388.54	101.87
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	286.67	286.67	286.67	286.67	101.83
	Net Loan-Closing	961.87	675.21	388.54	101.87	0.04
	Average Loan	1105.21	818.54	531.87	245.21	50.96
	Rate of Interest	7.8214%	7.7809%	7.6965%	7.4151%	6.6806%
	Interest	86.44	63.69	40.94	18.18	3.40