CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

PETITION NO. 100/TT/2014

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

Date of Hearing: 23.11.2015 Date of Order : 29.4.2016

In the Matter of:

Approval under the Regulation 4 (3(ii)) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2014 and Regulation 24 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 for commissioning date and (ii) Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations' 2014 for determination of transmission tariff from COD to 31.3.2019 for Asset A: LILO of 400 kV S/C Bhiwadi-Bassi TL at Kotputli Sub-station and Asset B: 315 MVA 400/220 kV ICT-I &II with 06 no 220 kV Line Bays at Kotputli S/S under Northern Region System Strengthening Scheme-XV in Northern Region.

And in the Matter of:

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

.....Petitioner

Versus

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



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



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

New Delhi-110002

....Respondent(s)

The following were present:

For Petitioner: Shri S.K. Niranjan, PGCIL

Shri S.S. Raju, PGCIL Shri Jasbir SIngh, PGCIL Shri Anshul Garg, PGCIL Shri Rakesh Prasad, PGCIL Shri M.M. Mondal, PGCIL Shri S.K Venkatesan, PGCIL Smt. Sangeeta Edwards, PGCIL

For Respondents: None

ORDER

The petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as "the petitioner"), a transmission licensee, for approval of COD under Regulation 4 (3)(ii) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2014 (hereinafter referred to as "the 2014 Tariff Regulations") and for determination of tariff under the 2014 Tariff Regulations for the period from COD to 31.3.2019 in respect of (A) LILO of 400 kV S/C Bhiwadi-Bassi TL at Kotputli Sub-station (hereinafter referred to as "Asset A"), (B) 315 MVA 400/220 kV ICT-I &II with 6 nos. 220 kV Line Bays at Kotputli S/S (under Northern Region System Strengthening Scheme-XV in Northern Region.

- 2. The respondents are distribution licensees, who are procuring transmission service from the petitioner, mainly beneficiaries of Northern Region.
- The brief facts of the case are as follows:-



- a) The petitioner has been entrusted with the implementation of transmission system associated with Northern Region System Strengthening Scheme XV (NRSS-XV). The investment approval of the project was accorded by the Board of Directors of the petitioner company vide Memorandum No. C/CP/NRSS-XV dated 20.2.2009 with an estimated cost of ₹52048 lakh including an IDC of ₹3445 lakh based on 4th Quarter, 2008 price level.
- b) The petitioner has sought the approval of COD under Regulations 4(3(ii)) of 2014 Tariff Regulations as the transmission system is not being charges as the downstream system implemented by RVPNL is not yet commissioned.
- c) The transmission system was scheduled to be commissioned within 33 months from the date of investment approval. Thus, the scheduled date of commissioning of the transmission system was 1.12.2011. There is delay of 28 months on account of delay in acquisition of land for the sub-station and the COD claimed by the petitioner for Asset A & B is 1.4.2014.
- d) The petitioner has filed the instant petition for approval of COD under Regulation 4 (3(ii)) of 2014 Tariff Regulations determination of tariff for the period from COD to 31.3.2019 for Asset A and Asset B.
- e) Commission had allowed the provisional tariff for Asset A & B vide order dated 23.06.2014, as follows:

Assets	Claimed / Approved	2014- 15	2015- 16	2016-17	2017- 18	2018- 19
Asset I: LILO of 400 kV S/C	Claimed by the petitioner	567.28	681.17	670.98	660.92	651.08



Assets	Claimed / Approved	2014- 15	2015- 16	2016-17	2017- 18	2018- 19
Bhiwadi-Bassi TL at Kotputli S/S	Provisionally allowed vide order dated 23.6.2014	453.82	-	-	-	-
Asset II: 315 MVA 400/220 Kv ICT-I &II	Claimed by the petitioner	1574.32	1784.20	1767.19	1750.62	1734.79
with 06 no 220 kV Line Bays at Kotputli S/S	Provisionally allowed vide order dated 23.6.2014	1259.46	-	-	-	-

- f) Subsequent to filing the petitioner, the petitioner vide affidavit dated 1.2.2016 has split up the Asset B into two parts i.e. (315 MVA 400/220 kV ICT-I &II with 2 nos. 220 kV Line Bays at Kotputli S/S referred as "Asset B(i)" and 315 MVA 400/220 kV ICT-I &II with 4 nos. 220 kV Line Bays at Kotputli S/S (referred as "Asset B(ii)").
- g) The petitioner has claimed a capital cost of ₹1813.84 lakh as on COD (1.4.2014) for Asset A and ₹5136.32 lakh as on COD (1.4.2014) for Asset B and additional capital expenditure of ₹1371.36 lakh and ₹2526.73 lakh respectively in Asset A and Asset B in 2014-19 tariff period.
- 4. The petitioner has served the petition to the Respondents and notice of this application has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003. No comments/objections have been received from the public in response to the notice in newspaper. Respondent No.6, PSPCL has submitted reply on 17.6.2014. The hearing in this matter was held on 23.11.2015. During the hearing, the Commission had directed the petitioner to submit additional information against the additional capital expenditure claimed by the petitioner for 2009-14 tariff period and 2014-19 tariff period. The petitioner has submitted additional information vide affidavits



dated 9.3.2015, 20.11.2015, 17.12.2015, 19.1.2016, 1.2.2016 and 16.2.2016. In response to the reply of PSPCL, the petitioner has filed rejoinder on 31.3.2015.

5. Having heard the representatives of the petitioner and perused the material on record, we proceed to determine the tariff in accordance with the Tariff Regulations, 2014.

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD:

6. The transmission charges claimed by the petitioner for Asset A, Asset B(i) and Asset B(ii) based on the proposed date of commercial operation are as below:-

(₹ in lakh)

Asset A							
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Depreciation	123.94	159.80	159.80	159.80	159.80		
Interest on Loan	152.76	183.55	169.10	154.64	140.24		
Return on Equity	147.05	187.39	187.39	187.39	187.39		
Interest on Working Capital	16.76	19.45	19.36	19.27	19.20		
O & M Expenses	126.77	130.98	135.33	139.82	144.45		
Total	567.28	681.17	670.98	660.92	651.08		

(₹ in lakh)

Asset B (i)							
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Depreciation	247.46	292.53	316.19	316.19	316.19		
Interest on Loan	330.44	360.27	361.73	332.98	304.30		
Return on Equity	319.30	371.17	398.41	398.41	398.41		
Interest on Working Capital	36.64	40.09	41.84	41.75	41.67		
O & M Expenses	289.44	299.04	308.98	319.22	329.82		
Total	1223.28	1363.10	1427.15	1408.55	1390.39		

Asset B (ii)							
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Depreciation	15.09	40.98	49.51	49.51	49.51		
Interest on Loan	18.48	46.82	52.88	48.37	43.93		
Return on Equity	17.37	46.91	56.47	56.47	56.47		
Interest on Working Capital	6.38	12.74	13.61	13.84	14.08		
O & M Expenses	94.27	174.44	180.24	186.20	192.40		
Total	151.59	321.89	352.71	354.39	356.39		



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

(₹ in lakh)

Asset A							
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Operation and Maintenance	10.56	10.92	11.28	11.65	12.04		
Maintenance Spares	19.02	19.65	20.30	20.97	21.67		
Receivables	94.55	113.53	111.83	110.15	108.51		
Total working capital	124.13	144.10	143.41	142.77	142.22		
Rate of Interest	13.50	13.50	13.50	13.50	13.50		
Interest of working capital	16.76	19.45	19.36	19.27	19.20		

(₹ in lakh)

Asset B (i)						
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	
Operation and Maintenance	24.12	24.92	25.75	26.60	27.49	
Maintenance Spares	43.42	44.86	46.35	47.88	49.47	
Receivables	203.88	227.18	237.86	234.76	231.73	
Total working capital	271.42	296.96	309.96	309.24	308.69	
Rate of Interest	13.50	13.50	13.50	13.50	13.50	
Interest of working capital	36.64	40.09	41.84	41.75	41.67	

(₹ in lakh)

Asset B (ii)							
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Operation and Maintenance	14.07	14.54	15.02	15.52	16.03		
Maintenance Spares	25.33	26.17	27.04	27.93	28.86		
Receivables	45.25	53.65	58.79	59.07	59.40		
Total working capital	84.65	94.36	100.85	102.52	104.29		
Rate of Interest	13.50	13.50	13.50	13.50	13.50		
Interest of working capital	11.43	12.74	13.61	13.84	14.08		

Commercial Operation Date ("COD")

8.The petitioner has prayed for approval of COD under Regulation 4(3)(ii)) of 2014

Tariff Regulations. Petitioner has submitted that the downstream system which is
the associated 220 kV feeder connections was to be implemented by the
RVPNL. The petitioner has made several correspondences to the RVPNL for
making the associated 220 kV feeder connections available; however the



downstream system was not implemented at the time of filing of this petition. The petitioner, vide its affidavit dated 9.3.2015, has submitted that out of the 6 nos. 220 kV feeders to be implemented by the RVPNL, two feeders have been commissioned.

9. Clause 3 (ii) of Regulation 4 of the 2014 Tariff Regulations provides as under:-

"in case a transmission system or an element thereof is prevented from regular service for reasons not attributable to the transmission licensee or its supplier or its contractors but is on account of the delay in commissioning of the concerned generating station or in commissioning of the upstream or downstream transmission system, the transmission licensee shall approach the Commission through an appropriate application for approval of the date of commercial operation of such transmission system or an element thereof."

- 10. Further, the Commission in its order dated 5.8.2015 in Petition No. 11/SM/2014 in the matter of Non-compliance of Sections 38 and 39 of the Electricity Act, 2003 has stated that:-
 - "....20. Keeping in view the mismatch between commissioning of transmission system by an ISTS licensee and upstream/downstream system of STU, we are of the view that ISTS transmission licensees and STUs should also sign such Implementation Agreement for development of ISTS and downstream system in coordinated way to avoid any mismatch. We direct staff of the Commission to examine this aspect and propose necessary changes required in the 2014 Tariff Regulations to enable an ISTS licensees and STUs to enter into Implementation Agreement.
 - 21. Since, the process of amendment would take time, we direct STUs to expedite downstream system in a time bound manner so that the transmission system already commissioned is put to use. PGCIL is at liberty to approach the Commission for invoking Regulation 3(12) (c) of the 2009 Tariff Regulations or Regulation 4(3) (ii) of 2014 Tariff Regulations, as the case may be, for COD of the completed assets. Concerned STU, who had requested for provision of downstream line bays in the various meetings of Standing Committee/RPC, shall bear the transmission charges till completion of downstream system."
- 11. PSPCL submitted that the DOCO certificate given in the petition does not certify that the associated 220kV bays have been charged/commissioned. Hence, as per the certification given in the DOCO certificate, the 220kV bays are not certified to be



commissioned. In absence of 220kV line bays, this entire substation/project becomes idle since the purpose of this new substation is to supply 220kV lines in Kotputli area.

- 12. The petitioner has already completed its work covered under their scope of work but the concerned STU has not completed their scope of work i.e. the implementation of associated 220 kV feeder connections. The petitioner in this matter has made regular correspondence which is evident from the copy of letters submitted to the RVPNL. Petitioner vide affidavit dated 1.2.2016 has submitted the status of 220KV feeders of Kotputli Sub-station. It is evident from the submission that commissioning of 220 KV feeders have been delayed.
- 13. In view of the above we are approving the COD of the Asset A & B (i) as 1.4.2014 and Asset B (ii) as 10.9.2014 under the Regulation 4 (3(ii)) of the 2014 Tariff Regulations. However, as regards the recovery of the transmission charges is concerned, the transmission charges is to be recovered from the concerned State Discoms in accordance with the transmission service agreements as set forth in forthcoming paragraph of this order.
- 14. Annual Fixed charges for 2014-19 tariff period are being determined in the succeeding paragraphs.

Capital Cost

- 15. 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;"
- 16. The details of apportioned approved cost, actual expenditure incurred as on date of commercial operation and additional capital expenditure incurred/projected to be incurred for the period from COD to 31.3.2019 for the transmission assets as submitted by the petitioner are as follows:-

Name of	Apportio- ned	Expenditure claimed up	Es	Estimated additional capital expenditure				
the Elements	Approved Cost as per FR	to proposed COD	2014- 15	2015- 16	2016- 17	2017- 18	2018- 19	completion cost
Asset A	3961.73	1813.83	1371.36	•	-	1	-	3185.19
Asset B(i)	10403.23	5008.69	837.49	925.96	-	1	-	6772.14
Asset B(ii)	10403.23	422.5	212.43	325.02	-	•	-	959.95
Total	14364.96	7245.02	2421.28	1250.98	-	-	-	10917.28

- 17. The petitioner, vide Auditor`s Certificate dated 6.5.2014, has submitted the capital cost as on the proposed date of commercial operation as ₹1813.83 lakh and ₹5136.32 lakh, ₹422.50 lakh for Asset A, Asset B (ii) and Asset B (ii) respectively.
- 18. In case of Asset B (i) the petitioner has submitted that the IDC amount of ₹127.63 lakh was un-discharged till the proposed COD of the asset and the same was discharged in 2014-15 hence the amount has been deducted from the capital cost of the asset as on COD and considered as the additional capital expenditure during 2014-

Treatment of Initial Spares

19. The petitioner has claimed initial spares of ₹42.98 lakh pertaining to sub-station and ₹11.19 lakh towards transmission line for the Asset I, and ₹150.36 lakh pertaining



to sub-station for the Asset II as on the cut-off date in Asset 1. The petitioner's claim towards the initial spares are summarised below:-

Acceta	P&M Cost for Initial Spares (₹ i lakh)		Initial Spares (₹ in lakh)		Initial Spares (%)	
Assets	Sub- station	Transmi ssion Line	Sub- station	Transmi ssion Line	Sub- station	Transmi ssion Line
Asset A: LILO of 400 kV S/C Bhiwadi-Bassi TL at Kotputli S/S	907.55	1492.00	42.98	11.19	4.74%	0.75%
Asset B: 315 MVA 400/220 Kv ICT-I &II with 06 no 220 kV Line Bays at Kotputli S/S	5515.31	-	150.36	-	2.73%	-

20. The Commission has computed the allowable initial spares for both the assets and worked out the excess initial spares for Asset I & II as follows:-

Assets	Normative Initial Spares (%)		Initial Spares Worked out (₹ in lakh)		Excess Initial Spares (₹ in lakh)	
Assets	Sub- station	Transm ission Line	Sub- station	Transm ission Line	Sub- station	Transm ission Line
Asset A: LILO of 400 kV S/C Bhiwadi-Bassi TL at Kotputli S/S	4.00%	1.00%	36.02	14.96	6.96	-3.77
Asset B: 315 MVA 400/220 Kv ICT-I &II with 06 no 220 kV Line Bays at Kotputli S/S	4.00%	1.00%	223.54	-	-73.18	-

21. The allowable initial spares for the Asset B (i) and (ii) have been computed on combined basis for the Asset B based on the Auditor's Certificate dated 6.5.2014.Based on the above computation the Commission has disallowed the excess initial claimed in Asset A from the capital cost of the Asset A as on proposed COD. The initial spares for the Asset B are within the normative limit and in line with the 2014 Tariff Regulations.



22. The allowable capital cost after disallowance of excess initial spares are presented below:-

(₹ in lakh)

	Capital cost	t as on COD
Assets	Claimed by the Petitioner	Allowed by the Commission
Asset A: LILO of 400 kV S/C Bhiwadi- Bassi TL at Kotputli S/S	1813.84	1806.88
Asset B(i): 315 MVA 400/220 Kv ICT-I &II with 2 nos. 220 kV Line Bays at Kotputli S/S	5008.69	5008.69
Asset II: 4 nos. 220 kV Line Bays at Kotputli S/S	422.50	422.50

Time Over-run

- 23. As per the investment approval, the transmission assets were scheduled to be commissioned within 33 months from the date of investment approval i.e. on 1.12.2011. However, the transmission assets were commissioned on 1.4.2014 as proposed by the petitioner. Thus, there is a time over-run of 28 months in Asset A and Asset B (i). The reasons for the time overrun for the instant assets submitted by the petitioner are summarised below:
 - a) The petitioner has submitted that there is a delay of 28 months in completion of the subject asset with respect to the schedule as available in the investment approval.
 - b) The petitioner has submitted that the delay in commissioning is mainly on account of delay in acquisition of the land for Kotputli Sub-station. The petitioner has started the land acquisition process in June 2009, however the land owners were not ready to hand over the land to petitioner.



- c) The matter was taken up in Rajasthan High Court but no settlement was reached upto November 2011. The petitioner then approached the Government of Rajasthan for intervention and after discussion and persistent follow up an alternate land was identified and finally physical possession of the land was given in December, 2011. There was no approach road available to the newly identified site.
- d) The petitioner has further submitted that the permission for building up of approach road by District administration also took considerable time and ultimately measurement was done as late as July 2012. The process and building of the approach road took another 7 months.
- e) Thus it took almost 36 month in possession of land and process for approach road, and the work could only be started in October 2012 with delay of almost 36 months.
- f) The petitioner has further submitted that in the mean time the LOA of the turnkey contractor M/s EMCO expired on 7.9.2011 and the agency refused to start the work, and after a lot of persuasion the original contract was revived and the amendment was issued on 25.3.2013.
- g) The petitioner has submitted that best efforts was made to complete the works in 12 months as compared to the 24 months as mentioned in the original L2 network.
- 24. It is observed that the overall delay in the completion of works is of 28 months (total time between SCOD and COD). Based on the reasons explained above it is evident that the delay in execution of the project is beyond the control of the petitioner. Moreover in view of the documentation and correspondence submitted by the petitioner



it is evident that the petitioner has made best efforts to expedite the land acquisition process for the site and the approach road. Thus we condone the overall time overrun.

Additional Capital Expenditure

- 25. Clause (1) of Regulation 14 of the 2014 Tariff Regulations provides as under:-
 - "(1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:
 - (i) Undischarged liabilities recognized to be payable at a future date;
 - (ii) Works deferred for execution;
 - (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation;
 - (iv)Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and
 - (v) Change in law or compliance of any existing law:"
- 26. Clause 13 of Regulation 3 of the 2014 Tariff Regulations defines

"Cut - off Date" means 31st March of the year closing after two years of the year of commercial operation of whole or part of the project, and in case the whole or part of the project is declared under commercial operation in the last quarter of a year, the cut - off date shall be 31st March of the year closing after three years of the year of commercial operation:"

27. The petitioner has claimed an estimated additional capital expenditure of ₹1371.36 lakh for Asset A towards balance and retention payments, ₹1763.45 lakh for Asset B (i) towards un-discharged IDC and balance/retention payments and ₹537.45 lakh for Asset B (ii) towards balance and retention payments during 2014-19 tariff period, as mentioned below:-



Acceta	Capital cost	Est	Estimated Additional Capital Expenditure					
Assets	up to COD	2014- 15	2015- 16	2016- 17	2017- 18	2018- 19	completion cost	
Asset A	1806.88	1371.36	-	-	1	1	3178.24	
Asset B (i)	5008.69	837.49	925.96	-	1	1	6772.14	
Asset B (ii)	422.5	212.43	325.02	-	1	1	959.95	
Total	7238.07	2421.28	1250.98	-	-	-	10910.33	

28. The additional capital expenditure claimed by the petitioner for the 2014-19 tariff period is within the cut-off date and also within the approved apportioned cost of the assets. The Commission has considered the submission of the petitioner and is allowing the same during the 2014-19 tariff period, subject to true up on actual basis.

Debt: Equity

- 29. Clause (1), (3) and (5) 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."
- 30. The petitioner has considered the debt:equity ratio of 70:30 as on proposed COD, which is in line with the 2014 Tariff Regulations. The details of the debt:equity considered for the purpose of tariff for 2014-19 tariff period is as follows:-



(`in lakh)

Asset	Funding	Capital Cost as on COD	(%)	Estimated additional capital expenditure during 2014-19	(%)	Estimated cost as on 31.3.2019	(%)
	Debt	1264.82	70.00	959.95	70.00	2224.77	70.00
Asset A	Equity	542.07	30.00	411.41	30.00	953.47	30.00
	Total	1806.88	100.00	1371.36	100.00	3178.24	100.00
	Debt	3506.08	70.00	1234.42	70.00	4740.50	70.00
Asset B (i)	Equity	1502.61	30.00	529.04	30.00	2031.64	30.00
	Total	5008.69	100.00	1763.45	100.00	6772.14	100.00
	Debt	295.75	70.00	376.22	70.00	671.97	70.00
Asset B (ii)	Equity	126.75	30.00	161.24	30.00	287.99	30.00
	Total	422.50	100.00	537.45	100.00	959.95	100.00

Return on Equity (ROE)

- 31. 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."

32. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during the 2013-14 has been considered for the purpose of ROE, which shall be trued up with actual tax rate in



accordance with Clause (3) of Regulation 25 of the 2014 Tariff Regulations. The ROE has been worked out and allowed as follows:-

(₹ in lakh)

Asset A							
Return on Equity	Return on Equity 2014-15 2015-16 2016-17 2017-18						
Opening Equity	542.07	953.47	953.47	953.47	953.47		
Additions	411.41	0.00	0.00	0.00	0.00		
Closing Equity	953.47	953.47	953.47	953.47	953.47		
Average Equity	747.77	953.47	953.47	953.47	953.47		
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	146.64	186.98	186.98	186.98	186.98		

(₹ in lakh)

Asset B (i)								
Return on Equity	2017-18	2018-19						
Opening Equity	1502.61	1753.85	2031.64	2031.64	2031.64			
Additions	251.25	277.79	0.00	0.00	0.00			
Closing Equity	1753.85	2031.64	2031.64	2031.64	2031.64			
Average Equity	1628.23	1892.75	2031.64	2031.64	2031.64			
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	319.30	371.18	398.41	398.41	398.41			

(₹ in lakh)

Asset B (ii)								
2014-15								
Opening Equity	126.75	190.48	287.99	287.99	287.99			
Additions	63.73	97.51	0.00	0.00	0.00			
Closing Equity	190.48	287.99	287.99	287.99	287.99			
Average Equity	158.61	239.23	287.99	287.99	287.99			
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	17.37	46.91	56.48	56.48	56.48			

Interest on Loan (IoL)

33. 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."
- 34. The weighted average rate of IoL has been considered on the basis of rate prevailing as on proposed COD. 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-1 and the IoL has been worked out and allowed as follows:-

Asset A								
Interest on Loan 2014-15 2015-16 2016-17 2017-18 2018								
Gross Normative Loan	1264.82	2224.77	2224.77	2224.77	2224.77			
Cumulative Repayment upto Previous Year	0.00	123.57	283.01	442.44	601.88			
Net Loan-Opening	1264.82	2101.20	1941.77	1782.33	1622.89			
Additions	959.95	0.00	0.00	0.00	0.00			
Repayment during the year	123.57	159.44	159.44	159.44	159.44			
Net Loan-Closing	2101.20	1941.77	1782.33	1622.89	1463.45			
Average Loan	1683.01	2021.48	1862.05	1702.61	1543.17			
Weighted Average Rate of Interest on Loan (%)	9.0504	9.0584	9.0614	9.0638	9.0671			
Interest on Loan	152.32	183.11	168.73	154.32	139.92			



Asset B (i)								
Interest on Loan 2014-15 2015-16 2016-17 2017-18								
Gross Normative Loan	3506.08	4092.33	4740.50	4740.50	4740.50			
Cumulative Repayment upto								
Previous Year	0.00	247.46	539.99	856.18	1172.37			
Net Loan-Opening	3506.08	3844.87	4200.51	3884.32	3568.13			
Additions	586.24	648.17	0.00	0.00	0.00			
Repayment during the year	247.46	292.53	316.19	316.19	316.19			
Net Loan-Closing	3844.87	4200.51	3884.32	3568.13	3251.95			
Average Loan	3675.48	4022.69	4042.41	3726.23	3410.04			
Weighted Average Rate of								
Interest on Loan (%)	8.9903	8.9560	8.9483	8.9362	8.9236			
Interest on Loan	330.44	360.27	361.73	332.98	304.30			

(₹ in lakh)

	Asset B (ii)									
Interest on Loan	2014-15 (pro- rata)	2015-16	2016-17	2017-18	2018-19					
Gross Normative Loan	295.75	444.45	671.97	671.97	671.97					
Cumulative Repayment upto Previous Year	0.00	15.08	56.06	105.58	155.10					
Net Loan-Opening	295.75	429.37	615.90	566.38	516.87					
Additions	148.70	227.51	0.00	0.00	0.00					
Repayment during the year	15.08	40.98	49.52	49.52	49.52					
Net Loan-Closing	429.37	615.90	566.38	516.87	467.35					
Average Loan	362.56	522.63	591.14	541.63	492.11					
Weighted Average Rate of										
Interest on Loan (%)	9.1298	8.9592	8.9453	8.9309	8.9274					
Interest on Loan	18.48	46.82	52.88	48.37	43.93					

Depreciation

35. 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."
- 36. The depreciation has been worked out considering the admitted capital expenditure as on proposed COD. The detailed calculations for depreciation for the transmission asset are worked out and allowed as follows:-

(₹ in lakh)

Asset A								
Depreciation 2014-15 2015-16 2016-17 2017-18 20								
Opening Gross Block	1806.88	3178.24	3178.24	3178.24	3178.24			
Additional Capitalization	1371.36	0.00	0.00	0.00	0.00			
Closing Gross Block	3178.24	3178.24	3178.24	3178.24	3178.24			
Average Gross Block	2492.56	3178.24	3178.24	3178.24	3178.24			
Freehold Land (Av. Cost)	0.00	0.00	0.00	0.00	0.00			
Rate of Depreciation (%)	4.96	5.02	5.02	5.02	5.02			
Elapsed life	1	2	3	4	5			
Balance Useful life of the asset	29	28	27	26	25			
Remaining Depreciable Value	617.11	1110.66	951.22	791.78	632.34			
Depreciation during the year	123.57	159.44	159.44	159.44	159.44			

(₹ in lakh)

Asset B (i)								
Depreciation	2017-18	2018-19						
Opening Gross Block	5008.69	5846.18	6772.14	6772.14	6772.14			
Additional Capitalization	837.49	925.96	0.00	0.00	0.00			
Closing Gross Block	5846.18	6772.14	6772.14	6772.14	6772.14			
Average Gross Block	5427.44	6309.16	6772.14	6772.14	6772.14			
Freehold Land (Av. Cost)	0.00	0.00	0.00	0.00	0.00			
Rate of Depreciation (%)	4.56	4.64	4.67	4.67	4.67			
Elapsed life	0	1	2	3	4			
Balance Useful life of the asset	25	24	23	22	21			
Remaining Depreciable Value	376.87	922.96	1047.12	730.93	414.74			
Depreciation during the year	247.46	292.53	316.19	316.19	316.19			

(₹ in lakh)

Asset B (ii)



Depreciation	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	422.50	634.93	959.95	959.95	959.95
Additional Capitalization	212.43	325.02	0.00	0.00	0.00
Closing Gross Block	634.93	959.95	959.95	959.95	959.95
Average Gross Block	528.72	797.44	959.95	959.95	959.95
Freehold Land (Av. Cost)	0.00	0.00	0.00	0.00	0.00
Rate of Depreciation (%)	5.11	5.14	5.16	5.16	5.16
Elapsed life	0	1	2	3	4
Balance Useful life of the asset	25	24	23	22	21
Remaining Depreciable Value	95.59	322.36	427.64	378.12	328.61
Depreciation during the year	15.08	40.98	49.52	49.52	49.52

Operation & Maintenance Expenses (O&M Expenses)

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

Asset A									
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19				
400 kV Bays:									
No. of Bays	2	2	2	2	2				
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71				
Line: D/C (Twin/Triple C	Conductor):								
Line Length (km)	8.722	8.722	8.722	8.722	8.722				
Norms (₹ lakh/km)	0.707	0.731	0.755	0.780	0.806				
Total O&M Expenses (₹ lakh)	126.77	130.98	135.33	139.82	144.45				

Asset B (i)									
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19				
400 kV Bays:									
No. of Bays	2	2	2	2	2				
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71				
220 kV Bays:									
No. of Bays	4	4	4	4	4				
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.10				
Total O&M Expenses (₹ lakh)	289.44	299.04	308.98	319.22	329.82				



Asset B (ii)										
Particulars	2014-15 (pro-rata)	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					
Total O&M Expenses (₹ lakh)	94.27	174.44	180.24	186.20	192.40					

38. 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)

39. 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;"



- 40. 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%.
- 41. 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:-

Asset A								
Interest on Working Capital	2014-15	2015-16	2016-17	2017-18	2018-19			
O & M expenses	10.56	10.91	11.28	11.65	12.04			
Maintenance Spares	19.01	19.65	20.30	20.97	21.67			
Receivables	94.34	113.32	111.63	109.97	108.33			
Total	123.92	143.88	143.21	142.59	142.03			
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50			
Interest on Working Capital	16.73	19.42	19.33	19.25	19.17			

(₹ in lakh)

Asset B (i)								
Interest on Working Capital	2014-15	2015-16	2016-17	2017-18	2018-19			
O & M expenses	24.12	24.92	25.75	26.60	27.49			
Maintenance Spares	43.42	44.86	46.35	47.88	49.47			
Receivables	203.88	227.18	237.86	234.76	231.73			
Total	271.42	296.96	309.95	309.24	308.69			
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50			
Interest on Working Capital	36.64	40.09	41.84	41.75	41.67			

Asset B (ii)									
Interest on Working Capital	2014-15 (pro- rata)	2015-16	2016-17	2017-18	2018-19				
O & M expenses	14.07	14.54	15.02	15.52	16.03				
Maintenance Spares	25.33	26.17	27.04	27.93	28.86				
Receivables	45.25	53.65	58.79	59.07	59.40				
Total	84.64	94.35	100.84	102.51	104.29				
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50				
Interest on Working Capital	6.38	12.74	13.61	13.84	14.08				



ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

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

Asset A								
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19			
Depreciation								
Opening Gross Block	1806.88	3178.24	3178.24	3178.24	3178.24			
Additional Capitalisation	1371.36	0.00	0.00	0.00	0.00			
Closing Gross Block	3178.24	3178.24	3178.24	3178.24	3178.24			
Average Gross Block	2492.56	3178.24	3178.24	3178.24	3178.24			
Rate of Depreciation (%)	4.96	5.02	5.02	5.02	5.02			
Depreciable Value	2243.31	3477.53	2860.42	2860.42	2860.42			
Balance useful life of the asset	29	28	27	26	25			
Elapsed life	0	1	2	3	4			
Remaining Depreciable Value	617.11	1110.66	951.22	791.78	632.34			
Depreciation during the year	123.57	159.44	159.44	159.44	159.44			
Cumulative depreciation (incl. of AAD)	123.57	283.01	442.44	601.88	761.32			
Interest on Loan								
Gross Normative Loan	1264.82	2224.77	2224.77	2224.77	2224.77			
Cumulative Repayments upto Previous Year	0.00	123.57	283.01	442.44	601.88			
Net Loan-Opening	1264.82	2101.20	1941.77	1782.33	1622.89			
Additions	959.95	0.00	0.00	0.00	0.00			
Repayment during the year	123.57	159.44	159.44	159.44	159.44			
Net Loan-Closing	2101.20	1941.77	1782.33	1622.89	1463.45			
Average Loan	1683.01	2021.48	1862.05	1702.61	1543.17			
Weighted Average Rate of Interest on Loan (%)	9.0504	9.0584	9.0614	9.0638	9.0671			
Interest on Loan	152.32	183.11	168.73	154.32	139.92			
Return on Equity								
Opening Equity	542.07	953.47	953.47	953.47	953.47			
Additions	411.41	0.00	0.00	0.00	0.00			
Closing Equity	953.47	953.47	953.47	953.47	953.47			
Average Equity	747.77	953.47	953.47	953.47	953.47			
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	146.64	186.98	186.98	186.98	186.98			
Interest on Working Capital								



Asset A								
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19			
O & M Expenses	10.56	10.91	11.28	11.65	12.04			
Maintenance Spares	19.01	19.65	20.30	20.97	21.67			
Receivables	94.34	113.32	111.63	109.97	108.33			
Total Working Capital	123.92	143.88	143.21	142.59	142.03			
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50			
Interest of working capital	16.73	19.42	19.33	19.25	19.17			
Annual Transmission Charges								
Depreciation	123.57	159.44	159.44	159.44	159.44			
Interest on Loan	152.32	183.11	168.73	154.32	139.92			
Return on Equity	146.64	186.98	186.98	186.98	186.98			
Interest on Working Capital	16.73	19.42	19.33	19.25	19.17			
O & M Expenses	126.77	130.98	135.33	139.82	144.45			
Total	566.02	679.93	669.80	659.81	649.96			

Asset B (i)								
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19			
Depreciation								
Opening Gross Block	5008.69	5846.18	6772.14	6772.14	6772.14			
Additional Capitalisation	837.49	925.96	0.00	0.00	0.00			
Closing Gross Block	5846.18	6772.14	6772.14	6772.14	6772.14			
Average Gross Block	5427.44	6309.16	6772.14	6772.14	6772.14			
Rate of Depreciation (%)	4.56	4.64	4.67	4.67	4.67			
Depreciable Value	4884.69	6055.11	6511.61	6094.93	6094.93			
Balance useful life of the asset	25	24	23	22	21			
Elapsed life	0	1	2	3	4			
Remaining Depreciable Value	376.87	922.96	1047.12	730.93	414.74			
Depreciation during the year	247.46	292.53	316.19	316.19	316.19			
Cumulative depreciation (incl. of AAD)	247.46	539.99	856.18	1172.37	1488.55			
Interest on Loan								
Gross Normative Loan	3506.08	4092.33	4740.50	4740.50	4740.50			
Cumulative Repayments upto Previous Year	0.00	247.46	539.99	856.18	1172.37			
Net Loan-Opening	3506.08	3844.87	4200.51	3884.32	3568.13			
Additions	586.24	648.17	0.00	0.00	0.00			
Repayment during the year	247.46	292.53	316.19	316.19	316.19			
Net Loan-Closing	3844.87	4200.51	3884.32	3568.13	3251.95			
Average Loan	3675.48	4022.69	4042.41	3726.23	3410.04			
Weighted Average Rate of Interest on Loan (%)	8.9903	8.9560	8.9483	8.9362	8.9236			
Interest on Loan	330.44	360.27	361.73	332.98	304.30			



	Asset B (i)								
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19				
Return on Equity									
Opening Equity	1502.61	1753.85	2031.64	2031.64	2031.64				
Additions	251.25	277.79	0.00	0.00	0.00				
Closing Equity	1753.85	2031.64	2031.64	2031.64	2031.64				
Average Equity	1628.23	1892.75	2031.64	2031.64	2031.64				
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	319.30	371.18	398.41	398.41	398.41				
Interest on Working Capital									
O & M Expenses	24.12	24.92	25.75	26.60	27.49				
Maintenance Spares	43.42	44.86	46.35	47.88	49.47				
Receivables	203.88	227.18	237.86	234.76	231.73				
Total Working Capital	271.42	296.96	309.95	309.24	308.69				
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50				
Interest of working capital	36.64	40.09	41.84	41.75	41.67				
Annual Transmission Charges									
Depreciation	247.46	292.53	316.19	316.19	316.19				
Interest on Loan	330.44	360.27	361.73	332.98	304.30				
Return on Equity	319.30	371.18	398.41	398.41	398.41				
Interest on Working Capital	36.64	40.09	41.84	41.75	41.67				
O & M Expenses	289.44	299.04	308.98	319.22	329.82				
Total	1223.28	1363.11	1427.15	1408.55	1390.39				

Asset B (ii)									
Particulars	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19				
Depreciation									
Opening Gross Block	422.50	634.93	959.95	959.95	959.95				
Additional Capitalisation	212.43	325.02	0.00	0.00	0.00				
Closing Gross Block	634.93	959.95	959.95	959.95	959.95				
Average Gross Block	528.72	797.44	959.95	959.95	959.95				
Rate of Depreciation (%)	5.11	5.14	5.16	5.16	5.16				
Depreciable Value	475.84	813.29	1010.21	863.96	863.96				
Balance useful life of the asset	25	24	23	22	21				
Elapsed life	0	1	2	3	4				
Remaining Depreciable Value	95.59	322.36	427.64	378.12	328.61				
Depreciation during the year	15.08	40.98	49.52	49.52	49.52				
Cumulative depreciation (incl. of AAD)	15.08	56.06	105.58	155.10	204.61				



	Asset B (ii)								
Particulars	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19				
Interest on Loan									
Gross Normative Loan	295.75	444.45	671.97	671.97	671.97				
Cumulative Repayments upto Previous Year	0.00	15.08	56.06	105.58	155.10				
Net Loan-Opening	295.75	429.37	615.90	566.38	516.87				
Additions	148.70	227.51	0.00	0.00	0.00				
Repayment during the year	15.08	40.98	49.52	49.52	49.52				
Net Loan-Closing	429.37	615.90	566.38	516.87	467.35				
Average Loan	362.56	522.63	591.14	541.63	492.11				
Weighted Average Rate of Interest on Loan (%)	9.1298	8.9592	8.9453	8.9309	8.9274				
Interest on Loan	18.48	46.82	52.88	48.37	43.93				
Return on Equity									
Opening Equity	126.75	190.48	287.99	287.99	287.99				
Additions	63.73	97.51	0.00	0.00	0.00				
Closing Equity	190.48	287.99	287.99	287.99	287.99				
Average Equity	158.61	239.23	287.99	287.99	287.99				
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	17.37	46.91	56.48	56.48	56.48				
Interest on Working Capital									
O & M Expenses	14.07	14.54	15.02	15.52	16.03				
Maintenance Spares	25.33	26.17	27.04	27.93	28.86				
Receivables	45.25	53.65	58.79	59.07	59.40				
Total Working Capital	84.64	94.35	100.84	102.51	104.29				
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50				
Interest of working capital	11.43	12.74	13.61	13.84	14.08				
Annual Transmission Charges									
Depreciation	15.08	40.98	49.52	49.52	49.52				
Interest on Loan	18.48	46.82	52.88	48.37	43.93				
Return on Equity	17.37	46.91	56.48	56.48	56.48				
Interest on Working Capital	6.38	12.74	13.61	13.84	14.08				
O & M Expenses	94.27	174.44	180.24	186.20	192.40				
Total	151.58	321.90	352.73	354.40	356.40				

Filing Fee and the Publication Expenses

43. 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

44. 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

45. 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

- 46. The transmission charges for the instant assets shall be borne by the beneficiary Discom till the commissioning of the downstream system. Once the downstream system is commissioned by the Discom, 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.
- 47. This order disposes of Petition No. 100/TT/2014.

Sd/- Sd/-

(Dr. M.K. lyer) Member (A.S. Bakshi) Member



Annexure – 1 (₹ in lakh)

	Ass	et A			(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
BOND XXXI-LOAN 1-					
Gross Opening Loan	300.00	300.00	300.00	300.00	300.00
Cumulative Repayments of					
Loans upto Previous Year	25.00	50.00	75.00	100.00	125.00
Net Loans Opening	275.00	250.00	225.00	200.00	175.00
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan	25.00	25.00	25.00	25.00	25.00
during the year					
Net Closing Loan	250.00	225.00	200.00	175.00	150.00
Average Net Loan	262.50	237.50	212.50	187.50	162.50
Rate of Interest on Loan (%)	8.90	8.90	8.90	8.90	8.90
Interest on Loan	23.36	21.14	18.91	16.69	14.46
BOND XXXIII-LOAN 2-					
Gross Opening Loan	200.00	200.00	200.00	200.00	200.00
Cumulative Repayments of					
Loans upto Previous Year	0.00	16.67	33.34	50.01	66.68
Net Loans Opening	200.00	183.33	166.66	149.99	133.32
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan	16.67	16.67	16.67	16.67	16.67
during the year	10.07	10.07	10.07	10.07	10.07
Net Closing Loan	183.33	166.66	149.99	133.32	116.65
Average Net Loan	191.67	175.00	158.33	141.66	124.99
Rate of Interest on Loan (%)	8.64	8.64	8.64	8.64	8.64
Interest on Loan	16.56	15.12	13.68	12.24	10.80
BOND XXXIV-LOAN 3-					
Gross Opening Loan	200.00	200.00	200.00	200.00	200.00
Cumulative Repayments of					
Loans upto Previous Year	0.00	16.67	33.34	50.01	66.68
Net Loans Opening	200.00	183.33	166.66	149.99	133.32
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan	16.67	16.67	16.67	16.67	16.67
during the year	10.07	10.07	10.07	10.07	10.07
Net Closing Loan	183.33	166.66	149.99	133.32	116.65
Average Net Loan	191.67	175.00	158.33	141.66	124.99
Rate of Interest on Loan (%)	8.84	8.84	8.84	8.84	8.84
Interest on Loan	16.94	15.47	14.00	12.52	11.05
BOND XXXV-LOAN 4-					
Gross Opening Loan	200.00	200.00	200.00	200.00	200.00
Cumulative Repayments of					
Loans upto Previous Year	0.00	0.00	16.67	33.34	50.01



Asset A							
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Net Loans Opening	200.00	200.00	183.33	166.66	149.99		
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00		
Less: Repayments of Loan	0.00	16.67	16.67	16.67	16.67		
during the year							
Net Closing Loan	200.00	183.33	166.66	149.99	133.32		
Average Net Loan	200.00	191.67	175.00	158.33	141.66		
Rate of Interest on Loan (%)	9.64	9.64	9.64	9.64	9.64		
Interest on Loan	19.28	18.48	16.87	15.26	13.66		
BOND XXXVI-LOAN 5-							
Gross Opening Loan	50.00	50.00	50.00	50.00	50.00		
Cumulative Repayments of							
Loans upto Previous Year	0.00	0.00	0.00	3.33	6.66		
Net Loans Opening	50.00	50.00	50.00	46.67	43.34		
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00		
Less: Repayments of Loan	0.00	0.00	3.33	3.33	3.33		
during the year Net Closing Loan	50.00	50.00	46.67	43.34	40.01		
Average Net Loan	50.00	50.00	48.34	45.01	41.68		
Rate of Interest on Loan (%)	9.35	9.35	9.35	9.35	9.35		
Interest on Loan	4.68	4.68	4.52	4.21	3.90		
					0.00		
BOND XXXVIII-LOAN 6-							
Gross Opening Loan	50.00	50.00	50.00	50.00	50.00		
Cumulative Repayments of	0.00	0.00	0.00	0.00	0.00		
Loans upto Previous Year							
Net Loans Opening	50.00	50.00	50.00	50.00	50.00		
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	0.00	0.00		
Net Closing Loan	50.00	50.00	50.00	50.00	50.00		
Average Net Loan	50.00	50.00	50.00	50.00	50.00		
Rate of Interest on Loan (%)	9.25	9.25	9.25	9.25	9.25		
Interest on Loan	4.63	4.63	4.63	4.63	4.63		
SBI (21.03.2012) LOAN-12-							
Gross Opening Loan	19.68	19.68	19.68	19.68	19.68		
Cumulative Repayments of	0.00	0.00	0.00	1.79	3.58		
Loans upto Previous Year Net Loans Opening	19.68	19.68	19.68	17.89	16.10		
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	1.79	1.79	1.79		
Net Closing Loan	19.68	19.68	17.89	16.10	14.31		
Average Net Loan	19.68	19.68	18.79	17.00	15.21		



	Ass	et A			
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Rate of Interest on Loan (%)	10.25	10.25	10.25	10.25	10.25
Interest on Loan	2.02	2.02	1.93	1.74	1.56
BOND XL-LOAN-7-					
Gross Opening Loan	100.00	100.00	100.00	100.00	100.00
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	8.33	16.66
Net Loans Opening	100.00	100.00	100.00	91.67	83.34
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	8.33	8.33	8.33
Net Closing Loan	100.00	100.00	91.67	83.34	75.01
Average Net Loan	100.00	100.00	95.84	87.51	79.18
Rate of Interest on Loan (%)	9.30	9.30	9.30	9.30	9.30
Interest on Loan	9.30	9.30	8.91	8.14	7.36
BOND XLI-LOAN-8-					
Gross Opening Loan	100.00	100.00	100.00	100.00	100.00
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	8.33	16.66
Net Loans Opening	100.00	100.00	100.00	91.67	83.34
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	8.33	8.33	8.33
Net Closing Loan	100.00	100.00	91.67	83.34	75.01
Average Net Loan	100.00	100.00	95.84	87.51	79.18
Rate of Interest on Loan (%)	8.85	8.85	8.85	8.85	8.85
Interest on Loan	8.85	8.85	8.48	7.74	7.01
BOND XLII-LOAN-9-					
Gross Opening Loan	10.00	10.00	10.00	10.00	10.00
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	0.00
Net Loans Opening	10.00	10.00	10.00	10.00	10.00
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	0.00	0.00
Net Closing Loan	10.00	10.00	10.00	10.00	10.00
Average Net Loan	10.00	10.00	10.00	10.00	10.00
Rate of Interest on Loan (%)	8.80	8.80	8.80	8.80	8.80
Interest on Loan	0.88	0.88	0.88	0.88	0.88
BOND XLIII-LOAN-10-					
Gross Opening Loan	20.00	20.00	20.00	20.00	20.00



Asset A							
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Cumulative Repayments of	0.00	0.00	0.00	0.00	1.67		
Loans upto Previous Year							
Net Loans Opening	20.00	20.00	20.00	20.00	18.33		
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00		
Less: Repayments of Loan	0.00	0.00	0.00	1.67	1.67		
during the year							
Net Closing Loan	20.00	20.00	20.00	18.33	16.66		
Average Net Loan	20.00	20.00	20.00	19.17	17.50		
Rate of Interest on Loan (%)	7.93	7.93	7.93	7.93	7.93		
Interest on Loan	1.59	1.59	1.59	1.52	1.39		
BOND XLV-LOAN-11-							
Gross Opening Loan	20.00	20.00	20.00	20.00	20.00		
Cumulative Repayments of							
Loans upto Previous Year	0.00	0.00	0.00	0.00	1.67		
Net Loans Opening	20.00	20.00	20.00	20.00	18.33		
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	1.67	1.67		
Net Closing Loan	20.00	20.00	20.00	18.33	16.66		
Average Net Loan	20.00	20.00	20.00	19.17	17.50		
Rate of Interest on Loan	9.65	9.65	9.65	9.65	9.65		
Interest on Loan	1.93	1.93	1.93	1.85	1.69		
Summary							
Gross Opening Loan	1269.68	1269.68	1269.68	1269.68	1269.68		
Cumulative Repayments of	25.00	83.34	158.35	255.14	355.27		
Loans upto Previous Year							
Net Loans Opening	1244.68	1186.34	1111.33	1014.54	914.41		
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00		
Less: Repayments of Loan during the year	58.34	75.01	96.79	100.13	100.13		
Net Closing Loan	1186.34	1111.33	1014.54	914.41	814.28		
Average Net Loan	1215.51	1148.84	1062.94	964.48	864.35		
Rate of Interest on Loan (%)	9.0504	9.0584	9.0614	9.0638	9.0671		
Interest on Loan	110.01	104.07	96.32	87.42	78.37		



Asset B (i)							
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
BOND XXX-LOAN 1-							
Gross Opening Loan	155.50	155.50	155.50	155.50	155.50		
Cumulative Repayments of Loans upto Previous Year	12.96	25.92	38.88	51.84	64.80		
Net Loans Opening	142.54	129.58	116.62	103.66	90.70		
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00		
Less: Repayments of Loan during the year	12.96	12.96	12.96	12.96	12.96		
Net Closing Loan	129.58	116.62	103.66	90.70	77.74		
Average Net Loan	136.06	123.10	110.14	97.18	84.22		
Rate of Interest on Loan (%)	8.80	8.80	8.80	8.80	8.80		
Interest on Loan	11.97	10.83	9.69	8.55	7.41		
BOND XXXI-LOAN 2-							
Gross Opening Loan	620.50	620.50	620.50	620.50	620.50		
Cumulative Repayments of Loans upto Previous Year	51.71	103.42	155.13	206.84	258.55		
Net Loans Opening	568.79	517.08	465.37	413.66	361.95		
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00		
Less: Repayments of Loan during the year	51.71	51.71	51.71	51.71	51.71		
Net Closing Loan	517.08	465.37	413.66	361.95	310.24		
Average Net Loan	542.94	491.23	439.52	387.81	336.10		
Rate of Interest on Loan (%)	8.90	8.90	8.90	8.90	8.90		
Interest on Loan	48.32	43.72	39.12	34.51	29.91		
BOND XXXIII-LOAN 3-							
Gross Opening Loan	512.00	512.00	512.00	512.00	512.00		
Cumulative Repayments of Loans upto Previous Year	0.00	42.67	85.34	128.01	170.68		
Net Loans Opening	512.00	469.33	426.66	383.99	341.32		
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00		
Less: Repayments of Loan during the year	42.67	42.67	42.67	42.67	42.67		
Net Closing Loan	469.33	426.66	383.99	341.32	298.65		
Average Net Loan	490.67	448.00	405.33	362.66	319.99		
Rate of Interest on Loan (%)	8.64	8.64	8.64	8.64	8.64		
Interest on Loan	42.39	38.71	35.02	31.33	27.65		
BOND XXXIV-LOAN 4-							
Gross Opening Loan	174.00	174.00	174.00	174.00	174.00		
Cumulative Repayments of Loans upto Previous Year	0.00	14.50	29.00	43.50	58.00		
Net Loans Opening	174.00	159.50	145.00	130.50	116.00		
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00		



Asset B (i)							
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Less: Repayments of Loan during the year	14.50	14.50	14.50	14.50	14.50		
Net Closing Loan	159.50	145.00	130.50	116.00	101.50		
Average Net Loan	166.75	152.25	137.75	123.25	108.75		
Rate of Interest on Loan (%)	8.84	8.84	8.84	8.84	8.84		
Interest on Loan	14.74	13.46	12.18	10.90	9.61		
BOND XXXV-LOAN 5-							
Gross Opening Loan	542.00	542.00	542.00	542.00	542.00		
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	45.17	90.34	135.51		
Net Loans Opening	542.00	542.00	496.83	451.66	406.49		
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00		
Less: Repayments of Loan	0.00	45.17	45.17	45.17	45.17		
during the year							
Net Closing Loan	542.00	496.83	451.66	406.49	361.32		
Average Net Loan Rate of Interest on Loan (%)	542.00 9.64	519.42 9.64	474.25 9.64	429.08 9.64	383.91 9.64		
Interest on Loan	52.25	50.07	45.72	41.36	37.01		
interest on Loan	32.23	30.07	45.72	41.30	37.01		
BOND XXXVI-LOAN 6-							
Gross Opening Loan	80.00	80.00	80.00	80.00	80.00		
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	5.33	10.66		
Net Loans Opening	80.00	80.00	80.00	74.67	69.34		
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	5.33	5.33	5.33		
Net Closing Loan	80.00	80.00	74.67	69.34	64.01		
Average Net Loan	80.00	80.00	77.34	72.01	66.68		
Rate of Interest on Loan (%)	9.35	9.35	9.35	9.35	9.35		
Interest on Loan	7.48	7.48	7.23	6.73	6.23		
Bond XXXVIII Loan-7							
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 (%)	9.25	9.25	9.25	9.25	9.25		
Interest on Loan	4.63	4.43	4.05	3.66	3.27		



Asset B (i)							
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
001/01/00000							
SBI (21.3.2012) Loan - 13 (Add cap for 2014-15)							
Gross Opening Loan	0.00	89.34	89.34	89.34	89.34		
Cumulative Repayments of							
Loans upto Previous Year	0.00	0.00	0.00	8.12	16.24		
Net Loans Opening	0.00	89.34	89.34	81.22	73.10		
Add: Draw(s) during the Year	89.34	0.00	0.00	0.00	0.00		
Less: Repayments of Loan during the year	0.00	0.00	8.12	8.12	8.12		
Net Closing Loan	89.34	89.34	81.22	73.10	64.98		
Average Net Loan	44.67	89.34	85.28	77.16	69.04		
Rate of Interest on Loan (%)	10.25	10.25	10.25	10.25	10.25		
Interest on Loan	4.58	9.16	8.74	7.91	7.08		
SBI (21.3.2012) Loan - 13 COD							
Loan							
Gross Opening Loan	112.08	112.08	112.08	112.08	112.08		
Cumulative Repayments of	0.00	0.00	0.00	10.19	20.38		
Loans upto Previous Year							
Net Loans Opening	112.08	112.08	112.08	101.89	91.70		
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	10.19	10.19	10.19		
Net Closing Loan	112.08	112.08	101.89	91.70	81.51		
Average Net Loan	112.08	112.08	106.99	96.80	86.61		
Rate of Interest on Loan (%)	10.25	10.25	10.25	10.25	10.25		
Interest on Loan	11.49	11.49	10.97	9.92	8.88		
BOND XL-LOAN-9							
Gross Opening Loan	300.00	300.00	300.00	300.00	300.00		
Cumulative Repayments of	0.00	0.00	0.00	25.00	50.00		
Loans upto Previous Year							
Net Loans Opening	300.00	300.00	300.00	275.00	250.00		
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	25.00	25.00	25.00		
Net Closing Loan	300.00	300.00	275.00	250.00	225.00		
Average Net Loan	300.00	300.00	287.50	262.50	237.50		
Rate of Interest on Loan (%)	9.30	9.30	9.30	9.30	9.30		
Interest on Loan	27.90	27.90	26.74	24.41	22.09		
BOND XLI-LOAN-9							
Gross Opening Loan	300.00	300.00	300.00	300.00	300.00		
Cumulative Repayments of	0.00	0.00	0.00	25.00	50.00		



Asset B (i)							
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Loans upto Previous Year							
Net Loans Opening	300.00	300.00	300.00	275.00	250.00		
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	25.00	25.00	25.00		
Net Closing Loan	300.00	300.00	275.00	250.00	225.00		
Average Net Loan	300.00	300.00	287.50	262.50	237.50		
Rate of Interest on Loan (%)	8.85	8.85	8.85	8.85	8.85		
Interest on Loan	26.55	26.55	25.44	23.23	21.02		
interest on Loan	20.33	20.33	25.44	25.25	21.02		
BOND XLII-LOAN-10							
Gross Opening Loan	130.00	130.00	130.00	130.00	130.00		
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	0.00		
Net Loans Opening	130.00	130.00	130.00	130.00	130.00		
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	0.00	0.00		
Net Closing Loan	130.00	130.00	130.00	130.00	130.00		
Average Net Loan	130.00	130.00	130.00	130.00	130.00		
Rate of Interest on Loan (%)	8.80	8.80	8.80	8.80	8.80		
Interest on Loan	11.44	11.44	11.44	11.44	11.44		
BOND XLIII-LOAN-11							
Gross Opening Loan	290.00	290.00	290.00	290.00	290.00		
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	24.17		
Net Loans Opening	290.00	290.00	290.00	290.00	265.83		
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	24.17	24.17		
Net Closing Loan	290.00	290.00	290.00	265.83	241.66		
Average Net Loan	290.00	290.00	290.00	277.92	253.75		
Rate of Interest on Loan	7.93	7.93	7.93	7.93	7.93		
Interest on Loan	23.00	23.00	23.00	22.04	20.12		
BOND XLV-COD - LOAN							
Gross Opening Loan	240.00	240.00	240.00	240.00	240.00		
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	20.00		
Net Loans Opening	240.00	240.00	240.00	240.00	220.00		
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	20.00	20.00		
Net Closing Loan	240.00	240.00	240.00	220.00	200.00		



Asset B (i)						
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	
Average Net Loan	240.00	240.00	240.00	230.00	210.00	
Rate of Interest on Loan	9.65	9.65	9.65	9.65	9.65	
Interest on Loan	23.16	23.16	23.16	22.20	20.27	
BOND XLVIII-COD - Add Cap for 2014-15 COD - LOAN						
Gross Opening Loan	0.00	496.90	496.90	496.90	496.90	
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	0.00	
Net Loans Opening	0.00	496.90	496.90	496.90	496.90	
Add: Draw(s) during the Year	496.90	0.00	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	496.90	496.90	496.90	496.90	496.90	
Average Net Loan	248.45	496.90	496.90	496.90	496.90	
Rate of Interest on Loan	8.20	8.20	8.20	8.20	8.20	
Interest on Loan	20.37	40.75	40.75	40.75	40.75	
Summary						
Gross Opening Loan	3506.08	4092.32	4092.32	4092.32	4092.32	
Cumulative Repayments of Loans upto Previous Year	64.67	186.51	357.69	602.51	891.50	
Net Loans Opening	3441.41	3905.81	3734.63	3489.81	3200.82	
Add: Draw(s) during the Year	586.24	0.00	0.00	0.00	0.00	
Less: Repayments of Loan during the year	121.84	171.18	244.82	288.99	288.99	
Net Closing Loan	3905.81	3734.63	3489.81	3200.82	2911.83	
Average Net Loan	3673.61	3820.22	3612.22	3345.32	3056.33	
Rate of Interest on Loan (%)	8.9903%	8.9560%	8.9483%	8.9362%	8.9236%	
Interest on Loan	330.27	342.14	323.23	298.94	272.73	



	Asset B (ii) (₹ ın lakh)						
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
BOND XXX-COD -LOAN	2014 10	2010 10	2010 17	2017 10	2010 13		
Gross Opening Loan	105.28	105.28	105.28	105.28	105.28		
Cumulative Repayments of							
Loans upto Previous Year	0.00	0.00	8.77	17.54	26.31		
Net Loans Opening	105.28	105.28	96.51	87.74	78.97		
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00		
Less: Repayments of Loan	0.00	8.77	8.77	8.77	8.77		
during the year							
Net Closing Loan	105.28	96.51	87.74	78.97	70.20		
Average Net Loan	105.28	100.90	92.13	83.36	74.59		
Rate of Interest on Loan (%)	9.64	9.64	9.64	9.64	9.64		
Interest on Loan	10.15	9.73	8.88	8.04	7.19		
BOND XLIV COD LOAN 1							
Gross Opening Loan	125.31	125.31	125.31	125.31	125.31		
Cumulative Repayments of							
Loans upto Previous Year	0.00	0.00	0.00	0.00	0.00		
Net Loans Opening	125.31	125.31	125.31	125.31	125.31		
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00		
Less: Repayments of Loan	0.00	0.00	0.00	0.00	41.77		
during the year							
Net Closing Loan	125.31	125.31	125.31	125.31	83.54		
Average Net Loan	125.31	125.31	125.31	125.31	104.43		
Rate of Interest on Loan (%)	8.70	8.70	8.70	8.70	8.70		
Interest on Loan	10.90	10.90	10.90	10.90	9.08		
SBI (2014-15) - COD Loan 2							
Gross Opening Loan	65.16	65.16	65.16	65.16	65.16		
Cumulative Repayments of	0.00	0.00	0.00	0.00	0.00		
Loans upto Previous Year	65.16	65.16	65.16	65.16	65.16		
Net Loans Opening	0.00	0.00	0.00	0.00	0.00		
Add: Draw(s) during the Year Less: Repayments of Loan	0.00	0.00	0.00	0.00	0.00		
during the year	0.00	0.00	0.00	0.00	0.00		
Net Closing Loan	65.16	65.16	65.16	65.16	65.16		
Average Net Loan	65.16	65.16	65.16	65.16	65.16		
Rate of Interest on Loan (%)	10.25	10.25	10.25	10.25	10.25		
Interest on Loan	6.68	6.68	6.68	6.68	6.68		
BOND XLIX-LOAN Add Cap for							
2014-15	0.00	440.70	440.70	440.70	4.40.70		
Gross Opening Loan	0.00	148.70	148.70	148.70	148.70		
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	0.00		



Asset B (ii)						
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	
Net Loans Opening	0.00	148.70	148.70	148.70	148.70	
Add: Draw(s) during the Year	148.70	0.00	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	148.70	148.70	148.70	148.70	148.70	
Average Net Loan	74.35	148.70	148.70	148.70	148.70	
Rate of Interest on Loan (%)	8.15	8.15	8.15	8.15	8.15	
Interest on Loan	6.06	12.12	12.12	12.12	12.12	
Summary						
Gross Opening Loan	295.75	444.45	444.45	444.45	444.45	
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	8.77	17.54	26.31	
Net Loans Opening	295.75	444.45	435.68	426.91	418.14	
Add: Draw(s) during the Year	148.70	0.00	0.00	0.00	0.00	
Less: Repayments of Loan during the year	0.00	8.77	8.77	8.77	50.54	
Net Closing Loan	444.45	435.68	426.91	418.14	367.60	
Average Net Loan	370.10	440.07	431.30	422.53	392.87	
Rate of Interest on Loan (%)	9.1298%	8.9592%	8.9453%	8.9309%	8.9274%	
Interest on Loan	33.79	39.43	38.58	37.74	35.07	

