

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 262/TT/2019

Coram:

Shri P. K. Pujari, Chairperson

Dr. M. K. Iyer, Member

Shri I. S. Jha, Member

Date of Order : 05.02.2020

In the matter of:

Petition for truing up of fees and charges for 2009-14 block and determination of fees and charges for 2014-19 tariff block in respect of Asset-I: 17 Nos. of OPGW links (759 km), Asset II: 09 Nos. of OPGW links (490 km), Asset III: 10 Nos. of OPGW links (440 km) and Asset IV: 01 Nos. of WBSETCL sector portion OPGW link (78.26 km) under "Fibre Optic communication system in lieu of existing Unified Load Despatch and Communication (ULDC) Microwave links" in Eastern Region.

And in the matter of:

Power Grid Corporation of India Ltd.
"Saudamini", Plot no.2,
Sector-29, Gurgaon -122 001. (Haryana)

.....Petitioner

Vs

1. National Thermal Power Corporation Ltd.
NTPC Bhawan, Core-7, Scope Complex
7, Institutional Area, Lodhi Road
New Delhi-110003.
2. Farakka Super Thermal Power Plant,
NTPC, Farakka
3. Kahalgaon Super Thermal Power Plant-I,
NTPC, Kahalgaon.
4. Kahalgaon Super Thermal Power Plant-II,
NTPC, Kahalgaon.



5. Talcher Super Thermal Power Plant,
Stage-II, NTPC, Talcher
6. National Hydro Power Corporation (NHPC) Ltd.
NHPC Office Complex
Lodhi Road, New Delhi
7. Teesta-V Hydro Electric Project,
NHPC, Singtam, East Sikkim
8. Rangeet Hydro Electric Project,
NHPC,
P.O. Rangit Nagar, South Sikkim.
9. DVC Mejia Thermal Power Station,
DVC, P.O.
MTPS, Dist. Bankura-722183
10. West Bengal State Electricity Distribution Co.Ltd.
Bidyut Bhawan, 8th floor (A Block)
Block DJ, Salt Lake City
Calcutta-700 091
11. Bihar State Electricity Board
Vidyut Bhawan, Bailey Road
Patna-800 001
12. Grid Corporation of Orissa Ltd.
Vidyut Bhawan, Janpath,
Bhubaneshwar-751 007
13. Power Department
Government of Sikkim, Gangtok-727 102
14. Jharkhand State Electricity Board
Engineering Building
HEC Township
Dhurwa, Ranchi-834 004
15. Damodar Valley Corporation
DVC Tower, VIP Road,
Calcutta-700 054



16. Powerlinks Transmission Ltd.,
Vidyut Nagar,
P.O. Satellite Township,
Siliguri-734 015

.....Respondents

For Petitioner : Shri S. S. Raju, PGCIL
Shri Amit K. Jain, PGCIL
Shri Amit Yadav, PGCIL

For Respondents : Shri R. B. Sharma, Advocate, BSP(H)CL
Shri Mohit Mudgal, Advocate, BSP(H)CL
Ms. Neha Maniktal, Advocate, BSP(H)CL

ORDER

The present petition has been filed by Power Grid Corporation of India Ltd. (hereinafter referred to as “the Petitioner”) under of Section 28(4) and Section 79(1)(d) of Electricity Act, 2003 (hereinafter referred to as the ‘Act’) and Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 for truing up of capital expenditure of the 1.4.2013 to 31.3.2014 period and determination of tariff for the 2014-19 tariff period for Asset-I: 17 Nos. of OPGW links (759 km); Asset II: 09 nos. of OPGW links (490 km); Asset III: 10 nos. of OPGW links (440 km); and Asset IV: 01 no of WBSETCL Sector portion OPGW link (78.26 km) (hereinafter collectively referred to as “assets”) under “Fibre Optic communication system in lieu of existing Unified Load Despatch and Communication (ULDC) Microwave links” (hereinafter referred to as the “transmission project”) in Eastern Region.



2. The investment approval for the Fibre Optic Communication system in lieu of existing Unified Load Despatch and Communication (ULDC) Microwave links in Eastern Region was accorded by the Board of Directors of the Petitioner vide letter no. C/CP/Fibre Optic in ER dated 15.2.2011 at an estimated cost of ₹5743 lakh including IDC of ₹331 lakh (based on 3rd Quarter, 2010 price level).

3. The Revised Cost Estimate (RCE) for Fibre Optic Communication System in lieu of existing ULDC microwave links in Eastern Region was accorded by Board of Directors of the Petitioner vide Memorandum No. C/CP/PA1920-02-0C-RCE-002 dated 9.5.2019 at the Estimated Cost of ₹6410 lakh including IDC of ₹322 lakh (at June, 2018 price level) in its 364th meeting held on 23.3.2019.

4. The broad scope of work covered under the transmission project is as under:-

(a) Installation of OPGW fibre optic cable on the existing EHV transmission line of POWERGRID and constituents, the estimated length of such cable is approximately 2325 km;

(b) Installation of approximately 34 km underground fibre optic to provide last mile connectivity to the control room where transmission line connectivity is not available. It is also envisaged that portion of the network which involves installation of the underground cable would be provided with radio based communication which operates in free band to back up the underground cable link of the network. Four number of radio links are proposed;



(c) The terminal equipment for communication based upon synchronous digital hierarchy (SDH) technology shall be installed in the sub-stations of constituents and POWERGRID. The project would also involve installation of primary multiplexers at the new wide band nodes; To monitor the Network, Network Management System (NMS) would also be required.

5. The details of the assets covered in the instant transmission project and the details of the petitions under which they were dealt earlier are as under:

Sl. No.	Name of Asset	Actual COD	Remark
1	Asset I: 17 OPGW links (approx. 759 km)	1.10.2012	Covered under instant petition. Tariff for 2009-14 period was earlier allowed in Petition No. 57/TT/2014.
2	Asset II: 9 OPGW links (approx. 490 km)	1.4.2013	
3	Asset III: 10 OPGW links (approx. 440 km)	1.11.2013	
4	Asset IV: 01 no. OPGW WBSETCL Sector portion link (78.26 km)	1.3.2014	Covered under instant petition.
5	01 no. of OPGW link 21.003 km under central sector	1.10.2014	Covered in Petition No. 48/TT/2016 and tariff for 2014-19 tariff period was allowed vide order dated 5.12.2016
6	01 no. of OPGW link 17.03 km under WBSETCL Sector		
7	07 nos. of OPGW link under DVC sector 196.81 km		
8	02 nos. of OPGW link 278.641 km under central sector	20.4.2015	
9	02 nos. of OPGW link 35.044 km under WBSETCL Sector		
10	01 nos. of OPGW link under DVC sector 0.80 km.		
11	Balance links	-	



Background

6. The Government of India (GOI) vide order dated 4.7.2008, created Power System Operation Corporation Ltd. (POSOCO) as a wholly owned subsidiary of PGCIL. POSOCO is responsible for system operation of National Load Despatch Centre (NLDC) and Regional Load Despatch Centre (RLDC). Pursuant to Satnam Singh Committee's report, the assets pertaining to system operations have been transferred to POSOCO for which separate tariff orders are issued by the Commission.

7. Government of India had also constituted a Task Force to look into the financial aspects for augmentation and up-gradation of the State Load Despatch Centres and issues related to emoluments for the personnel engaged in the system operation. The Task Force made certain recommendations with regard to the ownership of the assets. The Petitioner constituted committees at the regional level, subsequent to the Task Force's report, to identify the assets to be transferred to POSOCO. The recommendations of the committees for asset transfer were as follows:-

(A) Assets to be transferred to POSOCO:

- (i) EMS/SCADA system (computer system, hardware and software)
- (ii) Auxiliary power supply system comprising of uninterrupted power supply, diesel generating set etc.

- (iii) Building and civil works.

(B) Assets which will remain with Petitioner:

I. Central Portion:



- (i) Fibre Optic Cables (overhead and underground)
- (ii) Fibre Optic Communication Equipment
- (iii) Digital Microwave Communication System (Tower, Antenna, Equipment etc.)
- (iv) PABX
- (v) Power Line Carrier Communication System;
- (vi) Auxiliary power supply system.

II. State Portion: Entire state portion which consists of the following equipment will remain with the Petitioner:

- (i) EMS/SCADA system
- (ii) Fibre Optic System
- (iii) Digital Microwave Communication System (Tower, Antenna, Equipment etc.)
- (iv) PABX
- (v) Power Line Carrier Communication System
- (vi) Auxiliary power supply system (part)

8. The Petitioner filed Petition No. 68/2010 under Section 28(4) of the Act and Regulation 44 (Power to Relax) of the 2009 Tariff Regulations for specifying the tariff norms for recovery of cost for the assets to be retained/to be installed by the Petitioner after formation of POSOCO for the 2009-14 period.

9. The Commission in Petition No. 68/2010 vide order dated 8.12.2011, had observed as under:-

“9.....Since the communication system and SLDC system form part of the assets of the CTU, there is a requirement to specify regulations for determination of tariff of these assets. We direct the staff of the Commission to undertake the exercise separately and include these assets of CTU in the tariff regulations applicable for the next tariff period i.e.2014-19. As regards the tariff of these assets for the period 2009-14, we are not inclined to determine the tariff of these assets by exercising our power to relaxation under Regulation 44 of the 2009 regulations since there is no provision for determination of tariff for the assets covered under the communication system and ULDC system. We are of the view that the tariff of these assets shall be determined under our general power of determination of tariff for inter-State transmission system under section 79(1)(d) of the Act.....”



“.....It clearly emerges from the above judgment that the Central Commission can specify the terms and conditions of tariff even in the absence of the regulations. Since no regulation was specified for determination of tariff of the communication system and the ULDC system, the Commission determined the tariff of these assets during the period 2004-09 on levelised basis by adopting some of the parameters of 2004 tariff regulations. We have decided to continue with the levelised tariff for the existing assets in the absence of any provision in 2009 regulations regarding determination of tariff of communication system and ULDC system of the petitioner. For the new assets, the tariff will be decided as per the regulations for communication systems to be framed. Accordingly we direct the staff of the Commission to take necessary action to prepare draft regulations for determination of tariff for the communication system and ULDC system of the petitioner.”

“21. We have considered the submission of the petitioner and the respondents. We are of the view that replacement of microwave links with fibre optic links should be implemented as agreed by the beneficiaries to ensure safe and reliable operation of the power system. Moreover, the petitioner has submitted that surrender of the microwave frequencies would save substantial cost and the fibre optic system would be beneficial in the long run as the fibre optic communication network is required for implementation of new technologies like Wide Area Measurement System (WAMS), Special Protection Schemes (SPS) etc. in view of fast development and complexity of the power system in the country. As regards the regulatory approval, we are of the view that since the project has been agreed to be implemented by the constituents of each of the regions, regulatory approval is not considered necessary. The petitioner is granted liberty to approach the Commission for determination of tariff for the fibre optic network being installed in lieu of microwave links for each of the region separately. As regards the submission of UPPTCL, it is clarified that if the state portion is not being implemented by it separately as proposed earlier, the same shall be implemented by the petitioner and UPPTCL would be required to share the tariff in proportion to the assets being utilised by it. It is however made clear that the timeline for replacement of the digital microwave by optical fibre should be strictly complied with.”

10. The Commission in order dated 8.12.2011 in Petition No. 68/2010 observed that in the absence of any provision in the 2009 Tariff Regulations for determination of tariff of communication system and ULDC system levelised tariff would be allowed for the existing communication system and ULDC system of the Petitioner. The Petitioner filed Petition No. 57/TT/2014 for Asset-I, II and III in accordance with sub-section of Sections 28(4) and 79(1)(d) of the Act and the annual fee and charges for the instant



assets was allowed as per the principles approved in order dated 8.12.2011 in Petition No. 68/2010.

11. Later, the Petitioner filed Petition No. 248/TT/2017 for truing-up of the fee and charges allowed for Assets-I, II and III for the period from COD of the respective assets to 31.3.2014 and for determination of fee and charges for Asset-IV from its COD on 1.3.2014 to 31.3.2014. The Commission disposed of the said petition as the information required for reassessment of the capital cost was not available, vide order dated 20.9.2018 with a liberty to the Petitioner to file a fresh petition after the approval of the RCE by the Petitioner's Board of Directions. The observations made by the Commission in order dated in this regard are as under:

“10. As such, the truing up exercise for the tariff period 2009-14 and the tariff determination for tariff period 2014-19 would not be feasible in absence of such information regarding reassessment of capital cost.....”

12. Subsequently, RCE was approved by the Board of Directors of the Petitioner on 23.3.2019 and accordingly the Petitioner has filed the instant petition.

13. In this order, the fee and charges allowed for Assets-I, II and III for the 2009-14 period vide order dated 15.9.2016 in Petition No. 57/TT/2014 is trued up and tariff for the 2014-19 period is allowed for the said assets. Besides this, the final trued up tariff for Asset-IV is also allowed in this order as per the principles laid down in order dated 8.12.2011 in Petition No. 68/2010.



14. The Petitioner has served the petition on the respondents and notice of this application has been published in the newspapers in accordance with Section 64 of the Act. No comments have been received from the public in response to the notices published by the Petitioner under Section 64 of the Act. Bihar State Power (Holding) Company Ltd. (BSPHCL) has filed its reply vide affidavit dated 15.10.2019 and the Petitioner has filed its rejoinder to the reply of BSPHCL vide affidavit dated 15.10.2019.

15. BSPHCL has submitted that fees and charges for the stand alone communication system cannot be determined either under Regulation 4(1) of the 2009 Tariff Regulations or under Regulation 6(1) of the 2014 Tariff Regulations. BSPHCL has further submitted that the Tariff Regulations are also not applicable for determination of fee and charges as contained in Section 28(4) of the Act. Accordingly, this petition is liable to be rejected in accordance with Regulation 7(5) of the Tariff Regulations, 2014. In response, the Petitioner has submitted that the ULDC schemes were introduced in different regions between 2002 and 2006 and no specific regulations were available at that time as required under Section 28(4) of the Act for determination of fees and charges for the said assets for the 2004-09 period. Therefore, the Petitioner filed Petition No.68/2010 praying for extension of the 2009 Tariff Regulations for determination of fees and charges for the communication system and SLDC system to be retained/additional assets to be created by the Petitioner by exercising the power to relax under Regulation 44 of the 2009 Tariff Regulations and



the Commission vide order dated 8.12.2011 directed the Petitioner to file petition for approval of tariff for the communication in accordance with Section 28(4) of the Act.

16. As there were no specific regulations for determination of fee and charges for the communication system under the 2009 Tariff Regulations, the Commission in order dated 8.12.2011 had directed the Petitioner to seek approval of fee and charges for the communication system for the 2009-14 period under Sections 28(4) and 79(1)(d) of the Act and decided to allow levelised tariff for the existing communication system. Accordingly, the Petitioner filed Petition No. 57/TT/2014 and the Commission vide order dated 15.9.2016 allowed levelised tariff for the communication system for the 2009-14 period. As regards the fees and charges for the 2014-19 tariff period, the Commission in proviso (iii) of Regulation 6(1) of the 2014 Tariff Regulations has specified that the tariff for the existing communication system shall be as per the methodology followed prior to 1.4.2014. Accordingly, the instant OPGW links are allowed levelised tariff for 2009-14 and 2014-19 tariff periods.

17. Having heard the representatives of the Petitioner and BSPHCL and perused the material on record, we proceed to dispose of the Petition.

Time over-run

18. As per investment approval, the instant project was scheduled to be commissioned within 30 months from the date of investment approval of 15.2.2011. Accordingly, the scheduled COD of the instant assets was 1.9.2013. Asset-I and



Asset-II were put into commercial operation on 1.10.2012 and 1.4.2013 respectively. Therefore, there is no time over-run in case of Asset-I and Asset-II. Asset-III was put into commercial operation on 1.11.2013 and there was a time over-run of 61 days which was not condoned by the Commission in order dated 15.9.2016 in Petition No. 57/TT/2014.

19. The Petitioner has claimed the COD of the Asset-IV as 1.3.2014. With respect to RLDC charging certificate, the Petitioner has submitted that the instant asset achieved COD during 2009-14 tariff period and thus the charging certificate for the same is not applicable. The COD of Asset-IV was discussed in 27th ERPC and TCC meeting held on 30.5.2014 and was approved as 1.3.2014. Considering the self-declaration COD certificate and approval of ERPC, the COD of the Asset IV is approved as 1.3.2014. Accordingly, there is a time over-run of 181 days in case of Asset IV.

20. The Petitioner has submitted that the time over-run of 181 days in case of Asset-IV is not attributable to the Petitioner and requested to condone the time over-run of 181 days. The Petitioner has given the following reasons for the time over-run:

“It may be mentioned the OPGW installation is a specialized nature of job and is generally done under live line conditions. POWERGRID has taken up huge volume of work for connecting POWERGRID sub-stations. Simultaneously, POWERGRID has also taken up OPGW work for state utilities on their request due to greater stress on reliable communication requirement for grid operation. The live line installation of OPGW requires trained manpower and specialized T&P. Due to availability of limited no. of trained gangs for live line installation of OPGW, the installation process is not commensurate with the volume of work.

Further, to take up live line installation, permission from RLDC/SLDC is required who are responsible for grid operation. The SLDCs and RLDCs provide permission for live line installation considering the power flow situation. Considering these aspects there



are restrictions on taking up live line work on parallel lines and adjacent lines simultaneously. The progress of the live line work is also affected due to rain and fog. Efforts are being made to expedite the work and in the last few months the no. of gangs have increased several times with corresponding increase in OPGW installation.”

21. We have considered the submissions of the Petitioner regarding time over-run. The Petitioner has submitted that the time over-run is mainly due to availability of limited number of trained gangs for live line installation and obtaining permission from SLDC and RLDC for live line installation and restrictions for taking up live line work on parallel lines and adjacent lines simultaneously. The progress of the live line work was also affected due to rain and fog. However, it was clearly stated in the Commission’s order dated 8.12.2011 in Petition No. 68/2010 that the timeline for replacement of the digital microwave by optical fibre should be strictly complied with. The relevant portion of the said order is as under:-

”We have considered the submission of the petitioner and the respondents. We are of the view that replacement of microwave links with fibre optic links should be implemented as agreed by the beneficiaries to ensure safe and reliable operation of the power system. Moreover, the petitioner has submitted that surrender of the microwave frequencies would save substantial cost and the fibre optic system would be beneficial in the long run as the fibre optic communication network is required for implementation of new technologies like Wide Area Measurement System (WAMS), Special Protection Schemes (SPS) etc. in view of fast development and complexity of the power system in the country. As regards the regulatory approval, we are of the view that since the project has been agreed to be implemented by the constituents of each of the regions, regulatory approval is not considered necessary. The petitioner is granted liberty to approach the Commission for determination of tariff for the fibre optic network being installed in lieu of microwave links for each of the region separately. As regards the submission of UPPTCL, it is clarified that if the state portion is not being implemented by it separately as proposed earlier, the same shall be implemented by the petitioner and UPPTCL would be required to share the tariff in proportion to the assets being utilised by it. It is however made clear that the timeline for replacement of the digital microwave by optical fibre should be strictly complied with.”



In view of the above, we are not inclined to condone the time over run of 181 days in commissioning of Asset-IV.

22. The Commission, vide order dated 15.9.2016 in Petition No. 57/TT/2014 has approved the fee and charges based on the following capital cost for Assets-I, II and III as on their respective COD.

(₹ in lakh)

Particulars	Asset-I		Asset-II		Asset-III	
	Central Portion	State Portion	Central Portion	State Portion	Central Portion	State Portion
Expenditure up to COD (claimed)-(A)	26.47	423.32	34.81	391.20	321.75	259.48
IDC disallowed due to Undischarged Liability and Time over-run-(B)	1.98	6.17	0.00	0.00	0.00	0.00
IEDC disallowed due to Time over-run-(C)	0.00	0.00	0.00	0.00	1.91	1.54
Capital Cost as on COD (allowed) [A-(B+C)]	24.49	417.15	34.81	391.20	319.84	257.94
Add Cap during 2012-13/2013-14	43.44	1052.09	47.43	421.82	93.82	132.00
Capital cost as on 31.3.2014	67.93	1469.24	82.24	813.02	413.66	389.94

23. The details of the fee and charges approved for Assets-I, II and III in order dated 15.9.2016 are as under:-

(₹ in lakh)

Asset-I	Central Portion		State Portion	
	2012-13	2013-14	2012-13	2013-14
Annual Capital Recovery Charge - Loan	1.06	3.10	18.06	57.65
Annual Capital Recovery Charge - Equity	0.63	1.84	10.77	34.28
Annual Capital Recovery Charge - Total	1.69	4.94	28.83	91.93
O&M Expenses	14.32	31.48	0.00	0.00
Interest on Working Capital	0.83	1.85	0.66	2.12
Total Fee & Charges	16.84	38.27	29.49	94.04



(₹ in lakh)

Asset-II	Central Portion	State Portion
	2013-14	2013-14
Annual Capital Recovery Charge - Loan	2.98	33.44
Annual Capital Recovery Charge - Equity	1.80	20.20
Annual Capital Recovery Charge - Total	4.77	53.64
O&M Expenses	17.45	0.00
Interest on Working Capital	1.05	1.21
Total Fee & Charges	23.27	54.85

(₹ in lakh)

Asset-III	Central Portion	State Portion
	2013-14	2013-14
Annual Capital Recovery Charge - Loan	11.71	9.44
Annual Capital Recovery Charge - Equity	6.88	5.55
Annual Capital Recovery Charge - Total	18.59	14.99
O&M Expenses	6.11	0.00
Interest on Working Capital	0.75	0.34
Total Fee & Charges	25.44	15.33

Truing up of Fee and Charges for the 2009-14 period

Capital Cost as on COD

24. The Petitioner, vide Auditor's Certificates dated 18.2.2019, has submitted actual expenditure in case of Assets-I, II, III and Asset-IV corresponding to Central Portion as well as State Portion separately. The details of the Apportioned Approved Cost, Capital Cost as on COD and additional capitalization incurred for the instant OPGW links covered during 2012-13 and 2013-14 are as follows:-

(₹ in lakh)

Name of Asset	Apportioned approved cost/RCE	SECTOR	Cost as on DOCO	2012-13	2013-14	TOTAL
Asset-I	2094.63/ 1931.80	CENTRAL	26.47	11.12	18.36	55.95
		STATE	423.32	244.72	398.32	1066.36
		TOTAL	449.79	255.84	416.68	1122.31
Asset-II	1292.84/	CENTRAL	34.81	-	24.03	58.84



	1078.97	STATE	391.20	-	207.28	598.48
		TOTAL	426.01	-	231.31	657.32
Asset-III	1054.57/ 949.39	CENTRAL	321.75	-	0.84	322.59
		STATE	259.48	-	12.23	271.71
		TOTAL	581.23	-	13.07	594.30
Asset-IV	208.52/ 159.08	CENTRAL	-	-	-	-
		STATE	89.18	-	0.19	89.37
		TOTAL	89.18	-	0.19	89.37

The capital cost has been verified from the audited accounts of the Petitioner by the Auditor up to 31.3.2018.

25. The gross value of the assets submitted by the Petitioner as on COD have been considered for the purpose of true-up of fee and charges of 2009-14 period.

Interest During Construction (IDC)

26. The Petitioner has claimed IDC of ₹8.15 lakh, ₹5.03 lakh, ₹34.78 lakh and ₹5.11 lakh for Assets-I, II, III and IV respectively. The Petitioner, vide Auditor's Certificates dated 18.2.2019, has submitted the segregated IDC for Central Portion as well as State Portion. However, the Petitioner has submitted asset-wise combined working of IDC calculations for Central Portion as well as State Portion.

27. Allowable IDC has been worked out based on the loans deployed as per submission of the Petitioner on allowable date of IDC assuming that the Petitioner has not made any default in the payment of interest. We have worked out the allowable IDC by considering time over-run not allowed in case of Asset-III and IV. It is observed that the IDC claimed by the Petitioner in respect of Assets-I, II and III are slightly lower and in respect of Asset-IV is higher than the allowable IDC. Therefore, the IDC which is lower is considered for computation of fee and charges. Further, the



Petitioner has submitted the statement showing un-discharged IDC liability as on COD and to be discharged after COD. Accordingly, the IDC claimed, allowed, disallowed and liability thereon as on COD and discharge of liability thereafter are summarized below:-

(₹ in lakh)							
Asset (a)	Sector (b)	IDC Claimed (c)	IDC Allowed (d)	IDC Disallowed (On account of excess claim /time over-run not condoned, if any) (e)	IDC Liability (as on COD) (f)	IDC Discharged during 2012-13 (g)	IDC Discharged during 2013-14 (h)
Asset-I	Central Portion	1.98	1.98	-	1.98	1.90	0.08
	State Portion	6.17	6.17	-	6.17	5.93	0.24
	Total	8.15	8.15	-	8.15	7.83	0.32
Asset-II	Central Portion	0.41	0.41	-	-	-	-
	State Portion	4.62	4.62	-	-	-	-
	Total	5.03	5.03	-	-	-	-
Asset-III	Central Portion	19.25	19.25	-	4.68	-	4.68
	State Portion	15.53	15.53	-	3.77	-	3.77
	Total	34.78	34.78	-	8.45	-	8.45
Asset-IV	Central Portion	-	-	-	-	-	-
	State Portion	5.11	3.08	2.03	1.23	-	1.23
	Total	5.11	3.08	2.03	1.23	-	1.23



28. The IDC, as per column (e) and column (f) above, have been deducted from Capital Cost as on COD. Discharge of liability as per column (g) and column (h) above have been added to the additional capital expenditure during 2012-13 and 2013-14.

Incidental Expenditure during Construction (IEDC)

29. The Petitioner has claimed IEDC of ₹26.50 lakh, ₹32.59 lakh, ₹55.18 lakh and ₹0.88 lakh for Assets-I, II, III and IV respectively. The Petitioner, vide Auditor's Certificates dated 18.2.2019, has submitted the segregated IEDC for Central Portion as well as State Portion. However, the Petitioner has submitted asset-wise combined detail of IEDC calculations for Central Portion as well as State Portion.

30. We have applied same methodology approved in respect of IEDC in order dated 15.9.2016 in Petition No. 57/TT/2014. As per the said order, the percentage of Hard Cost indicated in the Abstract Cost Estimate is considered as the allowable limit for the IEDC. In the current petition, the Petitioner's claim is within the percentage of 10.75% on Hard Cost as indicated in the Abstract Cost Estimate, in case of Assets-I, II, III and IV. Hence, as per ceiling limit, IEDC claimed by the Petitioner is allowed.

31. Further, pro-rata IEDC of ₹3.40 lakh (₹1.88 lakh for Central Portion and ₹1.52 lakh for State Portion) and ₹0.14 lakh (State Portion) in case of Asset-III and IV respectively, for the period of time over-run not condoned are being deducted from the capital cost as on COD. Therefore, Capital Cost as on DOCO considered for the



purpose of fee and charges in the present petition, after scrutiny of IEDC and IDC are as follows:-

(₹ in lakh)

Asset (a)	Portion (b)	Capital Cost Claimed as on COD (c)	IDC Disallowed (On account of Excess Claim /Time Overrun not condoned, if any) (d)	IDC Liability (as on COD) (e)	Pro-rata IEDC On account of time over-run not condoned (f)	Capital Cost allowed as on COD (g)=[(c) – (d)-(e) – (f)]
Asset-I	Central Portion	26.47	-	1.98	-	24.49
	State Portion	423.32	-	6.17	-	417.15
	Total	449.79	-	8.15	-	441.64
Asset-II	Central Portion	34.81	-	-	-	34.81
	State Portion	391.20	-	-	-	391.20
	Total	426.01	-	-	-	426.01
Asset-III	Central Portion	321.75	-	4.68	1.88	315.19
	State Portion	259.48	-	3.77	1.52	254.19
	Total	581.23	-	8.45	3.40	569.38
Asset-IV	Central Portion	-	-	-	-	-
	State Portion	89.18	2.03	1.23	0.14	85.78
	Total	89.18	2.03	1.23	0.14	85.78

Additional Capital Expenditure during the tariff period 2009-14

32. As stated above, the Petitioner has submitted Auditor's Certificates dated 18.2.2019 for additional capitalization for Assets-I, II, III and IV corresponding to Central Portion and State Portion during 2012-13 and 2013-14. The additional



capitalization is on account of Balance/Retention payment and accordingly it is allowed. Further, as indicated at column (g) and column (h), IDC discharged during the respective years are to be allowed as additional capital expenditure of the respective years. Accordingly, the Capital Cost allowed as on COD and additional capital expenditure from COD to 31.3.2014 are as follows:

Particulars	PORTION	Capital Cost allowed as on COD	2012-13	2013-14	TOTAL
Asset-I	Central	24.49	13.02	18.44	55.95
	State	417.15	250.65	398.56	1066.36
	Total	441.64	263.67	417.00	1122.31
Asset-II	Central	34.81	-	24.03	58.84
	State	391.20	-	207.28	598.48
	Total	426.01	-	231.31	657.32
Asset-III	Central	315.19	-	5.52	320.71
	State	254.19	-	16.00	270.19
	Total	569.38	-	21.52	590.90
Asset-IV	Central	-	-	-	-
	State	85.78	-	1.42	87.19
	TOTAL	85.78	-	1.42	87.19

Debt equity ratio

33. The details of Debt-Equity as on COD of the assets and as on 31.3.2014, as per Regulation 12 of the 2009 Tariff Regulations, are as follows:-

Asset-I	As on COD		As on 31.3.2014	
	Central Portion	State Portion	Central Portion	State Portion
Loan	17.14	292.01	39.17	746.45
Equity	7.35	125.15	16.79	319.91
Total	24.49	417.15	55.95	1066.36
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



(₹ in lakh)

Asset-II	As on COD		As on 31.3.2014	
	Central Portion	State Portion	Central Portion	State Portion
Loan	24.37	273.84	41.19	418.94
Equity	10.44	117.36	17.65	179.54
Total	34.81	391.20	58.84	598.48
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

(₹ in lakh)

Asset-III	As on COD		As on 31.3.2014	
	Central Portion	State Portion	Central Portion	State Portion
Loan	220.63	177.93	224.50	189.14
Equity	94.56	76.26	9621	81.06
Total	315.19	254.19	320.71	270.19
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

(₹ in lakh)

Asset-IV	As on COD		As on 31.3.2014	
	Central Portion	State Portion	Central Portion	State Portion
Loan	-	60.04	-	61.04
Equity	-	25.73	-	26.16
Total	-	85.78	-	87.19
Debt (%)	-	70.00	-	70.00
Equity (%)	-	30.00	-	30.00
Total	-	100.00	-	100.00

Rates for Recovery of loan and equity

34. The Petitioner has submitted year wise Weighted Average Rate of Interest based on separate loan portfolio as on COD and for additional capital expenditure in respect of Central Portion and State Portion corresponding to Assets-I, II, III and IV. However, in Petition No. 57/TT/2014, the Petitioner had submitted combined loan portfolio for Central Portion and State Portion for each asset. We have calculated the Weighted



Average Rate of Interest of Loans which has been applied for calculating the Capital Recovery Factor for loan.

35. As in Petition No. 57/TT/2014, rate of return on equity of 15.50% has been applied for calculating the Capital Recovery Factor for equity portion. The above rates being on annual basis have been converted to monthly rates.

Monthly Capital Recovery Charges

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

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

37. The monthly Recovery factors for Loan for Central Portion and State Portion is as follows:

Particulars	(₹ in lakh)				
	Asset-I		Asset-II	Asset-III	Asset-IV
	2012-13	2013-14	2013-14	2013-14	2013-14
Central Portion	0.010307	0.010388	0.010177	0.010232	-
State Portion	0.010307	0.010369	0.010177	0.010232	0.009997

38. Similarly, monthly Recovery Factors for Equity for Central portion and State portion are as under:

Particulars	(₹ in lakh)				
	Asset-I		Asset-II	Asset-III	Asset-IV
	2012-13	2013-14	2013-14	2013-14	2013-14
Central Portion	0.014340	0.014468	0.014340	0.014340	-
State Portion	0.014340	0.014468	0.014340	0.014340	0.014340



39. Based on the above recovery factors, monthly Capital Recovery Charges for Loan for Central as well as State portion are worked out and they are as follows:

(₹ in lakh)

Particulars	Asset-I		Asset-II	Asset-III	Asset-IV
	2012-13	2013-14	2013-14	2013-14	2013-14
Central Portion	0.18	0.27	0.25	2.26	-
State Portion	3.01	4.80	2.79	1.82	0.60

40. The monthly Capital Recovery Charges for Equity for Central and State portion are worked out and they are as follows:

(₹ in lakh)

Particulars	Asset-I		Asset-II	Asset-III	Asset-IV
	2012-13	2013-14	2013-14	2013-14	2013-14
Central Portion	0.11	0.16	0.15	1.36	-
State Portion	1.79	2.88	1.68	1.09	0.37

41. While working out the capital recovery charges for loan, Weighted Average Rate of Interest and Rate of Return on Equity, as indicated above have been considered. Accordingly, the following recovery of Capital during 2009-14 has been worked out:-

(₹ in lakh)

Particular	Capital	Central Portion	State Portion	Total
Asset-I (Capital Cost Recovered during 2009-14)	Loan	1.14	20.73	21.87
	Equity	0.29	5.09	5.38
	Total	1.43	25.82	27.25
Asset-II (Capital Cost Recovered during 2009-14)	Loan	0.80	9.01	9.81
	Equity	0.19	2.15	2.34
	Total	0.99	11.16	12.15
Asset-III (Capital Cost Recovered during 2009-14)	Loan	2.92	2.35	5.28
	Equity	0.69	0.56	1.25
	Total	3.61	2.91	6.52
Asset-IV (Capital Cost Recovered during 2009-14)	Loan	-	0.16	0.16
	Equity	-	0.04	0.04
	Total	-	0.20	0.20



42. On the basis of the above, the Capital Cost considered and its recovery during 2009-14 period, the Net Capital cost of the Assets as on 31.3.2014 is derived as follows:-

(₹ in lakh)

Asset-I	Capital	Central Portion	State Portion	Total
Gross Capital Cost as on 31.3.2014	Loan	39.17	746.45	785.62
	Equity	16.79	319.91	336.69
	Total	55.95	1066.36	1122.31
Capital Cost Recovered from COD to 31.3.2014	Loan	1.14	20.73	21.87
	Equity	0.29	5.09	5.38
	Total	1.43	25.82	27.25
Net Capital Cost as on 31.3.2014	Loan	38.03	725.72	763.75
	Equity	16.50	314.82	331.32
	Total	54.52	1040.54	1095.06

(₹ in lakh)

Asset-II	Capital	Central Portion	State Portion	Total
Gross Capital Cost as on 31.3.2014	Loan	41.19	418.94	460.12
	Equity	17.65	179.54	197.20
	Total	58.84	598.48	657.32
Capital Cost Recovered from COD to 31.3.2014	Loan	0.80	9.01	9.81
	Equity	0.19	2.15	2.34
	Total	0.99	11.16	12.15
Net Capital Cost as on 31.3.2014	Loan	40.39	409.93	450.32
	Equity	17.46	177.39	194.85
	Total	57.85	587.32	645.17

(₹ in lakh)

Asset-III	Capital	Central Portion	State Portion	Total
Gross Capital Cost as on 31.3.2014	Loan	224.50	189.14	413.63
	Equity	96.21	81.06	177.27
	Total	320.71	270.19	590.90
Capital Cost Recovered from COD to 31.3.2014	Loan	2.92	2.35	5.28
	Equity	0.69	0.56	1.25
	Total	3.61	2.91	6.52
Net Capital Cost as on 31.3.2014	Loan	221.58	186.78	408.36
	Equity	95.52	80.50	176.02
	Total	317.10	267.28	584.38

(₹ in lakh)

Asset-IV	Capital	Central Portion	State Portion	Total
Gross Capital Cost as on 31.3.2014	Loan	-	61.04	61.04
	Equity	-	26.16	26.16
	Total	-	87.19	87.19



Capital Cost Recovered from COD to 31.3.2014	Loan	-	0.16	0.16
	Equity	-	0.04	0.04
	Total	-	0.20	0.20
Net Capital Cost as on 31.3.2014	Loan	-	60.87	60.87
	Equity	-	26.12	26.12
	Total	-	87.00	87.00

Operation & Maintenance Expenses (O&M Expenses)

43. The details of the O&M Expenses claimed and allowed for the Central Portion for the 2009-14 period is as under:-

Particulars	(₹ in lakh)	
	2012-13	2013-14
Asset I	14.33	31.48
Asset II	-	17.45
Asset III	-	6.11
Asset IV	-	NA*

* O&M under state Portion.

Interest on working capital (IWC)

44. IWC has been worked out in line with the methodology explained vide order dated 15.9.2016 in Petition No. 57/TT/2014.

- (i) **Maintenance spares:** Maintenance spares have been considered at the rate of 15% of O&M expenses each year for the purpose of calculation of working capital.
- (ii) **O & M expenses:** One month's O&M expenses have been allowed above and have been considered as an element of working capital.
- (iii) **Receivables:** Receivables, as a component of working capital, have been worked out on the basis of 2 months of fees and charges.



(iv) **Rate of interest on working capital:** In line with the 2009Tariff Regulations, SBI PLR as on 1.4.2012 (i.e.13.50%) for Asset-I corresponding to Central as well as State Portion is considered as the rate of interest on working capital. Similarly, SBI PLR as on 1.4.2013 (i.e.13.20%) for Assets-II, III and IV corresponding to Central and/or State Portion is considered as the rate of interest on working capital.

45. The details of the trued-up fees and charges of the 2009-14 tariff period of Assets-I, II, III and IV are given below:



	Central Portion-Charges (2009-14)		State Portion-Charges (2009-14)	
	(₹ in lakh)			
Particulars	Years		Years	
	2012-13	2013-14	2012-13	2013-14
Opening Gross Capital Cost	24.49	37.51	417.15	667.80
Opening Gross Notional Loan	17.14	26.26	292.01	467.46
Opening Gross Equity	7.35	11.25	125.15	200.34
Recovered Gross Capital Cost (As on 1st April)	0.00	0.34	0.00	5.71
Recovered Gross Notional Loan	0.00	0.27	0.00	4.60
Recovered Gross Equity	0.00	0.06	0.00	1.10
Opn.Net Capital Cost	24.49	37.18	417.15	662.09
Opn. Net Notional Loan	17.14	25.99	292.01	462.85
Opn. Net Equity	7.35	11.19	125.15	199.24
Recovered Capital Cost (During the Year)	0.34	1.09	5.71	20.11
Recovered Notional Loan	0.27	0.87	4.60	16.13
Recovered Equity	0.06	0.22	1.10	3.98
Cl. Net Capital Cost	24.15	36.08	411.44	641.98
Cl. Net Notional Loan	16.87	25.12	287.40	446.73
Cl. Net Equity	7.28	10.97	124.04	195.25
Additional Capital Expenditure	13.02	18.44	250.65	398.56
Additional Notional Loan	9.12	12.91	175.45	278.99
Additional Equity	3.91	5.53	75.19	119.57
Years (Capital to be recovered up to 30.09.2027)	15.00	14.50	15.00	14.50
Months	180.00	174.00	180.00	174.00
Weighted Average Rate of Interest p.a.	9.2757%	9.1337%	9.2757%	9.1017%
Weighted Average Rate of Interest p.m.	0.7730%	0.7611%	0.7730%	0.7585%
Monthly Recovery Factors -	0.010307	0.010388	0.010307	0.010369



Loan				
Monthly Capital Recovery Charge - Loan	0.18	0.27	3.01	4.80
Annual Capital Recovery Charge - Loan	2.12	3.24	36.12	57.59
Rate of Return on Equity p.a.	15.500%	15.500%	15.500%	15.500%
Rate of Return on Equity p.m.	1.292%	1.292%	1.292%	1.292%
Monthly Recovery Factors - Equity	0.014340	0.014468	0.014340	0.014468
Monthly Capital Recovery Charge - Equity	0.11	0.16	1.79	2.88
Annual Capital Recovery Charge - Equity	1.26	1.94	21.53	34.59
Monthly Capital Recovery Charge - Total	0.28	0.43	4.80	7.68
Annual Capital Recovery Charge - Total	3.38	5.18	57.65	92.18
O&M Expenses (Annualized)	28.64	31.48	0.00	0.00
Fee & Charges (Annualized)	Central Portion-Charges		State Portion-Charges	
Particulars	2012-13	2013-14	2012-13	2013-14
Annual Capital Recovery Charge - Loan	2.12	3.24	36.12	57.59
Annual Capital Recovery Charge - Equity	1.26	1.94	21.53	34.59
Annual Capital Recovery Charge - Total	3.38	5.18	57.65	92.18
O&M Expenses	28.64	31.48	0.00	0.00
Interest on Working Capital[†]	1.66	1.82	1.33	2.07
Total Fee & Charges	33.68	38.48	58.98	94.26
Interest on Working Capital (Annualized)	Central Portion-Charges		State Portion-Charges	
Particular	2012-13	2013-14	2012-13	2013-14
Maintenance Spares (15% of O&M)	4.30	4.72	0.00	0.00
O&M Expenses (1 Month)	2.39	2.62	0.00	0.00
Receivables (2 months)	5.61	6.41	9.83	15.71
Total	12.30	13.76	9.83	15.71
Rate of Interest on Working Capital	13.50%	13.20%	13.50%	13.20%



Total Interest on Working Capital (Annualized)	1.66	1.82	1.33	2.07
Allowable Fee & Charges (2009-14)	Central Portion-Charges		State Portion-Charges	
Particulars	2012-13 (Pro-rata)	2013-14	2012-13 (Pro-rata)	2013-14
Annual Capital Recovery Charge - Loan	1.06	3.24	18.06	57.59
Annual Capital Recovery Charge - Equity	0.63	1.94	10.77	34.59
Annual Capital Recovery Charge - Total	1.69	5.18	28.83	92.18
O&M Expenses	14.32	31.48	0.00	0.00
Interest on Working Capital[†]	0.83	1.82	0.66	2.07
Total Allowable Fee & Charges (2009-14)	16.84	38.48	29.49	94.26

Wt. Average Rate of Interest (for 2009-14) - Central Portion

(₹ in lakh)

2012-13

Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	8.83	0.00	0.00	8.83	8.83	9.2500%	0.82	
Bond XL	9.37	0.00	0.24	9.37	9.37	9.3000%	0.87	
Bond XLII	0.00	0.00	7.87	0.00	0.00	8.8000%	0.00	
Total Loan	18.20	0.00	8.11	18.20	18.20		1.69	9.2757%

2013-14

Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	8.83	0.00	0.00	8.83	8.83	9.2500%	0.82	
Bond XL	9.61	0.00	0.01	9.61	9.61	9.3000%	0.89	
Bond XLII	7.87	0.00	0.00	7.87	7.87	8.8000%	0.69	
Bond XLIV	0.00	0.00	12.86	0.00	0.00	8.7000%	0.00	
Total Loan	26.31	0.00	12.87	26.31	26.31		2.40	9.1337%



Wt. Average Rate of Interest (for 2009-14) - State Portion

(₹ in lakh)

2012-13								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	141.17	0.00	0.00	141.17	141.17	9.2500%	13.06	
Bond XL	149.78	0.00	5.24	149.78	149.78	9.3000%	13.93	
Bond XLII	0.00	0.00	171.22	0.00	0.00	8.8000%	0.00	
Total Loan	290.95	0.00	176.46	290.95	290.95		26.99	9.2757%
2013-14								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	141.17	0.00	0.00	141.17	141.17	9.2500%	13.06	
Bond XL	155.02	0.00	0.21	155.02	155.02	9.3000%	14.42	
Bond XLII	171.22	0.00	0.00	171.22	171.22	8.8000%	15.07	
Bond XLIV	0.00	0.00	278.83	0.00	0.00	8.7000%	0.00	
Total Loan	467.41	0.00	279.04	467.41	467.41		42.54	9.1017%



	Central Portion - Charges (2009-14)	State Portion - Charges (2009-14)
		(₹ in lakh)
Particulars	Years	Years
	2013-14	2013-14
Opening Gross Capital Cost	34.81	391.20
Opening Gross Notional Loan	24.37	273.84
Opening Gross Equity	10.44	117.36
Recovered Gross Capital Cost (As on 1st April)	0.00	0.00
Recovered Gross Notional Loan	0.00	0.00
Recovered Gross Equity	0.00	0.00
Opn.Net Capital Cost	34.81	391.20
Opn. Net Notional Loan	24.37	273.84
Opn. Net Equity	10.44	117.36
Recovered Capital Cost (During the Year)	0.99	11.16
Recovered Notional Loan	0.80	9.01
Recovered Equity	0.19	2.15
Cl. Net Capital Cost	33.82	380.04
Cl. Net Notional Loan	23.57	264.83
Cl. Net Equity	10.25	115.21
Additional Capital Expenditure	24.03	207.28
Additional Notional Loan	16.82	145.10
Additional Equity	7.21	62.18
Years (Capital to be recovered up to 31.03.2028)	15.00	15.00
Months	180.00	180.00
Weighted Average Rate of Interest p.a.	9.0582%	9.0582%
Weighted Average Rate of Interest p.m.	0.7549%	0.7549%
Monthly Recovery Factors -Loan	0.010177	0.010177
Monthly Capital Recovery Charge - Loan	0.25	2.79
Annual Capital Recovery Charge -	2.98	33.44



Loan		
Rate of Return on Equity p.a.	15.500%	15.500%
Rate of Return on Equity p.m.	1.292%	1.292%
Monthly Recovery Factors -Equity	0.014340	0.014340
Monthly Capital Recovery Charge - Equity	0.15	1.68
Annual Capital Recovery Charge - Equity	1.80	20.20
Monthly Capital Recovery Charge - Total	0.40	4.47
Annual Capital Recovery Charge - Total	4.77	53.64
O&M Expenses (Annualized)	17.45	0.00
Fee & Charges (Annualized)	Central Portion - Charges	State Portion - Charges
Particulars	2013-14	2013-14
Annual Capital Recovery Charge - Loan	2.98	33.44
Annual Capital Recovery Charge - Equity	1.80	20.20
Annual Capital Recovery Charge - Total	4.77	53.64
O&M Expenses	17.45	0.00
Interest on Working Capital¹	1.05	1.21
Total Fee & Charges	23.27	54.85
Interest on Working Capital (Annualized)		
Particular	2013-14	2013-14
Maintenance Spares (15% of O&M)	2.62	0.00
O&M Expenses (1 Month)	1.45	0.00
Receivables (2 months)	3.88	9.14
Total	7.95	9.14
Rate of Interest on Working Capital	13.20%	13.20%
Total Interest on Working Capital	1.05	1.21
Allowable Fee & Charges (2009-14)		
Particulars	2013-14	2013-14
Annual Capital Recovery Charge - Loan	2.98	33.44
Annual Capital Recovery Charge - Equity	1.80	20.20
Annual Capital Recovery Charge -	4.77	53.64



Total		
O&M Expenses	17.45	0.00
Interest on Working Capital¹	1.05	1.21
Total Allowable Fee & Charges (2009-14)	23.27	54.85

Wt. Average Rate of Interest (for 2009-14) - Central Portion

(₹ in lakh)

Loan	2013-14							
	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	4.90	0.00	0.00	4.90	4.90	9.2500%	0.45	
Bond XL	8.17	0.00	0.00	8.17	8.17	9.3000%	0.76	
Bond XLII	11.29	0.00	0.00	11.29	11.29	8.8000%	0.99	
Bond XLIII	0.00	0.00	16.82	0.00	0.00	7.9300%	0.00	
Total Loan	24.36	0.00	16.82	24.36	24.36		2.21	9.0582%

Wt. Average Rate of Interest (for 2009-14) - State Portion

(₹ in lakh)

Loan	2013-14							
	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	55.10	0.00	0.00	55.10	55.10	9.2500%	5.10	
Bond XL	91.83	0.00	0.00	91.83	91.83	9.3000%	8.54	
Bond XLII	126.92	0.00	0.00	126.92	126.92	8.8000%	11.17	
Bond XLIII	0.00	0.00	145.10	0.00	0.00	7.9300%	0.00	
Total Loan	273.85	0.00	145.10	273.85	273.85		24.81	9.0582%



	Central Portion- Charges (2009- 14)	State Portion- Charges (2009-14)
		(₹ in lakh)
Particulars	Years	Years
	2013-14	2013-14
Opening Gross Capital Cost	315.19	254.19
Opening Gross Notional Loan	220.63	177.93
Opening Gross Equity	94.56	76.26
Recovered Gross Capital Cost (As on 1st April)	0.00	0.00
Recovered Gross Notional Loan	0.00	0.00
Recovered Gross Equity	0.00	0.00
Opn.Net Capital Cost	315.19	254.19
Opn. Net Notional Loan	220.63	177.93
Opn. Net Equity	94.56	76.26
Recovered Capital Cost (During the Year)	3.61	2.91
Recovered Notional Loan	2.92	2.35
Recovered Equity	0.69	0.56
Cl. Net Capital Cost	311.58	251.28
Cl. Net Notional Loan	217.71	175.58
Cl. Net Equity	93.87	75.70
Additional Capital Expenditure	5.52	16.00
Additional Notional Loan	3.86	11.20
Additional Equity	1.66	4.80
Years (Capital to be recovered up to 31.10.2028)	15.00	15.00
Months	180.00	180.00
Weighted Average Rate of Interest p.a.	9.1505%	9.1505%
Weighted Average Rate of Interest p.m.	0.7625%	0.7625%
Monthly Recovery Factors -Loan	0.010232	0.010232
Monthly Capital Recovery Charge - Loan	2.26	1.82
Annual Capital Recovery Charge - Loan	27.09	21.85
Rate of Return on Equity p.a.	15.500%	15.500%
Rate of Return on Equity p.m.	1.292%	1.292%
Monthly Recovery Factors -Equity	0.014340	0.014340
Monthly Capital Recovery Charge - Equity	1.36	1.09
Annual Capital Recovery Charge - Equity	16.27	13.12



Monthly Capital Recovery Charge - Total	3.61	2.91
Annual Capital Recovery Charge - Total	43.36	34.97
O&M Expenses (Annualized)	14.66	0.00
Fee & Charges (Annualized)	Central Portion - Charges	State Portion - Charges
Particulars	2013-14	2013-14
Annual Capital Recovery Charge - Loan	27.09	21.85
Annual Capital Recovery Charge - Equity	16.27	13.12
Annual Capital Recovery Charge - Total	43.36	34.97
O&M Expenses	14.66	0.00
Interest on Working Capital¹	1.77	0.79
Total Fee & Charges	59.79	35.76
Interest on Working Capital (Annualized)		
Particular	2013-14	2013-14
Maintenance Spares (15% of O&M)	2.20	0.00
O&M Expenses (1 Month)	1.22	0.00
Receivables (2 months)	9.96	5.96
Total	13.39	5.96
Rate of Interest on Working Capital	13.20%	13.20%
Total Interest on Working Capital	1.77	0.79
Allowable Fee & Charges (2009-14)		
Particulars	2013-14 (Pro-rata)	2013-14 (Pro-rata)
Annual Capital Recovery Charge - Loan	11.29	9.10
Annual Capital Recovery Charge - Equity	6.78	5.47
Annual Capital Recovery Charge - Total	18.07	14.57
O&M Expenses	6.11	0.00
Interest on Working Capital¹	0.74	0.33
Total Allowable Fee & Charges (2009-14)	24.91	14.90

Wt. Average Rate of Interest (for 2009-14) - Central Portion

(₹ in lakh)

Loan	2013-14							
	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	22.14	0.00	0.00	22.14	22.14	9.2500%	2.05	
Bond XL	134.72	0.00	0.00	134.72	134.72	9.3000%	12.53	
Bond XLII	63.76	0.00	1.52	63.76	63.76	8.8000%	5.61	
Bond XLIV	0.00	0.00	2.35	0.00	0.00	8.7000%	0.00	
Total Loan	220.62	0.00	3.87	220.62	220.62		20.19	9.1505%



Wt. Average Rate of Interest (for 2009-14) - State Portion

(₹ in lakh)

Loan	2013-14							
	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	17.86	0.00	0.00	17.86	17.86	9.2500%	1.65	
Bond XL	108.64	0.00	0.00	108.64	108.64	9.3000%	10.10	
Bond XLII	51.42	0.00	4.39	51.42	51.42	8.8000%	4.52	
Bond XLIV	0.00	0.00	6.80	0.00	0.00	8.7000%	0.00	
Total Loan	177.92	0.00	11.19	177.92	177.92		16.28	9.1505%



	State Portion - Charges (2009- 14)
	(₹ in lakh)
Particulars	Years
	2013-14
Opening Gross Capital Cost	85.78
Opening Gross Notional Loan	60.04
Opening Gross Equity	25.73
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	85.78
Opn. Net Notional Loan	60.04
Opn. Net Equity	25.73
Recovered Capital Cost (During the Year)	0.20
Recovered Notional Loan	0.16
Recovered Equity	0.04
Cl. Net Capital Cost	85.58
Cl. Net Notional Loan	59.88
Cl. Net Equity	25.70
Additional Capital Expenditure	1.42
Additional Notional Loan	0.99
Additional Equity	0.43
Years (Capital to be recovered up to 28.02.2029)	15.00
Months	180.00
Weighted Average Rate of Interest p.a.	8.7540%
Weighted Average Rate of Interest p.m.	0.7295%
Monthly Recovery Factors -Loan	0.009997
Monthly Capital Recovery Charge - Loan	0.60
Annual Capital Recovery Charge - Loan	7.20
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	0.37
Annual Capital Recovery Charge - Equity	4.43
Monthly Capital Recovery Charge - Total	0.97



Annual Capital Recovery Charge - Total	11.63
O&M Expenses (Annualized)	0.00
Fee & Charges (Annualized)	State Portion - Charges
Particulars	2013-14
Annual Capital Recovery Charge - Loan	7.20
Annual Capital Recovery Charge - Equity	4.43
Annual Capital Recovery Charge - Total	11.63
O&M Expenses	0.00
Interest on Working Capital⁺	0.26
Total Fee & Charges	11.89
Interest on Working Capital (Annualized)	
Particular	2013-14
Maintenance Spares (15% of O&M)	0.00
O&M Expenses (1 Month)	0.00
Receivables (2 months)	1.98
Total	1.98
Rate of Interest on Working Capital	13.20%
Total Interest on Working Capital	0.26
Allowable Fee & Charges (2009-14)	
Particulars	2013-14 (Pro-rata)
Annual Capital Recovery Charge - Loan	0.60
Annual Capital Recovery Charge - Equity	0.37
Annual Capital Recovery Charge - Total	0.97
O&M Expenses	0.00
Interest on Working Capital⁺	0.02
Total Allowable Fee & Charges (2009-14)	0.99



Wt. Average Rate of Interest (for 2009-14) - State Portion

(₹ in lakh)

Loan	2013-14							
	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	12.00	0.00	0.00	12.00	12.00	9.2500%	1.11	
Bond XL	6.00	0.00	0.00	6.00	6.00	9.3000%	0.56	
Bond XLII	5.00	0.00	0.00	5.00	5.00	8.8000%	0.44	
Bond XLIII	16.00	0.00	0.00	16.00	16.00	7.9300%	1.27	
Bond XLIV	18.00	0.00	0.00	18.00	18.00	8.7000%	1.57	
Bond XLV	0.00	0.00	0.13	0.00	0.00	9.6500%	0.00	
SBI (Oct 13 - Dec 13)	3.14	0.00	1.06	3.14	3.14	10.2500%	0.32	
Total Loan	60.14	0.00	1.19	60.14	60.14		5.26	8.7540%



Fee and Charges for the period 2014-19

Capital Expenditure as on 1.4.2014

46. The closing Capital Costs as indicated at Para 42 above are considered as opening Capital Cost on 1.4.2014 for working out the fee and charges for the period 2014-19 for Assets-I, II, III and IV corresponding to Central Portion and State Portion.

47. The Petitioner has claimed the following additional capital expenditure during 2014-19 and the same is considered for calculation of fee and charges for 2014-19 period:

(₹ in lakh)						
Particulars	Portion	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	Central	17.16	3.37	5.34	0.70	12.39
	State	401.96	83.44	122.10	4.68	237.61
	Total	419.12	86.81	127.44	5.38	250.00
Asset-II	Central	28.33	7.42	3.34	0.83	12.30
	State	198.94	48.98	46.49	2.56	129.70
	Total	227.27	56.40	49.83	3.39	142.00
Asset-III	Central	93.95	20.12	17.43	1.91	69.00
	State	112.84	24.29	17.36	1.95	56.00
	Total	206.69	44.41	34.79	3.86	125.00
Asset-IV	Central	-	-	-	-	-
	State	13.88	4.38	8.24	2.47	62.00

Debt : Equity Ratio

48. The following Debt-Equity ratio has been considered as on 1.4.2014 for the Central as well as State Portion:-



(₹ in lakh)

Asset-I	As on 1.4.2019	
	Central	State
Loan	66.44	1341.31
Equity	28.47	574.85
Total	94.91	1916.15
Debt (%)	70.00	70.00
Equity (%)	30.00	30.00
Total	100.00	100.00

(₹ in lakh)

Asset-II	As on 1.4.2019	
	Central	State
Loan	77.74	717.61
Equity	33.32	307.55
Total	111.06	1025.15
Debt (%)	70.00	70.00
Equity (%)	30.00	30.00
Total	100.00	100.00

(₹ in lakh)

Asset-III	As on 1.4.2019	
	Central	State
Loan	366.11	337.84
Equity	156.91	144.79
Total	523.02	482.63
Debt (%)	70.00	70.00
Equity (%)	30.00	30.00
Total	100.00	100.00

(₹ in lakh)

Asset-IV	As on 1.4.2019	
	Central	State
Loan		124.71
Equity		53.45
Total		178.16
Debt (%)	-	70.00
Equity (%)	-	30.00
Total	-	100.00

Rates for Recovery of loan and equity

49. Capital Recovery for Loan: The year wise Weighted Average Rate of Interest



have been calculated on the basis of the loan portfolio along with rate of interest of loan submitted by the Petitioner for Assets-I, II, III and IV corresponding to Central Portion and State Portion, which have been applied for calculating the Capital Recovery Factor for loan.

50. Capital Recovery for Equity: The methodology used for true-up of the 2009-14 indicated above, 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

51. Accordingly, following are the monthly Recovery factors for Loan for Central Portion and State Portion:-

(₹ in lakh)

Asset-I	2014-15	2015-16	2016-17	2017-18	2018-19
Central Portion	0.010680	0.011057	0.011573	0.012151	0.012931
State Portion	0.010657	0.011029	0.011546	0.012120	0.012902

(₹ in lakh)

Asset-II	2014-15	2015-16	2016-17	2017-18	2018-19
Central Portion	0.010255	0.010594	0.011078	0.011638	0.012350
State Portion	0.010296	0.010641	0.011124	0.011671	0.012383

(₹ in lakh)

Asset-III	2014-15	2015-16	2016-17	2017-18	2018-19
Central Portion	0.010394	0.010789	0.011208	0.011687	0.012318
State Portion	0.010384	0.010788	0.011201	0.011679	0.012311

(₹ in lakh)

Asset-IV	2014-15	2015-16	2016-17	2017-18	2018-19
Central Portion	-	-	-	-	-
State Portion	0.010040	0.010445	0.010872	0.011293	0.011877



52. Similarly, the monthly Recovery Factors for Equity for Central portion and State portion are:-

(₹ in lakh)

Asset-I	2014-15	2015-16	2016-17	2017-18	2018-19
Central Portion	0.014763	0.015122	0.015565	0.016115	0.016808
State Portion	0.014763	0.015122	0.015565	0.016115	0.016808

(₹ in lakh)

Asset-II	2014-15	2015-16	2016-17	2017-18	2018-19
Central Portion	0.014608	0.014933	0.015332	0.015825	0.016441
State Portion	0.014608	0.014933	0.015332	0.015825	0.016441

(₹ in lakh)

Asset-III	2014-15	2015-16	2016-17	2017-18	2018-19
Central Portion	0.014468	0.014763	0.015122	0.015565	0.016115
State Portion	0.014468	0.014763	0.015122	0.015565	0.016115

(₹ in lakh)

Asset-IV	2014-15	2015-16	2016-17	2017-18	2018-19
Central Portion	-	-	-	-	-
State Portion	0.014360	0.014633	0.014964	0.015369	0.015871

53. Based on the above recovery factors, the monthly Capital Recovery Charges for Loan for Central and State portion are worked out as below:-

(₹ in lakh)

Asset-I	2014-15	2015-16	2016-17	2017-18	2018-19
Central Portion	0.41	0.54	0.56	0.61	0.61
State Portion	7.73	10.79	11.45	12.42	12.46

(₹ in lakh)

Asset-II	2014-15	2015-16	2016-17	2017-18	2018-19
Central Portion	0.41	0.62	0.68	0.70	0.71
State Portion	4.22	5.68	6.06	6.42	6.44

(₹ in lakh)

Asset-III	2014-15	2015-16	2016-17	2017-18	2018-19
Central Portion	2.30	3.02	3.17	3.30	3.31
State Portion	1.94	2.80	2.98	3.11	3.12



(₹ in lakh)

Asset-IV	2014-15	2015-16	2016-17	2017-18	2018-19
Central Portion	-	-	-	-	-
State Portion	0.61	0.72	0.75	0.81	0.83

54. Similarly, the monthly Capital Recovery Charges for Equity for Central as well as State portion are worked out as below:-

(₹ in lakh)

Asset-I	2014-15	2015-16	2016-17	2017-18	2018-19
Central Portion	0.24	0.32	0.34	0.36	0.37
State Portion	4.65	6.47	6.86	7.45	7.47

(₹ in lakh)

Asset-II	2014-15	2015-16	2016-17	2017-18	2018-19
Central Portion	0.26	0.38	0.42	0.43	0.44
State Portion	2.59	3.48	3.71	3.93	3.94

(₹ in lakh)

Asset-III	2014-15	2015-16	2016-17	2017-18	2018-19
Central Portion	1.38	1.80	1.89	1.97	1.98
State Portion	1.16	1.66	1.77	1.86	1.87

(₹ in lakh)

Asset-IV	2014-15	2015-16	2016-17	2017-18	2018-19
Central Portion	-	-	-	-	-
State Portion	0.38	0.44	0.46	0.49	0.51

55. While working out the capital recovery charges for loan, Wt. Average Rate of Interest and Rate of Return on Equity, as indicated above have been considered. Accordingly, the following recovery of Capital during 2014-19 has been worked out:-

(₹ in lakh)

Asset-I	Capital	Central Portion	State Portion	Total
Capital Cost Recovered during 2014-19	Loan	12.67	257.20	269.88
	Equity	3.76	76.08	79.83
	Total	16.43	333.28	349.71



(₹ in lakh)

Asset-II	Capital	Central Portion	State Portion	Total
Capital Cost Recovered during 2014-19	Loan	14.56	132.51	147.07
	Equity	4.12	37.66	41.77
	Total	18.68	170.16	188.84

(₹ in lakh)

Asset-III	Capital	Central Portion	State Portion	Total
Capital Cost Recovered during 2014-19	Loan	62.10	57.67	119.77
	Equity	17.74	16.47	34.21
	Total	79.85	74.14	153.98

(₹ in lakh)

Asset-IV	Capital	Central Portion	State Portion	Total
Capital Cost Recovered during 2014-19	Loan	-	15.25	15.25
	Equity	-	4.18	4.18
	Total	-	19.43	19.43

O&M Expenses

56. The Petitioner has claimed O&M Expenses for the Central Portion on actual basis for 2014-15, 2015-16, and 2016-17 and escalation of 3.32% thereafter. The Petitioner has not claimed any O&M charges for State portion. The O&M charges were allowed on actual basis by the Commission vide order dated 15.9.2016 in Petition No. 57/TT/2014, and on the same basis it is allowed for 2014-19 period as under:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19 (escalation @ 3.32%)
Asset I	34.98	36.57	40.21	47.66	49.27
Asset II	19.38	20.45	22.18	24.57	25.39
Asset III	16.23	16.97	18.51	20.44	21.12
Asset IV	NA*				

* O&M under state Portion.



Interest on working capital (IWC)

57. IWC has been worked out in line with the methodology explained vide order dated 15.9.2016 in Petition No. 57/TT/2014.

(i) **Maintenance spares:** Maintenance spares have been considered at the rate of 15% of O&M expenses each year for the purpose of calculation of working capital.

(ii) **O & M Expenses:** One month's O&M expenses has been allowed above and has been considered as an element of working capital.

(iii) **Receivables:** Receivables, as a component of working capital, have been worked out on the basis of 2 months of fees and charges.

(iv) **Rate of interest on working capital:** In line with the Regulation 28(3) of 2014 Tariff Regulations, SBI PLR as on 1.4.2014 (i.e.13.50%) has been considered as the rate of interest on working capital for the asset.

58. The details of the fees and charges allowed for the Assets-I, II, III and IV for the 2014-19 period are as follows:



Asset-I**Central Portion - Charges (2014-19)****State Portion - Charges (2014-19)****(₹ in lakh)**

Particulars	Years					Years				
	2014-15	2015-16	2016-17	2017-18	2018-19	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Capital Cost	55.95	73.11	76.48	81.82	82.52	1066.36	1468.32	1551.76	1673.86	1678.54
Opening Gross Notional Loan	39.17	51.18	53.54	57.27	57.76	746.45	1027.82	1086.23	1171.70	1174.98
Opening Gross Equity	16.79	21.93	22.94	24.55	24.76	319.91	440.50	465.53	502.16	503.56
Recovered Gross Capital Cost (As on 1st April)	1.43	3.34	6.16	9.45	13.42	25.82	62.32	119.40	186.64	268.29
Recovered Gross Notional Loan	1.14	2.65	4.88	7.43	10.46	20.73	49.74	94.66	146.85	209.43
Recovered Gross Equity	0.29	0.68	1.29	2.02	2.95	5.09	12.58	24.74	39.79	58.86
Opn.Net Capital Cost	54.52	69.77	70.32	72.37	69.10	1040.54	1406.00	1432.36	1487.22	1410.25
Opn. Net Notional Loan	38.03	48.52	48.66	49.85	47.30	725.72	978.08	991.58	1024.85	965.54
Opn. Net Equity	16.50	21.25	21.66	22.52	21.80	314.82	427.92	440.78	462.37	444.71
Recovered Capital Cost (During the Year)	1.91	2.82	3.29	3.96	4.44	36.50	57.08	67.24	81.65	90.81
Recovered Notional Loan	1.52	2.22	2.55	3.03	3.35	29.01	44.91	52.19	62.59	68.50
Recovered Equity	0.39	0.60	0.74	0.93	1.09	7.49	12.17	15.05	19.06	22.31
Cl. Net Capital Cost	52.61	66.95	67.03	68.40	64.66	1004.04	1348.92	1365.12	1405.57	1319.44
Cl. Net Notional Loan	36.51	46.30	46.11	46.81	43.95	696.71	933.17	939.38	962.27	897.04
Cl. Net Equity	16.10	20.65	20.92	21.59	20.71	307.33	415.75	425.74	443.30	422.40
Additional Capital Expenditure	17.16	3.37	5.34	0.70	12.39	401.96	83.44	122.10	4.68	237.61
Additional Notional Loan	12.01	2.36	3.74	0.49	8.67	281.37	58.41	85.47	3.28	166.33
Additional Equity	5.15	1.01	1.60	0.21	3.72	120.59	25.03	36.63	1.40	71.28
Years (Capital to be recovered up to 30.09.2027)	13.50	12.50	11.50	10.50	9.50	13.50	12.50	11.50	10.50	9.50
Months	162.00	150.00	138.00	126.00	114.00	162.00	150.00	138.00	126.00	114.00
Weighted Average Rate of Interest p.a.	8.9914%	8.8744%	8.8501%	8.7337%	8.7194%	8.9517%	8.8260%	8.8001%	8.6758%	8.6653%
Weighted Average Rate of Interest p.m.	0.7493%	0.7395%	0.7375%	0.7278%	0.7266%	0.7460%	0.7355%	0.7333%	0.7230%	0.7221%
Monthly Recovery Factors -Loan	0.010680	0.011057	0.011573	0.012151	0.012931	0.010657	0.011029	0.011546	0.012120	0.012902



Monthly Capital Recovery Charge - Loan	0.41	0.54	0.56	0.61	0.61	7.73	10.79	11.45	12.42	12.46
Annual Capital Recovery Charge - Loan	4.87	6.44	6.76	7.27	7.34	92.81	129.45	137.38	149.05	149.49
Rate of Return on Equity p.a.	15.500%	15.500%	15.500%	15.500%	15.500%	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%	1.292%	1.292%	1.292%	1.292%	1.292%
Monthly Recovery Factors -Equity	0.014763	0.015122	0.015565	0.016115	0.016808	0.014763	0.015122	0.015565	0.016115	0.016808
Monthly Capital Recovery Charge - Equity	0.24	0.32	0.34	0.36	0.37	4.65	6.47	6.86	7.45	7.47
Annual Capital Recovery Charge - Equity	2.92	3.86	4.05	4.36	4.40	55.77	77.65	82.33	89.41	89.70
Monthly Capital Recovery Charge - Total	0.65	0.86	0.90	0.97	0.98	12.38	17.26	18.31	19.87	19.93
Annual Capital Recovery Charge - Total	7.80	10.29	10.80	11.62	11.74	148.58	207.10	219.71	238.46	239.19
O&M Expenses (Annualized)	34.98	36.57	40.21	47.66	49.27	0.00	0.00	0.00	0.00	0.00
Fee & Charges (2014-19)	Central Portion - Charges					State Portion - Charges				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Capital Recovery Charge - Loan	4.87	6.44	6.76	7.27	7.34	92.81	129.45	137.38	149.05	149.49
Annual Capital Recovery Charge - Equity	2.92	3.86	4.05	4.36	4.40	55.77	77.65	82.33	89.41	89.70
Annual Capital Recovery Charge - Total	7.80	10.29	10.80	11.62	11.74	148.58	207.10	219.71	238.46	239.19
O&M Expenses	34.98	36.57	40.21	47.66	49.27	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital¹	2.11	2.26	2.47	2.90	2.99	3.42	4.77	5.06	5.49	5.51
Total Fee & Charges	44.89	49.12	53.48	62.18	64.00	152.00	211.87	224.77	243.95	244.69
Interest on Working Capital¹										
Particular	2014-15	2015-16	2016-17	2017-18	2018-19	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares (15% of O&M)	5.25	5.49	6.03	7.15	7.39	0.00	0.00	0.00	0.00	0.00
O&M Expenses (1 Month)	2.92	3.05	3.35	3.97	4.11	0.00	0.00	0.00	0.00	0.00
Receivables (2 months)	7.48	8.19	8.91	10.36	10.67	25.33	35.31	37.46	40.66	40.78
Total	15.64	16.72	18.30	21.48	22.16	25.33	35.31	37.46	40.66	40.78
Rate of Interest on Working Capital	13.50%	13.50%	13.50%	13.50%	13.50%	13.50%	13.50%	13.50%	13.50%	13.50%
Total Interest on Working Capital (Annualized)	2.11	2.26	2.47	2.90	2.99	3.42	4.77	5.06	5.49	5.51



Wt. Average Rate of Interest (for 2014-19) - Central Portion

(₹ in lakh)

2014-15								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	8.83	0.00	0.00	8.83	8.83	9.2500%	0.82	
Bond XL	9.62	0.00	0.00	9.62	9.62	9.3000%	0.89	
Bond XLII	7.87	0.00	0.00	7.87	7.87	8.8000%	0.69	
Bond XLIV	12.86	0.00	0.00	12.86	12.86	8.7000%	1.12	
Bond XLVI	0.00	0.00	3.58	0.00	0.00	9.3000%	0.00	
Bond XLIX	0.00	0.00	8.43	0.00	0.00	8.1500%	0.00	
Total Loan	39.18	0.00	12.01	39.18	39.18		3.52	8.9914%
2015-16								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	8.83	0.00	0.00	8.83	8.83	9.2500%	0.82	
Bond XL	9.62	0.00	0.00	9.62	9.62	9.3000%	0.89	
Bond XLII	7.87	0.00	0.00	7.87	7.87	8.8000%	0.69	
Bond XLIV	12.86	0.00	0.00	12.86	12.86	8.7000%	1.12	
Bond XLVI	3.58	0.00	0.00	3.58	3.58	9.3000%	0.33	
Bond XLIX	8.43	0.00	0.00	8.43	8.43	8.1500%	0.69	
Bond LI	0.00	0.00	2.36	0.00	0.00	8.4000%	0.00	
Total Loan	51.19	0.00	2.36	51.19	51.19		4.54	8.8744%
2016-17								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	8.83	0.00	0.00	8.83	8.83	9.2500%	0.82	
Bond XL	9.62	0.80	0.00	8.82	9.22	9.3000%	0.86	
Bond XLII	7.87	0.00	0.00	7.87	7.87	8.8000%	0.69	
Bond XLIV	12.86	0.00	0.00	12.86	12.86	8.7000%	1.12	
Bond XLVI	3.58	0.00	0.00	3.58	3.58	9.3000%	0.33	
Bond XLIX	8.43	0.00	0.00	8.43	8.43	8.1500%	0.69	
Bond LI	2.36	0.00	0.00	2.36	2.36	8.4000%	0.20	
Bond LVII	0.00	0.00	3.74	0.00	0.00	7.2000%	0.00	
Total Loan	53.55	0.80	3.74	52.75	53.15		4.70	8.8501%



2017-18								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	8.83	0.00	0.00	8.83	8.83	9.2500%	0.82	
Bond XL	8.82	0.80	0.00	8.02	8.42	9.3000%	0.78	
Bond XLII	7.87	0.00	0.00	7.87	7.87	8.8000%	0.69	
Bond XLIV	12.86	0.00	0.00	12.86	12.86	8.7000%	1.12	
Bond XLVI	3.58	0.00	0.00	3.58	3.58	9.3000%	0.33	
Bond XLIX	8.43	0.00	0.00	8.43	8.43	8.1500%	0.69	
Bond LI	2.36	0.00	0.00	2.36	2.36	8.4000%	0.20	
Bond LVII	3.74	0.00	0.00	3.74	3.74	7.2000%	0.27	
SBI-02 (2017-18) (Q-4)	0.00	0.00	0.49	0.00	0.00	7.9500%	0.00	
Total Loan	56.49	0.80	0.49	55.69	56.09		4.90	8.7337%
2018-19								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	8.83	0.00	0.00	8.83	8.83	9.2500%	0.82	
Bond XL	8.02	0.80	0.00	7.22	7.62	9.3000%	0.71	
Bond XLII	7.87	0.00	0.00	7.87	7.87	8.8000%	0.69	
Bond XLIV	12.86	4.29	0.00	8.57	10.72	8.7000%	0.93	
Bond XLVI	3.58	0.00	0.00	3.58	3.58	9.3000%	0.33	
Bond XLIX	8.43	0.00	0.00	8.43	8.43	8.1500%	0.69	
Bond LI	2.36	0.00	0.00	2.36	2.36	8.4000%	0.20	
Bond LVII	3.74	0.00	0.00	3.74	3.74	7.2000%	0.27	
SBI-02 (2017-18) (Q-4)	0.49	0.00	0.00	0.49	0.49	7.9500%	0.04	
Total Loan	56.18	5.09	0.00	51.09	53.64		4.68	8.7194%

Wt. Average Rate of Interest (for 2014-19) - State Portion

(₹ in lakh)

2014-15

Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	141.17	0.00	0.00	141.17	141.17	9.2500%	13.06	
Bond XL	155.23	0.00	0.00	155.23	155.23	9.3000%	14.44	
Bond XLII	171.22	0.00	0.00	171.22	171.22	8.8000%	15.07	



Bond XLIV	278.83	0.00	0.00	278.83	278.83	8.7000%	24.26	
Bond XLVI	0.00	0.00	83.80	0.00	0.00	9.3000%	0.00	
Bond XLIX	0.00	0.00	197.57	0.00	0.00	8.1500%	0.00	
Total Loan	746.45	0.00	281.37	746.45	746.45		66.82	8.9517%
2015-16								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	141.17	0.00	0.00	141.17	141.17	9.2500%	13.06	
Bond XL	155.23	0.00	0.00	155.23	155.23	9.3000%	14.44	
Bond XLII	171.22	0.00	0.00	171.22	171.22	8.8000%	15.07	
Bond XLIV	278.83	0.00	0.00	278.83	278.83	8.7000%	24.26	
Bond XLVI	83.80	0.00	0.00	83.80	83.80	9.3000%	7.79	
Bond XLIX	197.57	0.00	0.00	197.57	197.57	8.1500%	16.10	
Bond LI	0.00	0.00	58.41	0.00	0.00	8.4000%	0.00	
Total Loan	1027.82	0.00	58.41	1027.82	1027.82		90.72	8.8260%
2016-17								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	141.17	0.00	0.00	141.17	141.17	9.2500%	13.06	
Bond XL	155.23	12.94	0.00	142.29	148.76	9.3000%	13.83	
Bond XLII	171.22	0.00	0.00	171.22	171.22	8.8000%	15.07	
Bond XLIV	278.83	0.00	0.00	278.83	278.83	8.7000%	24.26	
Bond XLVI	83.80	0.00	0.00	83.80	83.80	9.3000%	7.79	
Bond XLIX	197.57	0.00	0.00	197.57	197.57	8.1500%	16.10	
Bond LI	58.41	0.00	0.00	58.41	58.41	8.4000%	4.91	
Bond LVII	0.00	0.00	85.47	0.00	0.00	7.2000%	0.00	
Total Loan	1086.23	12.94	85.47	1073.29	1079.76		95.02	8.8001%
2017-18								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	141.17	0.00	0.00	141.17	141.17	9.2500%	13.06	
Bond XL	142.29	12.94	0.00	129.35	135.82	9.3000%	12.63	
Bond XLII	171.22	0.00	0.00	171.22	171.22	8.8000%	15.07	
Bond XLIV	278.83	0.00	0.00	278.83	278.83	8.7000%	24.26	
Bond XLVI	83.80	0.00	0.00	83.80	83.80	9.3000%	7.79	
Bond XLIX	197.57	0.00	0.00	197.57	197.57	8.1500%	16.10	
Bond LI	58.41	0.00	0.00	58.41	58.41	8.4000%	4.91	



Bond LVII	85.47	0.00	0.00	85.47	85.47	7.2000%	6.15	
SBI-02 (2017-18) (Q-4)	0.00	0.00	3.28	0.00	0.00	7.9500%	0.00	
Total Loan	1158.76	12.94	3.28	1145.82	1152.29		99.97	8.6758%
2018-19								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	141.17	0.00	0.00	141.17	141.17	9.2500%	13.06	
Bond XL	129.35	12.94	0.00	116.41	122.88	9.3000%	11.43	
Bond XLII	171.22	0.00	0.00	171.22	171.22	8.8000%	15.07	
Bond XLIV	278.83	92.94	0.00	185.89	232.36	8.7000%	20.22	
Bond XLVI	83.80	0.00	0.00	83.80	83.80	9.3000%	7.79	
Bond XLIX	197.57	0.00	0.00	197.57	197.57	8.1500%	16.10	
Bond LI	58.41	0.00	0.00	58.41	58.41	8.4000%	4.91	
Bond LVII	85.47	0.00	0.00	85.47	85.47	7.2000%	6.15	
SBI-02 (2017-18) (Q-4)	3.28	0.00	0.00	3.28	3.28	7.9500%	0.26	
Total Loan	1149.10	105.88	0.00	1043.22	1096.16		94.99	8.6653%



Asset-II**Central Portion - Charges (2014-19)****State Portion - Charges (2014-19)****(₹ in lakh)**

Particulars	Years					Years				
	2014-15	2015-16	2016-17	2017-18	2018-19	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Capital Cost	58.84	87.17	94.59	97.93	98.76	598.48	797.42	846.40	892.89	895.45
Opening Gross Notional Loan	41.19	61.02	66.21	68.55	69.13	418.94	558.19	592.48	625.02	626.82
Opening Gross Equity	17.65	26.15	28.38	29.38	29.63	179.54	239.23	253.92	267.87	268.64
Recovered Gross Capital Cost (As on 1st April)	0.99	2.93	6.19	10.11	14.63	11.16	30.76	60.22	94.97	135.90
Recovered Gross Notional Loan	0.80	2.36	4.95	8.03	11.52	9.01	24.74	48.14	75.36	106.98
Recovered Gross Equity	0.19	0.57	1.24	2.08	3.11	2.15	6.02	12.08	19.61	28.92
Opn.Net Capital Cost	57.85	84.24	88.40	87.82	84.13	587.32	766.66	786.18	797.92	759.55
Opn. Net Notional Loan	40.39	58.66	61.26	60.52	57.61	409.93	533.46	544.34	549.67	519.83
Opn. Net Equity	17.46	25.58	27.14	27.30	26.52	177.39	233.21	241.84	248.25	239.72
Recovered Capital Cost (During the Year)	1.94	3.25	3.92	4.52	5.04	19.60	29.47	34.74	40.93	45.42
Recovered Notional Loan	1.56	2.59	3.08	3.49	3.84	15.73	23.40	27.21	31.63	34.53
Recovered Equity	0.38	0.66	0.84	1.02	1.20	3.87	6.06	7.53	9.31	10.89
Cl. Net Capital Cost	55.91	80.98	84.48	83.30	79.09	567.72	737.20	751.43	756.99	714.13
Cl. Net Notional Loan	38.83	56.07	58.19	57.03	53.77	394.20	510.05	517.12	518.04	485.30
Cl. Net Equity	17.08	24.91	26.29	26.27	25.32	173.52	227.14	234.31	238.95	228.83
Additional Capital Expenditure	28.33	7.42	3.34	0.83	12.30	198.94	48.98	46.49	2.56	129.70
Additional Notional Loan	19.83	5.19	2.34	0.58	8.61	139.26	34.29	32.54	1.79	90.79
Additional Equity	8.50	2.23	1.00	0.25	3.69	59.68	14.69	13.95	0.77	38.91
Years (Capital to be recovered up to 31.03.2028)	14.00	13.00	12.00	11.00	10.00	14.00	13.00	12.00	11.00	10.00
Months	168.00	156.00	144.00	132.00	120.00	168.00	156.00	144.00	132.00	120.00
Weighted Average Rate of Interest p.a.	8.5974%	8.4682%	8.4586%	8.4115%	8.4084%	8.6675%	8.5508%	8.5417%	8.4715%	8.4703%
Weighted Average Rate of Interest p.m.	0.7164%	0.7057%	0.7049%	0.7010%	0.7007%	0.7223%	0.7126%	0.7118%	0.7060%	0.7059%
Monthly Recovery	0.010255	0.010594	0.011078	0.011638	0.012350	0.010296	0.010641	0.011124	0.011671	0.012383



Factors -Loan										
Monthly Capital Recovery Charge - Loan	0.41	0.62	0.68	0.70	0.71	4.22	5.68	6.06	6.42	6.44
Annual Capital Recovery Charge - Loan	4.97	7.46	8.14	8.45	8.54	50.65	68.12	72.66	76.98	77.24
Rate of Return on Equity p.a.	15.500%	15.500%	15.500%	15.500%	15.500%	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%	1.292%	1.292%	1.292%	1.292%	1.292%
Monthly Recovery Factors -Equity	0.014608	0.014933	0.015332	0.015825	0.016441	0.014608	0.014933	0.015332	0.015825	0.016441
Monthly Capital Recovery Charge - Equity	0.26	0.38	0.42	0.43	0.44	2.59	3.48	3.71	3.93	3.94
Annual Capital Recovery Charge - Equity	3.06	4.58	4.99	5.18	5.23	31.10	41.79	44.49	47.14	47.29
Monthly Capital Recovery Charge - Total	0.67	1.00	1.09	1.14	1.15	6.81	9.16	9.76	10.34	10.38
Annual Capital Recovery Charge - Total	8.03	12.04	13.14	13.64	13.77	81.74	109.91	117.16	124.12	124.54
O&M Expenses (Annualized)	19.38	20.45	22.18	24.57	25.39	0.00	0.00	0.00	0.00	0.00
Fee & Charges (2014-19)	Central Portion - Charges					State Portion - Charges				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Capital Recovery Charge - Loan	4.97	7.46	8.14	8.45	8.54	50.65	68.12	72.66	76.98	77.24
Annual Capital Recovery Charge - Equity	3.06	4.58	4.99	5.18	5.23	31.10	41.79	44.49	47.14	47.29
Annual Capital Recovery Charge - Total	8.03	12.04	13.14	13.64	13.77	81.74	109.91	117.16	124.12	124.54
O&M Expenses	19.38	20.45	22.18	24.57	25.39	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital[†]	1.26	1.41	1.53	1.67	1.72	1.88	2.53	2.70	2.86	2.87
Total Fee & Charges	28.67	33.90	36.84	39.88	40.88	83.62	112.44	119.85	126.98	127.40
Interest on Working Capital[†]										
Particular	2014-15	2015-16	2016-17	2017-18	2018-19	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares (15% of O&M)	2.91	3.07	3.33	3.69	3.81	0.00	0.00	0.00	0.00	0.00
O&M Expenses (1 Month)	1.62	1.70	1.85	2.05	2.12	0.00	0.00	0.00	0.00	0.00
Receivables (2 months)	4.78	5.65	6.14	6.65	6.81	13.94	18.74	19.98	21.16	21.23
Total	9.30	10.42	11.32	12.38	12.74	13.94	18.74	19.98	21.16	21.23
Rate of Interest on Working Capital	13.50%	13.50%	13.50%	13.50%	13.50%	13.50%	13.50%	13.50%	13.50%	13.50%
Total Interest on Working Capital (Annualized)	1.26	1.41	1.53	1.67	1.72	1.88	2.53	2.70	2.86	2.87



Wt. Average Rate of Interest (for 2014-19) - Central Portion

(₹ in lakh)

2014-15								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	4.90	0.00	0.00	4.90	4.90	9.2500%	0.45	
Bond XL	8.17	0.00	0.00	8.17	8.17	9.3000%	0.76	
Bond XLII	11.29	0.00	0.00	11.29	11.29	8.8000%	0.99	
Bond XLIII	16.82	0.00	0.00	16.82	16.82	7.9300%	1.33	
Bond XLVIII	0.00	0.00	19.83	0.00	0.00	8.2000%	0.00	
Total Loan	41.18	0.00	19.83	41.18	41.18		3.54	8.5974%
2015-16								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	4.90	0.00	0.00	4.90	4.90	9.2500%	0.45	
Bond XL	8.17	0.00	0.00	8.17	8.17	9.3000%	0.76	
Bond XLII	11.29	0.00	0.00	11.29	11.29	8.8000%	0.99	
Bond XLIII	16.82	0.00	0.00	16.82	16.82	7.9300%	1.33	
Bond XLVIII	19.83	0.00	0.00	19.83	19.83	8.2000%	1.63	
Bond LI	0.00	0.00	5.19	0.00	0.00	8.4000%	0.00	
Total Loan	61.01	0.00	5.19	61.01	61.01		5.17	8.4682%
2016-17								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	4.90	0.00	0.00	4.90	4.90	9.2500%	0.45	
Bond XL	8.17	0.68	0.00	7.49	7.83	9.3000%	0.73	
Bond XLII	11.29	0.00	0.00	11.29	11.29	8.8000%	0.99	
Bond XLIII	16.82	0.00	0.00	16.82	16.82	7.9300%	1.33	
Bond XLVIII	19.83	0.00	0.00	19.83	19.83	8.2000%	1.63	
Bond LI	5.19	0.00	0.00	5.19	5.19	8.4000%	0.44	
Bond LVII	0.00	0.00	2.34	0.00	0.00	7.2000%	0.00	
Total Loan	66.20	0.68	2.34	65.52	65.86		5.57	8.4586%
2017-18								



Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	4.90	0.00	0.00	4.90	4.90	9.2500%	0.45	
Bond XL	7.49	0.68	0.00	6.81	7.15	9.3000%	0.66	
Bond XLII	11.29	0.00	0.00	11.29	11.29	8.8000%	0.99	
Bond XLIII	16.82	1.40	0.00	15.42	16.12	7.9300%	1.28	
Bond XLVIII	19.83	0.00	0.00	19.83	19.83	8.2000%	1.63	
Bond LI	5.19	0.00	0.00	5.19	5.19	8.4000%	0.44	
Bond LVII	2.34	0.00	0.00	2.34	2.34	7.2000%	0.17	
SBI-02 (2017-18) (Q-4)	0.00	0.00	0.58	0.00	0.00	7.9500%	0.00	
Total Loan	67.86	2.08	0.58	65.78	66.82		5.62	8.4115%

2018-19

Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	4.90	0.00	0.00	4.90	4.90	9.2500%	0.45	
Bond XL	6.81	0.68	0.00	6.13	6.47	9.3000%	0.60	
Bond XLII	11.29	0.00	0.00	11.29	11.29	8.8000%	0.99	
Bond XLIII	15.42	1.40	0.00	14.02	14.72	7.9300%	1.17	
Bond XLVIII	19.83	0.00	0.00	19.83	19.83	8.2000%	1.63	
Bond LI	5.19	0.00	0.00	5.19	5.19	8.4000%	0.44	
Bond LVII	2.34	0.00	0.00	2.34	2.34	7.2000%	0.17	
SBI-02 (2017-18) (Q-4)	0.58	0.00	0.00	0.58	0.58	7.9500%	0.05	
Total Loan	66.36	2.08	0.00	64.28	65.32		5.49	8.4084%

Wt. Average Rate of Interest (for 2014-19) - State Portion

(₹ in lakh)

Loan	2014-15							
	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	55.10	0.00	0.00	55.10	55.10	9.2500%	5.10	
Bond XL	91.83	0.00	0.00	91.83	91.83	9.3000%	8.54	
Bond XLII	126.92	0.00	0.00	126.92	126.92	8.8000%	11.17	
Bond XLIII	145.10	0.00	0.00	145.10	145.10	7.9300%	11.51	



Bond XLVIII	0.00	0.00	139.26	0.00	0.00	8.2000%	0.00	
Total Loan	418.95	0.00	139.26	418.95	418.95		36.31	8.6675%
2015-16								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	55.10	0.00	0.00	55.10	55.10	9.2500%	5.10	
Bond XL	91.83	0.00	0.00	91.83	91.83	9.3000%	8.54	
Bond XLII	126.92	0.00	0.00	126.92	126.92	8.8000%	11.17	
Bond XLIII	145.10	0.00	0.00	145.10	145.10	7.9300%	11.51	
Bond XLVIII	139.26	0.00	0.00	139.26	139.26	8.2000%	11.42	
Bond LI	0.00	0.00	34.29	0.00	0.00	8.4000%	0.00	
Total Loan	558.21	0.00	34.29	558.21	558.21		47.73	8.5508%
2016-17								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	55.10	0.00	0.00	55.10	55.10	9.2500%	5.10	
Bond XL	91.83	0.68	0.00	91.15	91.49	9.3000%	8.51	
Bond XLII	126.92	0.00	0.00	126.92	126.92	8.8000%	11.17	
Bond XLIII	145.10	0.00	0.00	145.10	145.10	7.9300%	11.51	
Bond XLVIII	139.26	0.00	0.00	139.26	139.26	8.2000%	11.42	
Bond LI	34.29	0.00	0.00	34.29	34.29	8.4000%	2.88	
Bond LVII	0.00	0.00	32.54	0.00	0.00	7.2000%	0.00	
Total Loan	592.50	0.68	32.54	591.82	592.16		50.58	8.5417%
2017-18								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	55.10	0.00	0.00	55.10	55.10	9.2500%	5.10	
Bond XL	91.15	0.68	0.00	90.47	90.81	9.3000%	8.45	
Bond XLII	126.92	0.00	0.00	126.92	126.92	8.8000%	11.17	
Bond XLIII	145.10	1.40	0.00	143.70	144.40	7.9300%	11.45	
Bond XLVIII	139.26	0.00	0.00	139.26	139.26	8.2000%	11.42	
Bond LI	34.29	0.00	0.00	34.29	34.29	8.4000%	2.88	
Bond LVII	32.54	0.00	0.00	32.54	32.54	7.2000%	2.34	
SBI-02 (2017-18) (Q-4)	0.00	0.00	1.79	0.00	0.00	7.9500%	0.00	
Total Loan	624.36	2.08	1.79	622.28	623.32		52.80	8.4715%



2018-19								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	55.10	0.00	0.00	55.10	55.10	9.2500%	5.10	
Bond XL	90.47	0.68	0.00	89.79	90.13	9.3000%	8.38	
Bond XLII	126.92	0.00	0.00	126.92	126.92	8.8000%	11.17	
Bond XLIII	143.70	1.40	0.00	142.30	143.00	7.9300%	11.34	
Bond XLVIII	139.26	0.00	0.00	139.26	139.26	8.2000%	11.42	
Bond LI	34.29	0.00	0.00	34.29	34.29	8.4000%	2.88	
Bond LVII	32.54	0.00	0.00	32.54	32.54	7.2000%	2.34	
SBI-02 (2017-18) (Q-4)	1.79	0.00	0.00	1.79	1.79	7.9500%	0.14	
Total Loan	624.07	2.08	0.00	621.99	623.03		52.77	8.4703%



Asset-III**Central Portion - Charges (2014-19)****State Portion - Charges (2014-19)****(₹ in lakh)**

Particulars	Years					Years				
	2014-15	2015-16	2016-17	2017-18	2018-19	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Capital Cost	320.71	414.56	434.68	452.11	454.02	270.19	383.03	407.32	424.68	426.63
Opening Gross Notional Loan	224.50	290.19	304.28	316.48	317.81	189.14	268.12	285.13	297.28	298.64
Opening Gross Equity	96.21	124.37	130.40	135.63	136.21	81.06	114.91	122.20	127.41	127.99
Recovered Gross Capital Cost (As on 1st April)	3.61	13.21	27.10	43.36	62.30	2.91	11.02	23.89	39.19	57.07
Recovered Gross Notional Loan	2.92	10.61	21.60	34.31	48.93	2.35	8.85	19.04	31.01	44.82
Recovered Gross Equity	0.69	2.60	5.50	9.05	13.37	0.56	2.17	4.85	8.19	12.26
Opn.Net Capital Cost	317.10	401.35	407.58	408.75	391.72	267.28	372.02	383.43	385.49	369.56
Opn. Net Notional Loan	221.58	279.58	282.67	282.17	268.89	186.78	259.27	266.09	266.27	253.83
Opn. Net Equity	95.52	121.77	124.91	126.58	122.84	80.50	112.74	117.35	119.22	115.73
Recovered Capital Cost (During the Year)	9.60	13.88	16.26	18.94	21.16	8.10	12.87	15.31	17.88	19.98
Recovered Notional Loan	7.69	10.99	12.70	14.62	16.09	6.50	10.19	11.97	13.81	15.20
Recovered Equity	1.91	2.90	3.55	4.32	5.06	1.61	2.68	3.34	4.07	4.77
Cl. Net Capital Cost	307.50	387.46	391.32	389.81	370.56	259.18	359.14	368.13	367.61	349.58
Cl. Net Notional Loan	213.88	268.59	269.97	267.55	252.79	180.29	249.08	254.12	252.46	238.62
Cl. Net Equity	93.61	118.87	121.35	122.26	117.77	78.89	110.06	114.01	115.15	110.96
Additional Capital Expenditure	93.85	20.12	17.43	1.91	69.00	112.84	24.29	17.36	1.95	56.00
Additional Notional Loan	65.70	14.08	12.20	1.34	48.30	78.99	17.00	12.15	1.37	39.20
Additional Equity	28.16	6.04	5.23	0.57	20.70	33.85	7.29	5.21	0.59	16.80
Years (Capital to be recovered up to 31.10.2028)	14.50	13.50	12.50	11.50	10.50	14.50	13.50	12.50	11.50	10.50
Months	174.00	162.00	150.00	138.00	126.00	174.00	162.00	150.00	138.00	126.00
Weighted Average Rate of Interest p.a.	9.1434%	9.1789%	9.1399%	9.0549%	9.0408%	9.1261%	9.1774%	9.1283%	9.0402%	9.0263%
Weighted Average Rate of Interest p.m.	0.7619%	0.7649%	0.7617%	0.7546%	0.7534%	0.7605%	0.7648%	0.7607%	0.7534%	0.7522%
Monthly Recovery Factors -Loan	0.010394	0.010789	0.011208	0.011687	0.012318	0.010384	0.010788	0.011201	0.011679	0.012311
Monthly Capital Recovery Charge - Loan	2.30	3.02	3.17	3.30	3.31	1.94	2.80	2.98	3.11	3.12



Annual Capital Recovery Charge - Loan	27.64	36.19	38.02	39.57	39.75	23.27	33.56	35.77	37.32	37.50
Rate of Return on Equity p.a.	15.500%	15.500%	15.500%	15.500%	15.500%	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%	1.292%	1.292%	1.292%	1.292%	1.292%
Monthly Recovery Factors -Equity	0.014468	0.014763	0.015122	0.015565	0.016115	0.014468	0.014763	0.015122	0.015565	0.016115
Monthly Capital Recovery Charge - Equity	1.38	1.80	1.89	1.97	1.98	1.16	1.66	1.77	1.86	1.87
Annual Capital Recovery Charge - Equity	16.58	21.57	22.67	23.64	23.75	13.98	19.97	21.30	22.27	22.38
Monthly Capital Recovery Charge - Total	3.69	4.81	5.06	5.27	5.29	3.10	4.46	4.76	4.97	4.99
Annual Capital Recovery Charge - Total	44.22	57.77	60.68	63.22	63.50	37.25	53.54	57.06	59.59	59.88
O&M Expenses (Annualized)	16.23	16.97	18.51	20.44	21.12	0.00	0.00	0.00	0.00	0.00
Fee & Charges (2014-19)	Central Portion - Charges					State Portion - Charges				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Capital Recovery Charge - Loan	27.64	36.19	38.02	39.57	39.75	23.27	33.56	35.77	37.32	37.50
Annual Capital Recovery Charge - Equity	16.58	21.57	22.67	23.64	23.75	13.98	19.97	21.30	22.27	22.38
Annual Capital Recovery Charge - Total	44.22	57.77	60.68	63.22	63.50	37.25	53.54	57.06	59.59	59.88
O&M Expenses	16.23	16.97	18.51	20.44	21.12	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital [†]	1.91	2.27	2.42	2.58	2.63	0.86	1.23	1.31	1.37	1.38
Total Fee & Charges	62.36	77.00	81.61	86.24	87.25	38.11	54.77	58.37	60.96	61.26
Interest on Working Capital[†]										
Particular	2014-15	2015-16	2016-17	2017-18	2018-19	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares (15% of O&M)	2.43	2.55	2.78	3.07	3.17	0.00	0.00	0.00	0.00	0.00
O&M Expenses (1 Month)	1.35	1.41	1.54	1.70	1.76	0.00	0.00	0.00	0.00	0.00
Receivables (2 months)	10.39	12.83	13.60	14.37	14.54	6.35	9.13	9.73	10.16	10.21
Total	14.18	16.79	17.92	19.14	19.47	6.35	9.13	9.73	10.16	10.21
Rate of Interest on Working Capital	13.50%	13.50%	13.50%	13.50%	13.50%	13.50%	13.50%	13.50%	13.50%	13.50%
Total Interest on Working Capital (Annualized)	1.91	2.27	2.42	2.58	2.63	0.86	1.23	1.31	1.37	1.38



Wt. Average Rate of Interest (for 2014-19) - Central Portion

(₹ in lakh)

2014-15								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	22.14	0.00	0.00	22.14	22.14	9.2500%	2.05	
Bond XL	134.72	0.00	0.00	134.72	134.72	9.3000%	12.53	
Bond XLII	65.28	0.00	0.00	65.28	65.28	8.8000%	5.74	
Bond XLIV	2.35	0.00	0.00	2.35	2.35	8.7000%	0.20	
Bond XLVI	0.00	0.00	65.77	0.00	0.00	9.3000%	0.00	
Total Loan	224.49	0.00	65.77	224.49	224.49		20.53	9.1434%
2015-16								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	22.14	0.00	0.00	22.14	22.14	9.2500%	2.05	
Bond XL	134.72	0.00	0.00	134.72	134.72	9.3000%	12.53	
Bond XLII	65.28	0.00	0.00	65.28	65.28	8.8000%	5.74	
Bond XLIV	2.35	0.00	0.00	2.35	2.35	8.7000%	0.20	
Bond XLVI	65.77	0.00	0.00	65.77	65.77	9.3000%	6.12	
Bond L	0.00	0.00	14.09	0.00	0.00	8.4000%	0.00	
Total Loan	290.26	0.00	14.09	290.26	290.26		26.64	9.1789%
2016-17								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	22.14	0.00	0.00	22.14	22.14	9.2500%	2.05	
Bond XL	134.72	11.23	0.00	123.49	129.11	9.3000%	12.01	
Bond XLII	65.28	0.00	0.00	65.28	65.28	8.8000%	5.74	
Bond XLIV	2.35	0.00	0.00	2.35	2.35	8.7000%	0.20	
Bond XLVI	65.77	0.00	0.00	65.77	65.77	9.3000%	6.12	
Bond L	14.09	0.00	0.00	14.09	14.09	8.4000%	1.18	
Bond LVII	0.00	0.00	12.20	0.00	0.00	7.2000%	0.00	
Total Loan	304.35	11.23	12.20	293.12	298.74		27.30	9.1399%
2017-18								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest



Bond XXXVIII	22.14	0.00	0.00	22.14	22.14	9.2500%	2.05	
Bond XL	123.49	11.23	0.00	112.26	117.88	9.3000%	10.96	
Bond XLII	65.28	0.00	0.00	65.28	65.28	8.8000%	5.74	
Bond XLIV	2.35	0.00	0.00	2.35	2.35	8.7000%	0.20	
Bond XLVI	65.77	0.00	0.00	65.77	65.77	9.3000%	6.12	
Bond L	14.09	0.00	0.00	14.09	14.09	8.4000%	1.18	
Bond LVII	12.20	0.00	0.00	12.20	12.20	7.2000%	0.88	
SBI-02 (2017-18) (Q-4)	0.00	0.00	1.34	0.00	0.00	7.9500%	0.00	
Total Loan	305.32	11.23	1.34	294.09	299.71		27.14	9.0549%
2018-19								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	22.14	0.00	0.00	22.14	22.14	9.2500%	2.05	
Bond XL	112.26	11.23	0.00	101.03	106.65	9.3000%	9.92	
Bond XLII	65.28	0.00	0.00	65.28	65.28	8.8000%	5.74	
Bond XLIV	2.35	0.78	0.00	1.57	1.96	8.7000%	0.17	
Bond XLVI	65.77	0.00	0.00	65.77	65.77	9.3000%	6.12	
Bond L	14.09	0.00	0.00	14.09	14.09	8.4000%	1.18	
Bond LVII	12.20	0.00	0.00	12.20	12.20	7.2000%	0.88	
SBI-02 (2017-18) (Q-4)	1.34	0.00	0.00	1.34	1.34	7.9500%	0.11	
Total Loan	295.43	12.01	0.00	283.42	289.43		26.17	9.0408%

Wt. Average Rate of Interest (for 2014-19) - State Portion

(₹ in lakh)

	2014-15							
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	17.86	0.00	0.00	17.86	17.86	9.2500%	1.65	
Bond XL	108.64	0.00	0.00	108.64	108.64	9.3000%	10.10	
Bond XLII	55.81	0.00	0.00	55.81	55.81	8.8000%	4.91	
Bond XLIV	6.80	0.00	0.00	6.80	6.80	8.7000%	0.59	
Bond XLVI	0.00	0.00	78.99	0.00	0.00	9.3000%	0.00	
Total Loan	189.11	0.00	78.99	189.11	189.11		17.26	9.1261%
	2015-16							
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest



Bond XXXVIII	17.86	0.00	0.00	17.86	17.86	9.2500%	1.65	
Bond XL	108.64	0.00	0.00	108.64	108.64	9.3000%	10.10	
Bond XLII	55.81	0.00	0.00	55.81	55.81	8.8000%	4.91	
Bond XLIV	6.80	0.00	0.00	6.80	6.80	8.7000%	0.59	
Bond XLVI	78.99	0.00	0.00	78.99	78.99	9.3000%	7.35	
Bond L	0.00	0.00	17.00	0.00	0.00	8.4000%	0.00	
Total Loan	268.10	0.00	17.00	268.10	268.10		24.60	9.1774%
2016-17								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	17.86	0.00	0.00	17.86	17.86	9.2500%	1.65	
Bond XL	108.64	9.05	0.00	99.59	104.12	9.3000%	9.68	
Bond XLII	55.81	0.00	0.00	55.81	55.81	8.8000%	4.91	
Bond XLIV	6.80	0.00	0.00	6.80	6.80	8.7000%	0.59	
Bond XLVI	78.99	0.00	0.00	78.99	78.99	9.3000%	7.35	
Bond L	17.00	0.00	0.00	17.00	17.00	8.4000%	1.43	
Bond LVII	0.00	0.00	12.15	0.00	0.00	7.2000%	0.00	
Total Loan	285.10	9.05	12.15	276.05	280.58		25.61	9.1283%
2017-18								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	17.86	0.00	0.00	17.86	17.86	9.2500%	1.65	
Bond XL	99.59	9.05	0.00	90.54	95.07	9.3000%	8.84	
Bond XLII	55.81	0.00	0.00	55.81	55.81	8.8000%	4.91	
Bond XLIV	6.80	0.00	0.00	6.80	6.80	8.7000%	0.59	
Bond XLVI	78.99	0.00	0.00	78.99	78.99	9.3000%	7.35	
Bond L	17.00	0.00	0.00	17.00	17.00	8.4000%	1.43	
Bond LVII	12.15	0.00	0.00	12.15	12.15	7.2000%	0.87	
SBI-02 (2017-18) (Q-4)	0.00	0.00	1.36	0.00	0.00	7.9500%	0.00	
Total Loan	288.20	9.05	1.36	279.15	283.68		25.64	9.0402%
2018-19								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	17.86	0.00	0.00	17.86	17.86	9.2500%	1.65	
Bond XL	90.54	9.05	0.00	81.49	86.02	9.3000%	8.00	
Bond XLII	55.81	0.00	0.00	55.81	55.81	8.8000%	4.91	



Bond XLIV	6.80	0.00	0.00	6.80	6.80	8.7000%	0.59	
Bond XLVI	78.99	0.00	0.00	78.99	78.99	9.3000%	7.35	
Bond L	17.00	0.00	0.00	17.00	17.00	8.4000%	1.43	
Bond LVII	12.15	0.00	0.00	12.15	12.15	7.2000%	0.87	
SBI-02 (2017-18) (Q-4)	1.36	0.00	0.00	1.36	1.36	7.9500%	0.11	
Total Loan	280.51	9.05	0.00	271.46	275.99		24.91	9.0263%



State Portion - Charges (2014-19)

(₹ in lakh)

Particulars	Years				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Capital Cost	87.19	101.07	105.45	113.69	116.16
Opening Gross Notional Loan	61.04	70.75	73.82	79.59	81.31
Opening Gross Equity	26.16	30.32	31.64	34.11	34.85
Recovered Gross Capital Cost (As on 1st April)	0.20	2.76	6.03	9.82	14.41
Recovered Gross Notional Loan	0.16	2.23	4.85	7.83	11.41
Recovered Gross Equity	0.04	0.52	1.18	1.99	3.00
Opn.Net Capital Cost	87.00	98.32	99.42	103.88	101.75
Opn. Net Notional Loan	60.87	68.52	68.97	71.75	69.91
Opn. Net Equity	26.12	29.80	30.45	32.12	31.85
Recovered Capital Cost (During the Year)	2.56	3.27	3.79	4.59	5.22
Recovered Notional Loan	2.07	2.62	2.99	3.58	4.00
Recovered Equity	0.49	0.66	0.80	1.02	1.21
Cl. Net Capital Cost	84.44	95.04	95.64	99.28	96.54
Cl. Net Notional Loan	58.80	65.90	65.98	68.18	65.90
Cl. Net Equity	25.64	29.14	29.65	31.11	30.64
Additional Capital Expenditure	13.88	4.38	8.24	2.47	62.00
Additional Notional Loan	9.72	3.07	5.77	1.73	43.40
Additional Equity	4.16	1.31	2.47	0.74	18.60
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 Rate of Interest p.a.	8.7817%	8.8697%	8.8916%	8.7648%	8.7499%
Weighted Average Rate of Interest p.m.	0.7318%	0.7391%	0.7410%	0.7304%	0.7292%
Monthly Recovery Factors - Loan	0.010040	0.010445	0.010872	0.011293	0.011877
Monthly Capital Recovery Charge - Loan	0.61	0.72	0.75	0.81	0.83
Annual Capital Recovery Charge - Loan	7.33	8.59	9.00	9.72	9.96
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 Charge - Equity	0.38	0.44	0.46	0.49	0.51
Annual Capital Recovery Charge - Equity	4.50	5.23	5.47	5.92	6.07
Monthly Capital Recovery Charge - Total	0.99	1.15	1.21	1.30	1.34
Annual Capital Recovery Charge - Total	11.84	13.82	14.47	15.65	16.03
O&M Expenses (Annualized)	0.00	0.00	0.00	0.00	0.00
Fee & Charges (2014-19)	State Portion - Charges				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Capital Recovery Charge - Loan	7.33	8.59	9.00	9.72	9.96
Annual Capital Recovery Charge - Equity	4.50	5.23	5.47	5.92	6.07
Annual Capital Recovery Charge - Total	11.84	13.82	14.47	15.65	16.03
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital[†]	0.27	0.32	0.33	0.36	0.37
Total Fee & Charges	12.11	14.14	14.80	16.01	16.40
Interest on Working Capital[†]					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares (15% of O&M)	0.00	0.00	0.00	0.00	0.00
O&M Expenses (1 Month)	0.00	0.00	0.00	0.00	0.00
Receivables (2 months)	2.02	2.36	2.47	2.67	2.73
Total	2.02	2.36	2.47	2.67	2.73
Rate of Interest on Working Capital	13.50%	13.50%	13.50%	13.50%	13.50%
Total Interest on Working Capital (Annualized)	0.27	0.32	0.33	0.36	0.37



Wt. Average Rate of Interest (for 2014-19) - State Portion

(₹ in lakh)

2014-15								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	12.00	0.00	9.72	12.00	12.00	9.2500%	1.11	
Bond XL	6.00	0.00	0.00	6.00	6.00	9.3000%	0.56	
Bond XLII	5.00	0.00	0.00	5.00	5.00	8.8000%	0.44	
Bond XLIII	16.00	0.00	0.00	16.00	16.00	7.9300%	1.27	
Bond XLIV	18.00	0.00	0.00	18.00	18.00	8.7000%	1.57	
Bond XLV	0.13	0.00	0.00	0.13	0.13	9.6500%	0.01	
SBI (Oct 13 - Dec 13)	4.20	0.00	1.23	4.20	4.20	10.2500%	0.43	
Total Loan	61.33	0.00	10.95	61.33	61.33		5.39	8.7817%
2015-16								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	21.72	0.00	0.00	21.72	21.72	9.2500%	2.01	
Bond XL	6.00	0.00	0.00	6.00	6.00	9.3000%	0.56	
Bond XLII	5.00	0.00	0.00	5.00	5.00	8.8000%	0.44	
Bond XLIII	16.00	0.00	0.00	16.00	16.00	7.9300%	1.27	
Bond XLIV	18.00	0.00	0.00	18.00	18.00	8.7000%	1.57	
Bond XLV	0.13	0.00	0.00	0.13	0.13	9.6500%	0.01	
SBI (Oct 13 - Dec 13)	5.43	0.00	0.00	5.43	5.43	10.2500%	0.56	
SBI (10000)	0.00	0.00	3.07	0.00	0.00	9.5500%	0.00	
Total Loan	72.28	0.00	3.07	72.28	72.28		6.41	8.8697%
2016-17								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	21.72	0.00	0.00	21.72	21.72	9.2500%	2.01	
Bond XL	6.00	0.50	0.00	5.50	5.75	9.3000%	0.53	
Bond XLII	5.00	0.00	0.00	5.00	5.00	8.8000%	0.44	
Bond XLIII	16.00	0.00	0.00	16.00	16.00	7.9300%	1.27	
Bond XLIV	18.00	0.00	0.00	18.00	18.00	8.7000%	1.57	
Bond XLV	0.13	0.00	0.00	0.13	0.13	9.6500%	0.01	
SBI (Oct 13 - Dec 13)	5.43	0.50	0.00	4.93	5.18	10.2500%	0.53	



SBI (10000)	3.07	0.00	0.00	3.07	3.07	9.5500%	0.29	
Bond LVII	0.00	0.00	5.77	0.00	0.00	7.2000%	0.00	
Total Loan	75.35	1.00	5.77	74.35	74.85		6.66	8.8916%
2017-18								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	21.72	0.00	0.00	21.72	21.72	9.2500%	2.01	
Bond XL	5.50	0.50	0.00	5.00	5.25	9.3000%	0.49	
Bond XLII	5.00	0.00	0.00	5.00	5.00	8.8000%	0.44	
Bond XLIII	16.00	1.33	0.00	14.67	15.34	7.9300%	1.22	
Bond XLIV	18.00	0.00	0.00	18.00	18.00	8.7000%	1.57	
Bond XLV	0.13	0.01	0.00	0.12	0.13	9.6500%	0.01	
SBI (Oct 13 - Dec 13)	4.93	0.50	0.00	4.43	4.68	10.2500%	0.48	
SBI (10000)	3.07	0.00	0.00	3.07	3.07	9.5500%	0.29	
Bond LVII	5.77	0.00	0.00	5.77	5.77	7.2000%	0.42	
SBI-02 (2017-18) (Q-4)	0.00	0.00	1.73	0.00	0.00	7.9500%	0.00	
Total Loan	80.12	2.34	1.73	77.78	78.95		6.92	8.7648%
2018-19								
Loan	Opening	Repayment	Add Cap	Closing	Average	Rate of interest	Interest	Weighted Average Rate of Interest
Bond XXXVIII	21.72	0.00	0.00	21.72	21.72	9.2500%	2.01	
Bond XL	5.00	0.50	0.00	4.50	4.75	9.3000%	0.44	
Bond XLII	5.00	0.00	0.00	5.00	5.00	8.8000%	0.44	
Bond XLIII	14.67	1.33	0.00	13.34	14.01	7.9300%	1.11	
Bond XLIV	18.00	6.00	0.00	12.00	15.00	8.7000%	1.31	
Bond XLV	0.12	0.01	0.00	0.11	0.12	9.6500%	0.01	
SBI (Oct 13 - Dec 13)	4.43	0.50	0.00	3.93	4.18	10.2500%	0.43	
SBI (10000)	3.07	0.00	0.00	3.07	3.07	9.5500%	0.29	
Bond LVII	5.77	0.00	0.00	5.77	5.77	7.2000%	0.42	
SBI-02 (2017-18) (Q-4)	1.73	0.00	0.00	1.73	1.73	7.9500%	0.14	
Total Loan	79.51	8.34	0.00	71.17	75.34		6.59	8.7499%



Filing fee and the publication expenses

59. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The Petitioner is 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.

License fee and RLDC Fees and Charges

60. The Petitioner has requested to allow it to bill and recover license fee and RLDC fees and charges, separately from the Respondents. The Petitioner is entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Regulation 52(2)(b) and 52(2)(a) respectively of the 2014 Tariff Regulations.

Goods and Services Tax

61. The Petitioner has prayed for reimbursement 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 Charges

62. The fee and charges allowed in this order for the 2009-14 period for the Central Portion shall be shared by the respondents in accordance with Para 44 of the Order dated 15.9.2016 in Petition No. 57/TT/2014.



63. The fees and charges allowed for the State Portion for the 2009-14 period in this order shall be shared by the respective State in proportion to the capital cost belonging to respective State.

64. As provided in Regulation 43(2) of the 2014 Tariff Regulations, the fees and charges allowed in this order for the 2014-19 period for the Central Portion shall be shared in terms of the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 as amended from time to time. The fees and charges for the State Portion shall be recovered from respective states.

65. Further, as specified under Regulation 5 of Central Electricity Regulatory Commission (Sharing of revenue derived from utilization of transmission assets for other business) Regulations, 2007, the revenue earned by the petitioner from utilisation of these assets for other business shall be adjusted on monthly basis in the bills of the respective month.

66. This order disposes of Petition No. 262/TT/2019.

sd/-
(I. S. Jha)
Member

sd/-
(Dr. M. K. Iyer)
Member

sd/-
(P. K. Pujari)
Chairperson

