CENTRAL ELECTRICITY REGULATORY COMMISSION **NEW DELHI**

Petition No. 213/TT/2017

Coram:

Shri P.K.Pujari, Chairperson Shri A.K. Singhal, Member Dr. M.K. Iyer, Member

Date of Hearing : 8.8.2018 Date of Order : 20 .09.2018

In the matter of:

Misc. Petition for Approval under sub-section(4) of Section 28 & 79(1)(d) of Electricity Act 2003 and regulation-86 of CERC (Conduct of Business) Regulations 1999 for determination of

i) Trued up Fees and Charges for 2009-14 block

ii) Fees and Charges for the period 2014-19 block.

For Asset-I: 02 Nos OPGW links under Central Sector (127 km) (DOCO: 01.11.2013) and Asset II: 03 Nos OPGW links under Central Sector (170.234 km) (DOCO: 01.03.2014), under "Fibre Optic communication system under Expansion of Wideband Communication Network" in Eastern Region. And in the matter of:

Power Grid Corporation of India Limited "Saudamini", Plot No.2, Sector-29, Gurgaon -122 001

.....Petitioner

Vs

1. NTPC Limited. NTPC Bhawan, Core-7, Scope Complex,



Order in Petition No. 213/TT/2017

7, Institutional Area, Lodhi Road, New Delhi-110 003

- National Hydro Power Corporation Limited, NHPC Office Complex, Institutional Area, Lodhi Road, New Delhi-110 003
- Orissa hydro Power Corporation Limited, Burla Power House, Dist. Sambalpur, Burla-768 017
- 4. Mejia Thermal Power Station DVC, P.O. MTPS, Dist Bankura-722 183
- West Bengal State Electricity Distribution Co. Limited, Bidyut Bhawan, 8th Floor (A Block), Block DJ, Salt Lake City, Kolkata-700 091
- Bihar State Electricity Board, Vidyut Bhawan, Bailey Road, Patna-800 001
- 7. Gird Corporation of Orissa Limited, Vidyut Bhawan, Janpath, Bhubaneshwar-751 007
- 8. Power Department, Govt. of Sikkim, Gangtok-727 102
- 9. Jharkhand State Electricity Board, Engineering Building, HEC Township, Dhurwa, Ranchi-834 004
- Damodar Valley Corporation
 DVC Tower, VIP Road,
 Calcutta-700 054
 - 11. Powerlinks Transmission Limited, Vidyut Nagar, P.O. Satellite Township, Siliguri-734 015

....Respondents

For petitioner : Shri S.K. Venkatesan, PGCIL

Shri S.S Raju, PGCIL Shri S. K. Niranjan, PGCIL Shri Rakesh Prasad, PGCIL Shri Vivek Kumar Singh, PGCIL



Shri V. P. Rastogi, PGCIL

<u>ORDER</u>

The instant petition has been filed by Power Grid Corporation of India Limited (PGCIL) under sub-section (4) of Section 28 and Section 79(1)(d) of Electricity Act, 2003 (Act) for truing up of fee and charges for Fibre Optic Communication system under expansion of Wideband Communication Network in Eastern Region for the 2009-14 period allowed vide order dated 22.7.2016 in petition no 81/TT/2015 and for determination of fee and charges for 2014-19 period.

2. The details of the assets covered in the instant petition are as under:-

Details of the Asset	COD	
	Scheduled	Actual
Asset-I: 127 km Optical Fibre under expansion of Wideband Communication in ER	27.8.2014	1.11.2013
Asset-II: 170.234 km Optical Fibre under expansion of Wideband Communication in ER	27.0.2014	1.3.2014

3. The investment approval for the Fibre Optic Communication system under expansion of Wideband Communication Network in Eastern Region was accorded by the Board of Directors of PGCIL on 26.2.2012 vide letter no. C/CP/FO-ER dated 27.03.2012 at an estimated cost of ₹11580 lakh including IDC of ₹654 lakh (based on 4th Quarter, 2011 price level). The scheduled completion time of the project was 30 months from the date of investment approval i.e. 26.9.2014.

- 4. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act, 2003 ("the Act"). The petitioner has served the copy of the petition on the respondents. None of the respondents have filed any reply.
- 5. The broad scope of work covered under the project is as hereinafter:-
- Installation of estimated 1159 km of OPGW fibre optic cable on the (a) existing EHV transmission lines;
- Installation of estimated 2500 km of OPGW fibre optic cable on new (b) /upcoming EHV transmission lines;
- (c) Installation of 53 nos. of Terminals Equipments for Communication based upon Synchronous Digital Hierarchy (SDH) technology in sub-stations of POWERGRID and constituents and generating stations;
- (d) Installation of 76 nos. of Drop Insert Multiplexers at wide band nodes;
- (e) Network Management System (NMS) to monitor the network was also envisaged; and
- (f) 53 nos. of DC Power Supply has been envisaged at all the wideband locations.

The methodology for working out the fee and charges of Communication/ ULDC system was elaborated at paragraphs 6 to 10 of our Order dated 22.7.2016 in petition no 81/TT/2015 and, we continue with the same methodology for determination of trued up fee and charges for 2009-14 period.

6. Having heard the representatives of the parties and perused the material on record, we proceed to dispose of the petition.

7. The trued up annual fee and charges claimed by the petitioner based on the actual date of commercial operation are as follows:-

(₹ in lakh)

Particulars	Asset-I	Asset-II
	Centra	Sector
	2013-14	2013-14
Annual Capital Recovery Charges (Pro-rata)	12.63	3.12

8. The commercial operation dates of Asset-I and Asset-II are 1.11.2013 and 1.3.2014 respectively. The Commission, vide order dated 22.07.2016 in Petition no. 81/TT/2015 had approved the Fee and Charges, on the basis of the following Capital Costs incurred / projected to be incurred as on COD and 31.03.2014 for the assets given hereunder:

(₹ in lakh)

Asset	Particular	Capital Cost
	As on COD	77.84
Asset-I	Additional Capitalization during 2013-14	21.30
	As on 31.03.2014	99.14
	As on COD	130.61
Asset-II	Additional Capitalization during 2013-14	2.97
	As on 31.03.2014	133.58

The Commission, under the same order, had approved the Fee and Charges as below:

(₹ in lakh)

Particulars	Asset-I	Asset-II
	2013-14	2013-14
	(Pro-rata)	(Pro-rata)
Annual Capital Recovery Charge - Loan	2.74	0.93
Annual Capital Recovery Charge - Equity	1.67	0.56
Annual Capital Recovery Charge - Total	4.41	1.49
O&M Expenses	2.63	0.63
Interest on Working Capital	0.24	0.07
Total Fee & Charges	7.28	2.19

9. The approved apportioned costs for the instant assets are as follows:-

(₹ in lakh)

Name of the Assets	Length (km)	COD	FR apportioned approved cost	Estimated completion cost
2 nos. of OPGW Links under central sector	127.00	1.11.2013	400.38	375.78
3 nos. of OPGW Links under central sector	170.234	1.3.2014	534.82	448.19
		Total	935.20	823.97

Truing-up of fee and charges for 2009-14 tariff period

Capital cost

10. As explained in the order dated 20.7.2016 in petition no 81/TT/2015, there is neither cost over-run nor time over-run in commissioning of instant assets.

Treatment of IDC and IEDC

11. Adjustments of IDC/IEDC in respect of time overrun in the instant assets are not required, as with reference to the investment approval there is no time overrun in commissioning of the Assets.

IDC:

12. Petitioner has claimed Interest during Construction (IDC) of ₹ 3.64 Lakh and ₹ 5.91 Lakh for Asset-I and Asset-II respectively.

IDC has been worked out based on the loans deployed for the assets as per submission of the petitioner on cash basis assuming that the petitioner has not made any default in the payment of interest. It is observed that the IDC claimed

by the petitioner in case of Asset-I and Asset-II is slightly lower than that worked out in Finance Division. Therefore, in view of the above, the IDC being considered for fee and charges computation is as claimed by the petitioner.

Further, the petitioner has submitted the statement showing un-discharged IDC liability as on COD and to be discharged of the same after COD. Accordingly, the following IDC has been disallowed as on COD on account of un-discharged liability:

(₹ in Lakhs)

Asset	IDC disallowed as on COD
Asset-I	0.44
Asset-II	0.35

The petitioner has submitted that the un-discharged IDC as on COD as indicated above has been discharged during 2013-14. Hence, the same have been added to the additional capital expenditure during 2013-14.

IEDC

13. Petitioner has claimed Incidental Expenditure during Construction (IEDC) as on COD, which is within the percentage on Hard Cost as indicated in the Abstract Cost Estimate. In the current petition, 10.75% of Hard Cost is indicated as IEDC in the Abstract Cost Estimate.

Further, the petitioner has submitted that the entire amount of IEDC, pertaining to Asset-I and Asset-II, has been discharged up to COD. Hence, the adjustment of IEDC, in respect of limitation, time overrun and un-discharged liability is not required.

14. Therefore, Capital Cost as on COD considered for the purpose of fee and charges in the present petition, after scrutiny of IEDC/IDC, are as below:

(₹ in lakh)

Assets	Particulars	Capital Cost as
		on COD
	(1) Expenditure as on COD (Claimed)	77.84
Asset-I	(2) IDC Disallowed due to Un-discharged Liability	0.44
	(3) Capital Cost as on COD (allowable) (1-2)	77.40
	(1) Expenditure as on COD (Claimed)	130.61
Asset-II	(2) IDC Disallowed due to Un-discharged Liability	0.35
	(6) Capital Cost as on COD (allowable) (1-2)	130.26

Additional Capital Expenditure

15. The petitioner, vide Auditor's Certificates dated 20.07.2017, has submitted additional capitalization for the Asset-I as ₹ 21.30 lakh and for Asset-II as ₹ 2.97 lakh during 2013-14.

Further, as discussed at para 12, the IDC un-discharged as on COD being discharged during 2013-14 has been added to the add cap during the year. Hence, the following add cap has been allowed during 2013-14:

(₹ in Lakh)

Asset	Add Cap allowable during 2013-14
Asset-I	21.74
Asset-II	3.32

Therefore, the Capital Cost as on COD, additional capitalization during 2009-14 period and Capital Cost as on 31.03.2014 has been considered for the purpose of fee and charges for 2009-14, as below:

(₹ in lakh)

Asset	Particular	Capital Cost
	As on COD	77.40
Asset-I	Additional Capitalization during 2013-14	21.74
	As on 31.03.2014	99.14
	As on COD	130.26
Asset-II	Additional Capitalization during 2013-14	3.32
	As on 31.03.2014	133.58

16. Vide order dated 22.7.2016 in petition no 81/TT/2015, petitioner was directed to submit explanation for additional capitalization at the time of truing-up. The petitioner has submitted that the additional capitalization incurred during 2013-14 is within the cut-off date and is covered under clause 9(1)(i) of Tariff Regulations 2009.

Debt-Equity Ratio

17. The details of debt-equity ratio of the instant assets as on COD and as on 31.3.2014 are as follows:-

(₹ in lakh)

Dani'a dana	As on COD		As on 31.03.2014	
Particulars	Asset-I	Asset-II	Asset-I	Asset-II
Loan	54.18	91.18	69.40	93.51
Equity	23.22	39.08	29.74	40.07
Total	77.40	130.26	99.14	133.58
Debt	70.00%	70.00%	70.00%	70.00%
Equity	30.00%	30.00%	30.00%	30.00%
Total	100.00%	100.00%	100.00%	100.00%

Rates for Recovery of loan and equity

The Capital Recovery Factor (CRF) for Loan and Equity in respect of instant assets have been calculated by applying weighted average rate of interest and Return on Equity using a recovery factor for loan and equity for 15 years (i.e. 180 months).

18. As explained in the order in petition No 81/TT/2015, Capital Recovery Factor for equity has been considered on post-tax return on equity of 15.50%. The details of weighted average rate of interest on loan are attached at Annexure of the order. The rates considered on annual basis, have been converted to monthly rates.

The monthly Capital Recovery Factors for loan and equity has been worked out using the following relationship:

Recovery Factor =
$$\frac{i \times (1+i)^n}{(1+i)^n - 1}$$
 $n = period$, and $i = rate$

19. Following are the monthly Recovery factors for Loan for Asset-I and Asset-II are:

Particulars	2013-14
Asset-I	0.010205
Asset-II	0.010210

Similarly, monthly Recovery Factors for Equity for Asset-I and Asset-II are:

Particulars	2013-14
Asset-I	0.014340
Asset-II	0.014340

20. Based on the above recovery factors, monthly Capital Recovery Charges for Loan for Asset-I and Asset-II are worked out as below:

(₹ in Lakhs)

Particulars	2013-14
Asset-I	0.55
Asset-II	0.93

Likewise, monthly Capital Recovery Charges for Equity for Asset-I and Asset-II are worked out as below:

(₹ in Lakhs)

Particulars	2013-14
Asset-I	0.33
Asset-II	0.56

21. While working out the capital recovery charges for loan, Wt. Average Rate of Interest & Rate of Return on Equity, as indicated in one of the earlier para have been considered. Accordingly, the following recovery of Capital during 2009-14 has been worked out:

(₹ in Lakhs)

Particulars	Capital	Capital Cost recovered
		during 2009-14
Asset-I	Loan	0.72
	Equity	0.17
	Total	0.89
Asset-II	Loan	0.24
	Equity	0.06
	Total	0.29

Keeping in view the Capital Cost considered and its recovery during 2009-14 period, we get the following:

(₹ in Lakhs)

Asset-I	Capital	Capital Cost as on
		31.03.2014
Gross Capital Cost as on	Loan	69.40
31.03.2014	Equity	29.74
	Total	99.14
Capital Cost Recovered from COD	Loan	0.72
to 31.03.2014	Equity	0.17
	Total	0.89
Net Capital Cost as on 31.03.2014	Loan	68.68
	Equity	29.57
	Total	98.25

(₹ in Lakhs)

Asset-II	Capital	Central Portion
Gross Capital Cost as on	Loan	93.51
31.03.2014	Equity	40.07
	Total	133.58
Capital Cost Recovered from COD	Loan	0.24
to 31.03.2014	Equity	0.06
	Total	0.29
Net Capital Cost as on 31.03.2014	Loan	93.27
	Equity	40.02
	Total	133.29

- 22. The petitioner has further submitted that capital recovery on account of equity has been claimed @15.50% and it be allowed to recover the tax component from the beneficiaries.
- 23. The Commission in its order dated 18.3.2011 in Petition No. 28/2010 had approved the fees and charges for the period up to 31.3.2009 by considering CRF corresponding to equity on the basis of return on equity at the rate of 14% per annum (post-tax) in accordance with the terms and conditions for

determination of tariff applicable during 2004-09. Whereas, during 2009-14, consequent to creation of POSOCO, fees and charges of the assets transferred to POSOCO were allowed as per RLDC Regulations 2009, the assets retained with the CTU are neither covered under the RLDC Regulations nor under the 2009 Tariff Regulations. The tariff regulations applicable for the period 2009-14 provide for recovery of RoE (pre-tax), calculated by grossing up the base rate (normally @ 15.5% per annum) with the Corporate Tax/MAT rate for the year 2008-09 and is to be trued up subsequently with reference to the actual tax rate applicable under the provisions of the relevant Finance Act each year during the tariff period. As already mentioned earlier in this order, PGCIL filed a miscellaneous Petition No. 68/2010 for fixation of tariff norms for recovery of cost of assets ("Communication System" and "Sub-Load Despatch Centre System") to be retained or to be installed by the petitioner after formation of POSOCO for the tariff period 2009-14. It was decided, vide order dated 8.12.2011 in Petition No. 68/2010, to continue with the levelised tariff for the existing assets in the absence of any provision in the 2009 Tariff Regulations regarding determination of tariff of communication system and ULDC system of the petitioner. In our opinion, the concept of grossing up linked with the tariff determination for ordinary assets cannot per se be applied for calculating fees and charges in accordance with the Capital Recovery Factor (CRF) concept. By considering the grossed-up value of RoE, CRF gets distorted because of factoring of tax component. Therefore, in departure from the provisions for recovery of RoE specified under the tariff regulations presently applicable, posttax RoE of 15.50% per annum, converted to monthly rates has been considered. As RoE has been considered post-tax, the petitioner shall be entitled to recover income-tax from the respondents in proportion of the fees and charges shared by them in accordance with this order.

Operation & Maintenance Expenses (O&M Expenses)

24. Vide order dated 22.7.2016 in petition No 81/TT/2015, Commission had observed the following:

Quote

- In this regard, the Commission vide order dated 8.12.2011 in petition no. 68/2010 has directed as follows:
- **"(C) O&M Charges:** 27. We have examined the data submitted by the petitioner regarding actual O&M expenses during 2002-03 to 2009-10 for the communication system. It is observed that O&M charges for the year 2008-09 vary from 3.54% to 8.59% of the capital cost as on 31.03.2009 for different regions. We are of the view that the petitioner should be allowed O & M expenses on actual for the communication systems already in operation under ULDC schemes in different regions. However, for the new systems, the O&M norms would be decided at the time of framing of regulation for communication system."
- 27 In view of the above, O&M expenses are allowable on actual basis. The O&M Expenditure claimed by the petitioner for Asset-I and Asset-II is allowed subject to actual at the time of truing-up.

Unquote

25. The petitioner has submitted the details of actual O & M expenses incurred during 2013-14. Accordingly, actual O & M expenses are being allowed with the Fee and Charges.

Interest on working capital

26. The petitioner is entitled to claim interest on working capital and in the absence of specific regulation in respect of ULDC petitions, it has been considered as per the 2009 Tariff Regulations. The components of the working capital and the petitioner's entitlement to interest thereon are discussed hereinafter:-



(i) Receivables

As per Regulation 18(1) (c) (i) of the 2009 Tariff Regulations, receivables as a component of working capital will be equivalent to two months of fixed cost. The petitioner has claimed the receivables on the basis of 2 months of annual fee and charges claimed in the petition. In the fee and charges being allowed, receivables have been worked out on the basis of 2 months fee and charges.

(ii) Maintenance Spares

Regulation 18 (1) (c) (ii) of the 2009 Tariff Regulations provides for maintenance spares @ 15% per annum of the O & M Expenses as part of the working capital from 1.4.2009. The value of maintenance spares has accordingly been worked out.

(iii) O & M Expenses

Regulation 18(1) (c) (iii) of the 2009 Tariff Regulations provides for O&M Expenses for one month to be included in the working capital. The petitioner has claimed O&M Expenses for 1 month of the respective year. This has been considered in the working capital in respect of instant assets.

(iv) Rate of Interest on Working Capital

In accordance with clause (3) of Regulation 18 of the 2009 Tariff Regulations, as amended, rate of interest on working capital shall be on normative basis and shall be equal to State Bank of India Base Rate plus 350 basis point. As such, rate of interest on working capital @ 13.20% (Base rate of 8.70% as on 1.4.2013 plus 350 basis points) has been

considered in respect of Asset-I and Asset-II. Interest on working capital has been worked out accordingly.

28 Necessary computations in support of interest on working capital are given under:-

(₹ in lakh)

Particulars	Asset-I	Asset-II
	Central Portion	Central Portion
	2013-14	2013-14
	(pro-rata)	(pro-rata)
Maintenance Spares	2.77	2.72
O & M Expenses	1.54	1.51
Receivables	5.05	6.23
Total	9.36	10.46
Rate of Interest	13.20%	13.20%
Interest	1.24	1.38

Annual Fee and charges

38. The detailed calculations of fee and charges being worked out on annualized basis for the instant assets are attached at Annexure of this order and are as follows:-

(₹ in lakh)

Particulars	Asset-I	Asset-II		
	Central portion			
2013-14				
(pro-rata)	12.63	3.12		

Determination of Annual Fee and Charges for 2014-19

39. As per the directions of the Commission in order dated 8.12.2011 in Petition No.68/2010, the scope of the 2014 Tariff Regulations has been widened to include the communication system used for inter-State transmission



of electricity. However, as per proviso (iii) of Regulation 6(1) of the 2014 Tariff Regulations, the tariff of the existing communication system forming part of the transmission system is to be determined as per the methodology followed prior to 1.4.2014. The said proviso (iii) of Regulation 6(1) provides as follows:-

"(iii) the tariff of the existing communication system forming part of transmission system shall be as per the methodology followed by the Commission prior to 1.4.2014."

40. The annual fee and charges claimed by the petitioner for the instant assets for the 2014-19 tariff period are as hereunder:-

(₹ in lakh)

Asset	2014-15	2015-16	2016-17	2017-18	2018-19
Asset I	36.47	69.07	80.31	89.17	90.37
Asset II	44.62	82.97	95.40	105.79	107.21
Total	81.09	152.04	175.71	194.96	197.58

Capital Expenditure as on 01.04.2014

41. The closing Capital Cost as indicated at para-21 are being considered as opening Capital Cost on 1.4.2014 for working out the Fee & Charges for the period 2014-19 for Asset-I and Asset-II.

Additional Capital Expenditure during the tariff period 2014-19:

42. The petitioner has submitted Auditor's Certificates dated 20.07.2017, duly verified on the basis of audited statement of accounts for the period ending 31.03.2017, for expenditure incurred up to 31.03.2017 and expenditure projected to be incurred up to 31.03.2018. The following additional capital

expenditure for the period 2014-19 has been indicated in the Auditor's certificates:

(₹ in Lakhs)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	186.62	26.77	51.83	11.42	0.00
Asset-II	213.48	25.70	61.60	13.83	0.00

In absence of the specific regulation in respect of the then ULDC and the consequent Communication System petitions, we have considered the add cap up to cut off date only, as per Tariff Regulation 2009. The COD of Asset-I and Asset-II is 01.11.2013 and 01.03.2014 respectively. Accordingly, cut-off date for Asset-I and Asset-II shall be 2015-16 and 2016-17 respectively. Hence, the add cap up to 31.03.2016 and 31.03.2017 for Asset-I and Asset-II respectively have been considered.

Debt : Equity Ratio

43. The following Debt-Equity ratio has been considered as on 01.04.2014 for Asset-I and Asset-II:

(₹ in lakh)

Badiadaa	As on 31.03.2014		
Particulars	Asset-I	Asset-II	
Loan	69.40	93.51	
Equity	29.74	40.07	
Total	99.14	133.58	
Debt	70.00%	70.00%	
Equity	30.00%	30.00%	
Total	100.00%	100.00%	

Rates for Recovery of loan and equity:

(i) Capital Recovery for Loan:



44. The year wise Weighted Average Rate of Interest have been calculated on the basis of the impact due to change in floating rate of interest of loan which have been applied for calculating the Capital Recovery Factor for loan.

(ii) Capital Recovery for Equity:

45. The methodology as used for true-up calculation for 2009-14 has been applied for Capital Recovery of Equity. Hence, post–tax RoE of 15.50%, without grossing has been applied for calculating the Capital Recovery Factor for equity.

Monthly Capital Recovery Charges: -

46. Following are the monthly Recovery factors for Loan for Asset-I and Asset-II:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	0.010193	0.010735	0.011134	0.011654	0.012282
Asset-II	0.010220	0.010692	0.011066	0.011392	0.011428

47. Similarly, monthly Recovery Factors for Equity for Asset-I and Asset-II are:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	0.014445	0.014736	0.015090	0.015524	0.016064
Asset-II	0.014360	0.014633	0.014964	0.015369	0.015871

48. Based on the above recovery factors, monthly Capital Recovery Charges for Loan for Asset-I and Asset-II are worked out as below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	0.70	2.11	2.32	2.32	2.32
Asset-II	0.95	2.56	2.75	3.21	3.06

49. Monthly Capital Recovery Charges for Equity for Asset-I and Asset-II are worked out as below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	0.43	1.25	1.37	1.37	1.37
Asset-II	0.57	1.51	1.63	1.91	1.91

While working out the capital recovery charges for loan, Wt. Average Rate of Interest & Rate of Return on Equity have been considered. The details of weighted average rate of interest on loan are attached at Annexure

50. Accordingly, the following recovery of Capital during 2014-19 has been allowed:

(₹ in Lakhs)

Particulars	Capital	Capital Cost recovered during 2014-19
Asset-I	Loan	40.66
	Equity	11.57
	Total	52.22
Asset-II	Loan	52.38
	Equity	14.42
	Total	66.80

Operation & Maintenance Expenses:

51. The petitioner has claimed the following O&M expenses:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	21.45	26.29	33.19	34.29	35.43
Asset-II	24.51	31.23	39.44	40.75	42.10

This has been considered while working out the Fee and Charges for the period 2014-19.

Interest on working capital

52. The petitioner is entitled to claim interest on working capital and in the absence of specific regulation in respect of ULDC petitions, it has been considered as per the 2014 Tariff Regulations. The components of the working capital and the petitioner's entitlement to interest thereon are discussed hereinafter:-

(i) Maintenance spares:

Maintenance spares have been worked out as 15% of O&M.

(ii) O & M expenses:

One month's O&M expenses have been allowed.

(iii) Receivables:

In the calculation, the receivables have been worked out on the basis 2 months' of annual Fee & Charges.

(iv) Rate of interest on working capital:

In line with the Clause 28(3) of Regulations, 2014, SBI Base Rate Plus 350 bps



as on 1.04.2014 (i.e.13.50%) has been considered as the rate of interest on working capital for the asset.

53. The detailed calculations of fee and charges being worked out for 2014-19 period for the instant assets are attached at Annexure of this order and are as follows:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	36.47	69.06	80.31	81.47	82.67
Asset-II	44.62	82.96	95.39	105.81	105.42

Filing fee and Publication Expenses

39. The petitioner has sought reimbursement of filing fee paid by it. The petitioner has clarified that reimbursement of expenditure has been claimed in terms of the Regulation 52 of 2014 Tariff Regulations. The petitioner shall recover the filing fee in connection with the present petition, directly from the beneficiaries on *pro-rata* basis.

Licence Fee

40. The petitioner has submitted that the license fee has been a new component of cost to the transmission license and the license fee may be allowed to be recovered separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 52 of the 2014 Tariff Regulations.

GST

41. The petitioner has prayed for reimbursement of tax, if any, on account of



implementation of GST. GST is not levied on transmission service at present and we are of the view that petitioner's prayer is premature

Sharing of Annual Fees and Charges

42. The fee and charges for Fiber Optic Communication system covered under Central Sector portion shall be shared on similar lines as system operation charges by the users in the ratio of 45:45:10 as per Regulation 26 of Fees and charges of Regional Load Despatch Centre and other related matters Regulations, 2015 as under:-

Distribution licensees and buyers : 45% of system operation charges;

Generating stations and sellers : 45% of system operation charges;

Inter-state Transmission licensees: 10% of system operation charges"

43. This order disposes of Petition No. 213/TT/2017.

(M.K. lyer) (A.K. Singhal) (P.K.Pujari)
Member Member Chairperson

Annexure-1

(₹ in lakh)

Asset-I	Years
	2013-14
Opening Gross Capital Cost	77.40
Opening Gross Notional Loan	54.18
Opening Gross Equity	23.22
Recovered Gross Capital Cost (As on 1st April)	0.00
Recovered Gross Notional Loan	0.00
Recovered Gross Equity	0.00
Opn.Net Capital Cost	77.40
Opn. Net Notional Loan	54.18
Opn. Net Equity	23.22
Recovered Capital Cost (During the Year)	0.89
Recovered Notional Loan	0.72
Recovered Equity	0.17
Cl. Net Capital Cost	76.51
Cl. Net Notional Loan	53.46
Cl. Net Equity	23.05
Additional Capital Expenditure	21.74
Additional Notional Loan	15.22
Additional Equity	6.52
Years (Capital to be recovered up to 31.10.2028)	15.00
Months	180.00
Weighted Average Rare of Interest p.a.	9.1044%
Weighted Average Rare of Interest p.m.	0.7587%
Monthly Recovery Factors -Loan	0.010205
Monthly Capital Recovery Charge - Loan	0.55
Annual Capital Recovery Charge - Loan	6.63
Rate of Return on Equity p.a.	15.500%
Rate of Return on Equity p.m.	1.292%
Monthly Recovery Factors -Equity	0.014340
Monthly Capital Recovery Charge - Equity	0.33
Annual Capital Recovery Charge - Equity	4.00
Monthly Capital Recovery Charge - Total	0.89
Monthly Capital Recovery Charge - Total	
Annual Capital Recovery Charge - Total	10.63

Fee & Charges (2009-14) (Annualized)

Central Portion - Charges

Particulars	2013-14
Annual Capital Recovery Charge - Loan	6.63
Annual Capital Recovery Charge - Equity	4.00
Annual Capital Recovery Charge - Total	10.63
O&M Expenses	6.31
Interest on Working Capital ¹	0.58
Total Fee & Charges (Annualized)	17.52

Interest on Working Capital¹

Particular
Maintenance Spares (15% of O&M)
O&M Expenses (1 Month)
Receivables (2 months)
Total
Rate of Interest on Working Capital
Total Interest on Working Capital (Annualized)

2013-14		
	0.95	
	0.53	
	2.92	
	4.39	
	13.20%	
	0.58	

Applicable Fee & Charges (2009-14)

Central Portion - Charges

Particulars	2013-14 (Pro-rata)
Annual Capital Recovery Charge - Loan	2.76
Annual Capital Recovery Charge - Equity	1.66
Annual Capital Recovery Charge - Total	4.43
O&M Expenses	2.63
Interest on Working Capital ⁴	0.24
ApplkicableTotal Fee & Charges	7.30

Note: As per practise, Additional Capital Expenditure for the respective year are considered at the end of the corresponding year. Therefore, the impact of the additional capital expenditure for a particular year is considered in the tariff for the following year.

Annexure-2

(₹ in lakh)

Asset-II	Years
ASSEL-II	
On anima One as Conital Cost	2013-14
Opening Gross Capital Cost	130.26
Opening Gross Notional Loan	91.18
Opening Gross Equity	39.08
Recovered Gross Capital Cost (As on 1st April)	0.00
Recovered Gross Notional Loan	0.00
Recovered Gross Equity	0.00
Opn.Net Capital Cost	130.26
Opn. Net Notional Loan	91.18
Opn. Net Equity	39.08
-1 -1 -1 -1	
Recovered Capital Cost (During the Year)	0.29
Recovered Notional Loan	0.24
Recovered Equity	0.06
Cl. Net Capital Cost	129.97
Cl. Net Notional Loan	90.94
Cl. Net Equity	39.02
Additional Capital Expenditure	3.32
Additional Notional Loan	2.32
Additional Equity	1.00
Years (Capital to be recovered up to 28.02.2029)	15.00
Months	180.00
Weighted Average Rare of Interest p.a.	9.1125%
Weighted Average Rare of Interest p.m.	0.7594%
Monthly Recovery Factors -Loan	0.010210
Monthly Capital Recovery Charge - Loan	0.93
Annual Capital Recovery Charge - Loan	11.17
Rate of Return on Equity p.a.	15.500%
Rate of Return on Equity p.m.	1.292%
Monthly Recovery Factors -Equity	0.014340
Monthly Capital Recovery Charge - Equity	0.56
Annual Capital Recovery Charge - Equity	6.72
Monthly Capital Recovery Charge - Total	1.49
Annual Capital Recovery Charge - Total	17.90
O&M Expenses (Annualized)	7.56

Fee & Charges (2009-14) (Annualized)

Central Portion - Charges

Particulars	2013-14
Annual Capital Recovery Charge - Loan	11.17
Annual Capital Recovery Charge - Equity	6.72
Annual Capital Recovery Charge - Total	17.90
O&M Expenses	7.56
Interest on Working Capital ¹	0.81
Total Fee & Charges (Annualized)	26.27

Interest on Working Capital¹

Particular					
Maintenance Spares (15% of O&M)					
O&M Expenses (1 Month)					
Receivables (2 months)					
Total					
Rate of Interest on Working Capital					
Total Interest on Working Capital (Annualized)					

2013-14				
	1.13			
	0.63			
	4.38			
	6.14			
	13.20%			
	0.81			

Applicable Fee & Charges (2009-14)

Central Portion - Charges

Particulars	2013-14 (Pro-rata)
Annual Capital Recovery Charge - Loan	0.93
Annual Capital Recovery Charge - Equity	0.56
Annual Capital Recovery Charge - Total	1.49
O&M Expenses	0.63
Interest on Working Capital ¹	0.07
ApplkicableTotal Fee & Charges	2.19

Note: As per practise, Additional Capital Expenditure for the respective year are considered at the end of the corresponding year. Therefore, the impact of the additional capital expenditure for a particular year is considered in the tariff for the following year.

Annexure-3

(₹ in lakh)

Asset-I	Years						
7.00011	2014-15	1	ı	2017-18	2049.40		
Opening Gross Capital	2014-15 99.14	2015-16 285.76	2016-17 312.53	312.53	2018-19 312.53		
Cost							
Opening Gross Notional Loan	69.40	200.03	218.77	218.77	218.77		
Opening Gross Equity	29.74	85.73	93.76	93.76	93.76		
Recovered Gross Capital Cost (As on 1st April)	0.89	3.89	13.56	25.39	38.52		
Recovered Gross Notional Loan	0.72	3.14	10.81	20.09	30.25		
Recovered Gross Equity	0.17	0.75	2.74	5.29	8.27		
Opn.Net Capital Cost	98.25	281.87	298.97	287.14	274.01		
Opn. Net Notional Loan	68.68	196.89	207.96	198.68	188.52		
Opn. Net Equity	29.57	84.98	91.01	88.46	85.49		
Recovered Capital Cost (During the Year)	3.00	9.67	11.83	13.13	14.59		
Recovered Notional Loan	2.42	7.68	9.28	10.16	11.12		
Recovered Equity	0.58	1.99	2.55	2.97	3.47		
Cl. Net Capital Cost	95.25	272.20	287.14	274.01	259.42		
Cl. Net Notional Loan	66.26	189.22	198.68	188.52	177.40		
Cl. Net Equity	28.99	82.98	88.46	85.49	82.02		
Additional Capital Expenditure	186.62	26.77	0.00	0.00	0.00		
Additional Notional Loan	130.63	18.74	0.00	0.00	0.00		
Additional Equity	55.99	8.03	0.00	0.00	0.00		
Years (Capital to be recovered up to 31.10.2028)	14.58	13.58	12.58	11.58	10.58		
Months	175.00	163.00	151.00	139.00	127.00		
Weighted Average Rare of Interest p.a.	8.8508%	9.1441%	9.0804%	9.0804%	9.0804%		
Weighted Average Rare of Interest p.m.	0.7376%	0.7620%	0.7567%	0.7567%	0.7567%		
Monthly Recovery Factors -Loan	0.010193	0.010735	0.011134	0.011654	0.012282		
Monthly Capital Recovery Charge - Loan	0.70	2.11	2.32	2.32	2.32		
Annual Capital Recovery Charge -	8.40	25.36	27.78	27.78	27.78		
Rate of Return on Equity p.a.	15.500%	15.500%	15.500%	15.500%	15.500%		
Rate of Return on Equity p.m.	1.292%	1.292%	1.292%	1.292%	1.292%		
Monthly Recovery Factors -Equity	0.014445	0.014736	0.015090	0.015524	0.016064		

Monthly Capital Recovery Charge - Equity	0.43	1.25	1.37	1.37	1.37
Annual Capital Recovery Charge - Equity	5.13	15.03	16.48	16.48	16.48
Monthly Capital Recovery Charge - Total	1.13	3.37	3.69	3.69	3.69
Annual Capital Recovery Charge - Total	13.53	40.39	44.26	44.26	44.26
O&M Expenses (Annualized)	21.45	26.29	33.19	34.29	35.43

Fee & Charges (2009-14)

Central Portion - Charges

14)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Capital Recovery Charge - Loan	8.40	25.36	27.78	27.78	27.78
Annual Capital Recovery Charge - Equity	5.13	15.03	16.48	16.48	16.48
Annual Capital Recovery Charge - Total	13.53	40.39	44.26	44.26	44.26
O&M Expenses	21.45	26.29	33.19	34.29	35.43
Interest on Working Capital ⁴	1.50	2.38	2.85	2.91	2.98
Total Fee & Charges	36.47	69.06	80.31	81.47	82.67

Interest on Working Capital⁴

Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares (15% of O&M)	3.22	3.94	4.98	5.14	5.31
O&M Expenses (1 Month)	1.79	2.19	2.77	2.86	2.95
Receivables (2 months)	6.08	11.51	13.38	13.58	13.78
Total	11.08	17.64	21.13	21.58	22.05
Rate of Interest on Working Capital	13.50%	13.50%	13.50%	13.50%	13.50%
Total Interest on Working Capital (Annualized)	1.50	2.38	2.85	2.91	2.98



Annexure-4 (₹ In Lakh)

Asset-II	Years							
	2014-15	2015-16	2016-17	2017-18	2018-19			
Opening Gross Capital Cost	133.58	347.06	372.76	434.36	434.36			
Opening Gross Notional Loan	93.51	242.94	260.93	304.05	304.05			
Opening Gross Equity	40.07	104.12	111.83	130.31	130.31			
Recovered Gross Capital Cost (As on 1st April)	0.29	4.13	15.26	28.64	46.44			
Recovered Gross Notional Loan	0.24	3.33	12.18	22.69	36.55			
Recovered Gross Equity	0.06	0.80	3.09	5.95	9.89			
Opn.Net Capital Cost	133.29	342.93	357.50	405.72	387.92			
Opn. Net Notional Loan	93.27	239.61	248.75	281.36	267.50			
Opn. Net Equity	40.02	103.32	108.74	124.35	120.42			
Recovered Capital Cost (During the Year)	3.84	11.13	13.38	17.79	20.65			
Recovered Notional Loan	3.09	8.85	10.51	13.86	16.07			
Recovered Equity	0.74	2.29	2.87	3.93	4.59			
Cl. Net Capital Cost	129.45	331.80	344.12	387.92	367.27			
Cl. Net Notional Loan	90.18	230.76	238.24	267.50	251.43			
Cl. Net Equity	39.27	101.03	105.87	120.42	115.84			
Additional Capital Expenditure	213.48	25.70	61.60	0.00	0.00			
Additional Notional Loan	149.44	17.99	43.12	0.00	0.00			
Additional Equity	64.04	7.71	18.48	0.00	0.00			
Years (Capital to be recovered up to 28.02.2029)	14.92	13.92	12.92	11.92	10.92			
Months	179.00	167.00	155.00	143.00	131.00			
Weighted Average Rare of Interest p.a.	9.0854%	9.2917%	9.2302%	8.9423%	7.9213%			
Weighted Average Rare of Interest p.m.	0.7571%	0.7743%	0.7692%	0.7452%	0.6601%			
Monthly Recovery Factors - Loan	0.010220	0.010692	0.011066	0.011392	0.011428			
Monthly Capital Recovery Charge - Loan	0.95	2.56	2.75	3.21	3.06			
Annual Capital Recovery Charge - Loan	11.44	30.74	33.03	38.46	36.68			
Rate of Return on Equity p.a.	15.500%	15.500%	15.500%	15.500%	15.500%			
Rate of Return on Equity p.m.	1.292%	1.292%	1.292%	1.292%	1.292%			
Monthly Recovery Factors - Equity	0.014360	0.014633	0.014964	0.015369	0.015871			
Monthly Capital Recovery	0.57	1.51	1.63	1.91	1.91			



Charge - Equity					
Annual Capital Recovery Charge - Equity	6.90	18.14	19.53	22.93	22.93
Monthly Capital Recovery Charge - Total	1.53	4.07	4.38	5.12	4.97
Annual Capital Recovery Charge - Total	18.33	48.88	52.56	61.40	59.62
O&M Expenses (Annualized)	24.51	31.23	39.44	40.75	42.10

Fee & Charges (2014-19)

Central Portion - Charges

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Capital Recovery	11.44	30.74	33.03	38.46	36.68
Charge - Loan					
Annual Capital Recovery	6.90	18.14	19.53	22.93	22.93
Charge - Equity					
Annual Capital Recovery	18.33	48.88	52.56	61.40	59.62
Charge - Total					
O&M Expenses	24.51	31.23	39.44	40.75	42.10
Interest on Working Capital ¹	1.78	2.85	3.39	3.66	3.70
Total Fee & Charges	44.62	82.96	95.39	105.81	105.42

Interest on Working Capital¹

Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares (15% of O&M)	3.68	4.68	5.92	6.11	6.32
O&M Expenses (1 Month)	2.04	2.60	3.29	3.40	3.51
Receivables (2 months)	7.44	13.83	15.90	17.64	17.57
Total	13.16	21.11	25.10	27.14	27.39
Rate of Interest on Working Capital	13.50%	13.50%	13.50%	13.50%	13.50%
Total Interest on Working Capital (Annualized)	1.78	2.85	3.39	3.66	3.70

Annexure-5

Asset-I	2013-14									
Loan	Opening	Repayment	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest			
Bond XXXVIII	15.00	0.00	15.00	15.00	9.2500%	1.39				
Bond XL	19.49	0.00	19.49	19.49	9.3000%	1.81				
Bond XLII	19.69	0.00	19.69	19.69	8.8000%	1.73				
Total Loan	54.18	0.00	54.18	54.18		4.93	9.1044%			

Asset-II	2013-14										
Loan	Opening	Repayment	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest				
Bond XXXVIII	30.00	0.00	30.00	30.00	9.2500%	2.78					
Bond XL	30.00	0.00	30.00	30.00	9.3000%	2.79					
Bond XLII	31.19	0.00	31.19	31.19	8.8000%	2.74					
Total Loan	91.19	0.00	91.19	91.19		8.31	9.1125%				

Annexure-6

(₹ in Lakh)

Asset-I

	2014-15									
Loan	Opening	Repayment	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest			
Bond XXXVIII	15.00	0.00	15.00	15.00	9.2500%	1.39				
Bond XL	19.49	0.00	19.49	19.49	9.3000%	1.81				
Bond XLII	19.69	0.00	19.69	19.69	8.8000%	1.73				
Bond XLII (Add Cap 2013-14)	0.31	0.00	0.31	0.31	8.8000%	0.03				
Bond XLIII (Add Cap 213-14)	14.91	0.00	14.91	14.91	7.9300%	1.18				
Total Loan	69.40	0.00	69.40	69.40		6.14	8.8508%			
				201	-					
Loan	Opening	Repayment	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest			
Bond XXXVIII	15.00	0.00	15.00	15.00	9.2500%	1.39				
Bond XL	19.49	0.00	19.49	19.49	9.3000%	1.81				
Bond XLII	19.69	0.00	19.69	19.69	8.8000%	1.73				
Bond XLII (Add Cap 2013-14)	0.31	0.00	0.31	0.31	8.8000%	0.03				
Bond XLIII (Add Cap 213-14)	14.91	0.00	14.91	14.91	7.9300%	1.18				
Bond XLIII (Add Cap 214-15)	130.63	0.00	130.63	130.63	9.3000%	12.15				
Total Loan	200.03	0.00	200.03	200.03		18.29	9.1441%			

	2016-17									
Loan	Opening	Repayment	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest			
Bond XXXVIII	15.00	0.00	15.00	15.00	9.2500%	1.39				
Bond XL	19.49	0.00	19.49	19.49	9.3000%	1.81				
Bond XLII	19.69	0.00	19.69	19.69	8.8000%	1.73				
Bond XLII (Add Cap 2013-14)	0.31	0.00	0.31	0.31	8.8000%	0.03				
Bond XLIII (Add Cap 2013-14)	14.91	0.00	14.91	14.91	7.9300%	1.18				
Bond XLIII (Add Cap 2014-15)	130.63	0.00	130.63	130.63	9.3000%	12.15				
Bond LI (Add Cap 2015-16)	18.74	0.00	18.74	18.74	8.4000%	1.57				
Total Loan	218.77	0.00	218.77	218.77		19.87	9.0804%			

	2017-18									
Loan	Opening	Repayment	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest			
Bond XXXVIII	15.00	0.00	15.00	15.00	9.2500%	1.39				
Bond XL	19.49	0.00	19.49	19.49	9.3000%	1.81				
Bond XLII	19.69	0.00	19.69	19.69	8.8000%	1.73				
Bond XLII (Add Cap 2013-14)	0.31	0.00	0.31	0.31	8.8000%	0.03				
Bond XLIII (Add Cap 2013-14)	14.91	0.00	14.91	14.91	7.9300%	1.18				
Bond XLIII (Add Cap 2014-15)	130.63	0.00	130.63	130.63	9.3000%	12.15				
Bond LI (Add Cap 2015-16)	18.74	0.00	18.74	18.74	8.4000%	1.57				
Total Loan	218.77	0.00	218.77	218.77		19.87	9.0804%			

	2018-19										
Loan	Opening	Repayment	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest				
Bond XXXVIII	15.00	0.00	15.00	15.00	9.2500%	1.39					
Bond XL	19.49	0.00	19.49	19.49	9.3000%	1.81					
Bond XLII	19.69	0.00	19.69	19.69	8.8000%	1.73					
Bond XLII (Add Cap 2013-14)	0.31	0.00	0.31	0.31	8.8000%	0.03					
Bond XLIII (Add Cap 2013-14)	14.91	0.00	14.91	14.91	7.9300%	1.18					
Bond XLIII (Add Cap 2014-15)	130.63	0.00	130.63	130.63	9.3000%	12.15					
Bond LI (Add Cap 2015-16)	18.74	0.00	18.74	18.74	8.4000%	1.57					
Total Loan	218.77	0.00	218.77	218.77		19.87	9.0804%				

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Annexure-7

(₹ in Lakh)

	2014-15								
Loan	Opening	Repayment	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest		
Bond XXXVIII	30.00	0.00	30.00	30.00	9.2500%	2.78			
Bond XL	30.00	0.00	30.00	30.00	9.3000%	2.79			
Bond XLII	31.19	0.00	31.19	31.19	8.8000%	2.74			
Bond XLII (Add Cap 2013-14)	0.24	0.00	0.24	0.24	8.8000%	0.02			
Bond XLIII (Add Cap 213-14)	2.08	0.00	2.08	2.08	7.9300%	0.16			
Total Loan	93.51	0.00	93.51	93.51		8.50	9.0854%		
				2015-16					
Loan	Opening	Repayment	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest		
Bond XXXVIII	30.00	0.00	30.00	30.00	9.2500%	2.78			
Bond XL	30.00	0.00	30.00	30.00	9.3000%	2.79			
Bond XLII	31.19	0.00	31.19	31.19	8.8000%	2.74			
Bond XLII (Add Cap 2013-14)	0.24	0.00	0.24	0.24	8.8000%	0.02			
Bond XLIII (Add Cap 2013-14)	2.08	0.00	2.08	2.08	7.9300%	0.16			
Bond XLIII (Add Cap 2014-15)	130.44	0.00	130.44	130.44	9.3000%	12.13			
SBI 10000-D (Add Cap 2014-15)	19.00	0.00	19.00	19.00	10.2500%	1.95	_		
Total Loan	242.95	0.00	242.95	242.95		22.57	9.2917%		

	2016-17								
Loan	Opening	Repayment	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest		
Bond XXXVIII	30.00	0.00	30.00	30.00	9.2500%	2.78			
Bond XL	30.00	0.00	30.00	30.00	9.3000%	2.79			
Bond XLII	31.19	0.00	31.19	31.19	8.8000%	2.74			
Bond XLII (Add Cap 2013-14)	0.24	0.00	0.24	0.24	8.8000%	0.02			
Bond XLIII (Add Cap 2013-14)	2.08	0.00	2.08	2.08	7.9300%	0.16			
Bond XLIII (Add Cap 2014-15)	130.44	0.00	130.44	130.44	9.3000%	12.13			
SBI 10000-D (Add Cap 2014-15)	19.00	0.00	19.00	19.00	10.2500%	1.95			
Bond LI (Add Cap 2015-16)	17.99	0.00	17.99	17.99	8.4000%	1.51			
Total Loan	260.94	0.00	260.94	260.94		24.09	9.2302%		



	2017-18									
Loan	Opening	Repayment	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest			
Bond XXXVIII	30.00	0.00	30.00	30.00	9.2500%	2.78				
Bond XL	30.00	0.00	30.00	30.00	9.3000%	2.79				
Bond XLII	31.19	0.00	31.19	31.19	8.8000%	2.74				
Bond XLII (Add Cap 2013-14)	0.24	0.00	0.24	0.24	8.8000%	0.02				
Bond XLIII (Add Cap 2013-14)	2.08	0.00	2.08	2.08	7.9300%	0.16				
Bond XLIII (Add Cap 2014-15)	130.44	0.00	130.44	130.44	9.3000%	12.13				
SBI 10000-D (Add Cap 2014-15)	19.00	0.00	19.00	19.00	10.2500%	1.95				
Bond LI (Add Cap 2015-16)	17.99	0.00	17.99	17.99	8.4000%	1.51				
Bond LVII (Add Cap 2016-17)	43.12	0.00	43.12	43.12	7.2000%	3.10				
Total Loan	304.06	0.00	304.06	304.06		27.19	8.9423%			

	2018-19									
Loan	Opening	Repayment	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest			
Bond XXXVIII	30.00	0.00	30.00	30.00	9.2500%	2.78				
Bond XL	30.00	0.00	30.00	30.00	9.3000%	2.79				
Bond XLII	31.19	0.00	31.19	31.19	8.8000%	2.74				
Bond XLII (Add Cap 2013-14)	0.24	0.00	0.24	0.24	8.8000%	0.02				
Bond XLIII (Add Cap 2013-14)	2.08	0.00	2.08	2.08	7.9300%	0.16				
Bond XLIII (Add Cap 2014-15)	130.44	0.00	130.44	130.44	9.3000%	12.13				
SBI 10000-D (Add Cap 2014-15)	19.00	0.00	19.00	19.00	10.2500%	1.95				
Bond LI (Add Cap 2015-16)	17.99	0.00	17.99	17.99	8.4000%	1.51				
Bond LVII (Add Cap 2016-17)	43.12	0.00	43.12	43.12	7.2000%	3.10				
Total Loan	304.06	0.00	304.06	304.06		24.09	7.9213%			