

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 37/TT/2017

Coram:

**Shri Gireesh B. Pradhan, Chairperson
Shri A.K. Singhal, Member
Shri A.S. Bakshi, Member
Dr. M.K. Iyer, Member**

Date of Order: 17.10.2017

In the matter of:

Truing up of transmission tariff for 2009-14 tariff period and determination of transmission tariff for 2014-19 tariff period for 6 Nos. of Spare ICTs and Reactors under "Provision of Spare ICTs and Reactors for Eastern, Northern, Southern and Western Regions" in Eastern Region, under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

And in the matter of:

Power Grid Corporation of India Ltd
'Saudamini', Plot No-2,
Sector-29, Gurgaon -122 001 (Haryana)

.....**Petitioner**

Vs

1. Bihar State Power (Holding) Company Limited,
Vidyut Bhawan, Bailey Road,
Patna-800 001
2. West Bengal State Electricity Distribution Company Limited,
Bidyut Bhawan, Bidhan Nagar,
Block DJ, Sector-II, Salt Lake City,
Kolkata-700 091
3. Grid Corporation of Orissa Limited,
Shahid Nagar,
Bhubaneswar-751 007
4. Damodar Valley Corporation,
DVC Tower, Maniktala
Civil Centre, VIP Road,
Kolkata-700 054



5. Power Department,
Govt. of Sikkim, Gangtok-737 101
6. Jharkhand Urja Vikas Nigam Limited (JUVNL),
HEC Building, Dhurwa,
Ranchi-834 002

.....Respondents

For Petitioner: Shri Rakesh Prasad, PGCIL
Shri S.K. Venkatesan, PGCIL
Shri S.S. Raju, PGCIL

For Respondents: None

ORDER

The present petition has been filed by Power Grid Corporation of India Limited ('the petitioner'), for trueing up of capital expenditure and tariff for Combined elements of 6 Nos. of Spare ICTs and Reactors (hereinafter referred as "transmission assets") under Provision of Spare ICTs and Reactors for Eastern, Northern, Southern and Western Regions, in Eastern Region, under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations") based on actual expenditure for the period 1.4.2009 to 31.3.2014 and for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") for the period from 1.4.2014 to 31.3.2019.

2. The brief facts of the case are as follows:-

- a. The Investment approval of the project was accorded by the Board of Directors of the petitioner's company vide letter No. C/CP/Spare ICTs and



Reactors dated 4.8.2011 for ₹7777 lakh including IDC of ₹210 lakh, based on 1st Quarter, 2011 price level.

b. The final tariff for tariff period 2009-14 for 6 assets was determined vide order dated 10.7.2015 in Petition No. 43/TT/2013 in accordance with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The details of the assets, their COD/Tariff COD and capital cost approved as on 31.3.2014 are as under:-

Particulars	COD/Tariff COD	Capital cost as on 31.3.2014 (₹ in lakh)
Asset-A: 1 No. 315 MVA, 400/220/33 kV, 3-Phase Transformer at Biharshariff Sub-station and 1 No. 315 MVA, 400/220/33 kV, 3-Phase Transformer at Jamshedpur Sub-station	1.9.2012 (Tariff COD)	2381.54
Asset-B: 1 No. 80 MVAR, 420 kV, 3-Phase Reactor at Rourkela Sub-station	1.10.2012	562.27
Asset-C: 1 No. 160 MVA, 220/132kV, 3-Phase ICT at Baripada Sub-station (Shifted to Purnea Sub-Station)	1.9.2013	404.58
Asset-D: 1 No. 315 MVA, 400/220 kV, 3-Phase ICT at Durgapur Sub-station	1.3.2013	1098.25
Asset-E: 1 No. 160 MVA, 220/132 kV, 3-Phase ICT at Siliguri Sub-station	1.6.2013	616.94
Asset-F: 1 No. 315 MVA, 400/220 kV, 3-Phase ICT at Rourkela Sub-station	1.4.2013	1088.27
Asset-G: 1 No. 50 MVA, 132/66 kV, 3-Phase ICT at Gangtok Sub-station	Commissioned in 2014-19	Petition No. 215/TT/2015

c. The tariff allowed vide order dated 10.7.2015 for the tariff period 2009-14 is as under:-

Particulars	(₹ in lakh)				
	Asset-A		Asset-B		Asset-C
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2013-14 (pro-rata)
Depreciation	55.81	125.75	8.44	24.60	10.78
Interest on Loan	67.30	144.00	10.21	28.40	12.27
Return on Equity	55.43	124.89	8.38	24.44	10.70
Interest on Working Capital	4.11	9.08	0.62	1.78	0.76
O & M Expenses	-	-	-	-	-
Total	182.65	403.72	27.65	79.23	34.50



(₹ in lakh)

Particulars	Asset-D		Asset-E	Asset-F
	2012-13 (pro-rata)	2013-14	2013-14 (pro-rata)	2013-14
Depreciation	3.08	49.01	20.90	48.95
Interest on Loan	3.65	55.39	24.83	57.90
Return on Equity	3.06	48.68	20.76	48.62
Interest on Working Capital	0.23	3.52	1.50	3.50
O & M Expenses	-	-	-	-
Total	10.02	156.60	67.99	158.96

d. The MAT rate applicable as on 2008-09 was considered to arrive at rate of return on equity for the tariff period 2009-14, which is required to be adjusted as per the actual MAT rate applicable for the respective year at the time of truing up of tariff for 2009-14 tariff period.

3. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act, 2003 ("the Act"). The petitioner has served the petition to the respondents. None of the Respondents has filed a reply.

4. The hearing in the matter was held on 4.5.2017. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

Truing-up of Annual Fixed Charges for Tariff Period 2009-14

5. The tariff of 2009-14 has been trued up as discussed below.

Capital Cost and Additional Capital Expenditure

6. Regulation 6 of the 2009 Tariff Regulations provides as under:-

"6. Truing up of Capital Expenditure and Tariff.

(1) The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up.



Provided that the generating company or the transmission licensee, as the case may be, may in its discretion make an application before the Commission one more time prior to 2013- 14 for revision of tariff.

(2) The generating company or the transmission licensee, as the case may be, shall make an application, as per Appendix I to these regulations, for carrying out truing up exercise in respect of the generating station a unit or block thereof or the transmission system or the transmission lines or sub-stations thereof by 31.10.2014;

(3) The generating company or the transmission licensee, as the case may be, shall submit for the purpose of truing up, details of capital expenditure and additional capital expenditure incurred for the period from 1.4.2009 to 31.3.2014, duly audited and certified by the auditors;

(4) Where after the truing up, the tariff recovered exceeds the tariff approved by the Commission under these regulations, the generating company or the transmission licensee, as the case may be, shall refund to the beneficiaries or the transmission customers, as the case may be, the excess amount so recovered along with simple interest at the rates specified in the proviso to this regulation.

(5) Where after the truing up, the tariff recovered is less than the tariff approved by the Commission under these regulations, the generating company or the transmission licensee, as the case may be, shall recover from the beneficiaries or the transmission customers, as the case may be, the under-recovered amount along with simple interest at the rates specified in the proviso to this regulation.

(6) The amount under-recovered or over-recovered, along with simple interest at the rates specified in the proviso to this regulation, shall be recovered or refunded by the generating company or the transmission licensee, as the case may be, in six equal monthly installments starting within three months from Page 3 of 6 the date of the tariff order issued by the Commission after the truing up exercise.

Provided that the rate of interest, for clauses (4), (5) and (6) of this regulation, for calculation of simple interest shall be considered as under:

(i) SBI short-term Prime Lending Rate as on 01.04.2009 for the year 2009-10.

(ii) SBI Base Rate as on 01.07.2010 plus 350 basis points for the year 2010-11.

(iii) Monthly average SBI Base Rate from 01.07.2010 to 31.3.2011 plus 350 basis points for the year 2011-12.

(iv) Monthly average SBI Base Rate during previous year plus 350 basis points for the year 2012-13 & 2013-14.”

7. The petitioner has submitted Auditors' Certificates dated 26.8.2015, 12.5.2016, 26.8.2015, 26.5.2015, 12.7.2016 and 12.5.2016 for Asset-A, Asset-B, Asset-C, Asset-D, Asset-E and Asset-F respectively in support of actual capital



expenditure incurred. The details of the capital cost as on COD, additional capital expenditure and the completion cost claimed by the petitioner are as under:-

(₹ in lakh)

Particulars	Approved apportioned cost	Expenditure upto COD/tariff COD	Actual additional capital expenditure		Total completion cost as on 31.3.2014
			2012-13	2013-14	
Asset-A	2513.74	1334.42	929.67	0.70	2264.79
Asset-B	632.15	258.27	-	180.74	439.01
Asset-C	755.55	301.50	-	109.47	410.97
Asset-D	1268.54	653.49	115.02	225.65	994.16
Asset-E	736.45	338.74	-	101.17	439.91
Asset-F	1287.16	784.46	-	213.07	997.53

*Capital cost has been verified from the audited statements of account of the petitioner by the Auditors upto 31.3.2015/31.3.2016.

De-capitalisation

8. The Commission in order dated 10.7.2015 in Petition No. 43/TT/2013 observed that asset which has completed 25 years of life must be decapitalised and directed the petitioner to submit the details at the time of truing-up. The relevant portion of the order is as follows:-

“20. The 2 nos. 100 MVA ICTs at Purnea Sub-station (commissioned on 1.12.1986) had completed 25 years of service life and they are replaced with 1 no. 160 MVA, 3-Phase ICT. However, the petitioner in the instant petition has not mentioned the details of de-capitalization of the asset that is being replaced. The asset which has completed life of 25 years must be de-capitalized and the petitioner is directed to submit the details at the time of truing-up.”

“26-----The petitioner has also not provided any details about how ICT requirement at Baripada Sub-station would be met in view of shifting of ICT meant for Baripada to Purnea. The petitioner is directed to submit the details of the same at the time of truing-up and also details regarding ICT which is being replaced for decapitalisation in an appropriate petition”.

9. In this connection, the petitioner in the original petition has submitted as below:-

“-----ICTs procured under spare ICTs & reactors project will be used as regional spares. Hence, as per the site requirement, the spare ICTs were delivered accordingly, and the further need of ICT at Baripada S/S shall be taken care of accordingly. Initially this spare ICT was planned for Baripada, but according to load requirement, the need of spare ICT arose at Purnea S/S in place of Baripada. Hence, according to the site requirement ICT was diverted to Purnea S/S from



Baripada S/S (i.e. diversion within the Eastern Region in line with proposed scheme)”).

“-----that a total 03 Nos. of 220/132 kV ICTs at Purnea Substation with 100 MVA capacities each are available. Out of these three transformers 02 nos. of ICTs (ICT-I & II) has been commissioned in 1985-86 under Chukka Transformers system and replaced under Augmentation of transformation capacity in ER & NR and the replaced 100 MVA ICTs kept as regional spare and the same has been approved vide order under petition no. 257/TT/2015 dated 26.05.2016. The remaining one ICT-III had been commissioned in November’ 2003 under the project LILO of 132 kV Dalkhola Purnea transmission system”.

“Due to ageing, loading of old transformers were restricted to 70 MVA each hence total maximum possible loading was around 210 MVA. However, load at Purnea 220/132 kV substation was around 250-260 MW, including Nepal load also. Keeping in view of load requirement at Purnea, Bihar State Power Holding Company Ltd. (BSPHCL) has raised issue in 25th ERPC meeting for up gradation of 100 MVA ICT at Purnea with 160 MVA spare ICT. Further, Chief Secretary, Govt. of Bihar requested to POWERGRID to increase the capacity of ICTs at Purnea to meet the load requirement in Purnea area. Further, BSPTCL has once again requested POWERGRID for early replacement of the ICT with 160 MVA spare ICT of Eastern Region available at Purnea substation & 160 MVA ICT after procurement will be kept as spare at Purnea”.

“As per above requirement a 160 MVA ICT at Purnea which was diverted from Baripada & put under commercial operation from 01.09.2013 as a spare transformer. As per the requirement of BSPHCL the 100 MVA ICT replaced with 160 MVA spare transformer. Accordingly, 100 MVA ICT III, which was commissioned in November’ 2003, was replaced with available 160 MVA spare ICT and commissioned on 01.10.2014. Accordingly, Petitioner has commissioned 160 MVA ICT which was already spare under instant project at Purnea S/S but it was not declared for commercial operation at that time. However RLDC certificate was obtained from ERLDC on 27.10.2017. (Successful charging date 01.10.2014)”.

“To facilitate the further power requirement at Purnea, MD, BSPTCL during 103rd OCC meeting with POWERGRID requested to connect the 100 MVA transformer in parallel with existing 160 MVA ICT III at Purnea on temporary basis by ERS arrangement. As per the decisions taken in 96 OCC meeting the parallel connection of 100 MVA ICT was made in 24.12.2014 and after that both 160 MVA ICT & 100 MVA ICTs’ have been in service. Hence, de-capitalization for the asset is not applicable”.

10. We have considered the submissions of the petitioner. The Commission has allowed the tariff for the Spare ICTs and Reactors vide order dated 10.7.2015 in Petition No. 43/TT/2013, wherein the petitioner submitted that the Spare ICTs were approved by ERPC. However, the petitioner has submitted in the instant asset that it has been decided in 96th OCC meeting and 25th ERPC meeting. The



petitioner has not submitted the details of decapitalisation as directed in order dated 10.7.2015.. Allowing tariff for Asset-C without de-capitalisation of old ICTs would tantamount to servicing two assets. Therefore, tariff for Asset-C is not allowed in this order and the same shall be allowed only after de-capitalisation of the old asset, namely old ICT 100 MVA and associated cost of bays and adjustment of cumulative depreciation. The petitioner is given liberty to file a separate petition claiming tariff for Asset-C after de-capitalisation of old replaced assets.

11. We are also of the view that there is a need for devising a limit on regional spares and methodology of servicing of investment on such regional spares. In this regard, we have already sought certain information in some of the petitions seeking list of regional spares, their values, methodology of recovery of their cost, whether to be through tariff of sub-stations/line, or as O&M Expenses. The petitioner is directed to submit this information, while claiming tariff for Asset-C.

12. Accordingly, the capital cost as on COD/tariff COD and additional capitalisation during 2009-14 is considered for tariff purposes for 2009-14 tariff period in accordance with Clause 2(viii) of Regulation 9 of the 2009 Tariff Regulations for all assets excluding Asset-C in this order.

Treatment of IDC and IEDC

13. The petitioner, vide Auditors' Certificates dated 26.8.2015, 12.5.2016, 26.5.2015, 12.7.2016 and 12.5.2016 for Asset-A, Asset-B, Asset-D, Asset-E and Asset-F respectively, has submitted details of IDC, IDC discharged as on COD/tariff COD and IDC discharged during 2012-13 and 2013-14 as follows:-



(₹ in lakh)

Particulars	IDC claimed as per Auditors' Certificates (on accrual basis)	IDC discharged		
		As on COD/tariff COD	2012-13	2013-14
Asset-A	-	-	-	-
Asset-B	8.52	0.95	7.18	0.39
Asset-D	9.47	-	4.42	5.05
Asset-E	9.54	5.90	-	3.64
Asset-F	26.23	14.52	-	11.71

14. The Commission, vide order dated 10.7.2015 in Petition No. 43/TT/2013, has not condoned the time over-run in completion of the assets. Accordingly, the delay has not been condoned in the instant petition. The details of time over-run in commissioning of the instant assets are as under:-

Particulars	COD/Tariff COD	Delay in months
Asset-A	1.9.2012 (Tariff COD)	No Delay
Asset-B	1.10.2012	No Delay
Asset-D	1.3.2013	2 months
Asset-E	1.6.2013	5 months
Asset-F	1.4.2013	3 months

15. IDC has been worked out based on the loans deployed for the instant assets as per Form-9C submitted in the petition. The IDC claimed by the petitioner, in respect of Asset-F, is slightly higher than that worked out. However, IDC claimed by the petitioner, in respect of Asset-B, Asset-D and Asset-E, is slightly lower than that worked out. Therefore, IDC considered for tariff computation is the minimum of worked out IDC and IDC claimed by the petitioner. Accordingly, the details of IDC allowable after disallowance for time over-run, as on COD/ tariff COD and IDC liable to be discharged during 2012-13 and 2013-14 considered during 2009-14 are as overleaf:-



(₹ in lakh)

Particulars	IDC claimed as per Auditors' Certificates (on accrual basis)	IDC Allowable	IDC discharged		
			As on COD/tariff COD	2012-13	2013-14
Asset-A	-	-	-	-	-
Asset-B	8.52	8.52	0.95	7.18	0.39
Asset-D	9.47	9.47	-	4.42	5.05
Asset-E	9.54	9.54	5.90	-	3.64
Asset-F	26.23	18.85	14.52	-	4.33

16. Accordingly, the capital cost as on COD/tariff COD after considering IDC on cash basis but before IEDC and Initial Spares are as under:-

(₹ in lakh)

Particulars	Capital cost as on COD/tariff COD claimed as per Auditors' Certificates (A)	IDC as per Auditors' Certificates (on accrual basis) (B)	IDC discharged as on COD/tariff COD allowed (C)	Capital Cost allowed as on COD/tariff COD after allowed IDC (D)=(A-B+C)
Asset-A	1334.42	-	-	1334.42
Asset-B	258.27	8.52	0.95	250.70
Asset-D	653.49	9.47	-	644.02
Asset-E	338.74	9.54	5.90	335.10
Asset-F	784.46	26.23	14.52	772.75

17. Similarly, the petitioner, vide Auditors' Certificates dated 26.8.2015, 12.5.2016, 26.5.2015, 12.7.2016 and 12.5.2016 for Asset-A, Asset-B, Asset-D, Asset-E and Asset-F respectively, has submitted details of IEDC and has submitted that the entire IEDC has been discharged as on COD/tariff COD. The allowable IEDC limit is considered as percentage of Hard Cost as submitted in the Abstract Cost Estimate. The IEDC amount claimed is within the percentage of Hard Cost and has been allowed, for the purpose of tariff in this order. However, IEDC for time over-run in respect of Asset-D, Asset-E and Asset-F has been disallowed on a pro-rata basis. Therefore, the details of IEDC claimed and disallowed are as follows:-



(₹ in lakh)

Particulars	IEDC claimed as per Auditors' Certificates	Pro-rata IEDC disallowed as on COD/tariff COD due to time over-run
Asset-A	-	-
Asset-B	6.27	-
Asset-D	7.12	0.79
Asset-E	3.67	0.87
Asset-F	8.95	1.41

Treatment of Initial Spares

18. The petitioner, vide Auditors' Certificates dated 26.8.2015, 12.5.2016, 26.5.2015, 12.7.2016 and 12.5.2016, has claimed Initial Spares amounting to ₹127.86 lakh, ₹10.83 lakh, ₹26.60 lakh, ₹13.72 lakh and ₹26.60 lakh for sub-station in respect of Asset-A, Asset-B, Asset-D, Asset-E and Asset-F respectively. In view of revised capital cost, the allowable initial spares claimed in respect of instant assets has been deducted to arrive at the capital cost and are considered for the purpose of tariff in the instant petition. The details are as under:-

(₹ in lakh)

Particulars	Capital cost claimed as on cut-off date/ 31.3.2014	Initial Spares claimed against capital cost claimed as on cut-off date/ 31.3.2014	Capital cost considered after scrutiny of IDC and IEDC as on cut-off date /31.3.2014	Proportionate claim of Initial spares against the adjusted capital cost as on cut-off date / 31.3.2014	Ceiling Limit as per the 2009 Tariff Regulations	Initial spares works out	Excess Initial spares claimed
Asset-A	2,264.79	127.86	-	-	2.50%	54.79	73.07
Asset-B	439.01	10.83	-	-	2.50%	10.98	-
Asset-D	994.16	26.60	993.37	26.58	2.50%	24.79	1.79
Asset-E	439.91	13.72	439.04	13.69	2.50%	10.91	2.79
Asset-F	997.53	26.60	988.74	26.37	2.50%	24.68	1.69

19. The petitioner has also submitted year wise details of liability discharged pertaining to initial spares vide affidavit dated 18.5.2017 as under:-

(₹ in lakh)

Particulars	Total Initial spares claimed	Initial Spares discharged	
		as on COD/tariff COD	2013-14
Asset-A	127.86	127.86	-
Asset-B	10.83	9.75	1.01
Asset-D	26.60	23.94	-
Asset-E	13.72	12.35	-
Asset-F	26.60	23.94	-

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20. In view of above, the details of initial spares disallowed as on COD/tariff COD, but discharged and considered as add-cap are as under:-

(₹ in lakh)

S. No.	Particulars	Asset				
		A	B	D	E	F
1	Initial spares claimed	127.86	10.83	26.60	13.72	26.60
2	Excess initial spares disallowed (As at para-19 above)	73.07	-	1.79	2.79	1.69
3	Initial spares allowable up to cut-off date	54.79	10.98	24.79	10.91	24.68
4	Initial spares claimed to be discharged up to COD	127.86	9.75	23.94	12.35	23.94
5	Initial spares discharged as on COD (Minimum of 1,3 & 4)	54.79	9.75	23.94	10.91	23.94
6	Undercharged initial spares as on COD	-	1.08*	0.85**	-	0.74**
7	Total disallowed initial spares as on COD (2+6)	73.07	1.08	2.64	2.79	2.43

*₹1.01 lakh has been discharged during 2013-14.

** Not claimed as discharged during 2009-14 period.

Capital cost as on COD/Tariff COD

21. Therefore, capital cost considered for the purpose of tariff in the instant petition, after considering IDC on cash basis, disallowed IDC and IEDC on account of time over-run/un-discharged liability and initial spares (excess claim and un-discharged liability) are detailed as under:-

(₹ in lakh)

Particulars	Capital cost as on COD allowed after considering IDC (para-12)	IEDC disallowed as on COD due to time over-run (para-13)	Initial spares disallowed as on COD (para-16)	Capital cost as on COD considered after allowing IDC, IEDC and initial spares
	(a)	(b)	(c)	(d=a-b-c)
Asset-A	1334.42	-	73.07	1261.35
Asset-B	250.70	-	1.08	249.62
Asset-D	644.02	0.79	2.64	640.59
Asset-E	335.10	0.87	2.79	331.44
Asset-F	772.75	1.41	2.43	768.91

Additional Capital Expenditure and De-capitalisation

22. Regulation 9 (1) of the 2009 Tariff Regulations specifies as under:-

“9. Additional Capitalisation:



1. The capital expenditure incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

- (i) Undischarged liabilities;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, subject to the provisions of regulation 8;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (v) Change in law:

Provided that the details of works included in the original scope of work along with estimates of expenditure, undischarged liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff.”

23. The additional capital expenditure, excluding that of Asset-C, claimed by the petitioner is as discussed at para-7 in this order. Therefore, considering the discharged IDC and liability for initial spares after COD/tariff COD, the details of total add-cap allowed during the tariff period 2009-14 are as under:-

Particulars	(₹ in lakh)							
	Allowed		Allowed on actual discharge				Allowed	
	Actual add-cap		IDC		Initial spares		Total add-cap	
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
Asset-A	929.67	0.70	-	-	-	-	929.67	0.70
Asset-B	-	180.74	7.18	0.39	-	1.01	7.18	182.14
Asset-D	115.02	225.65	4.42	5.05	-	-	119.44	230.70
Asset-E	-	101.17	-	3.64	-	-	-	104.81
Asset-F	-	213.07	-	4.33	-	-	-	217.40

Capital Cost as on 31.3.2014

24. Keeping the above in view, the capital cost allowed as on 31.3.2014 is as under:-

Particulars	Capital cost as on COD considered after allowing IDC, IEDC and Initial Spares	Additional capital expenditure allowed		Capital cost allowed as on 31.3.2014
		2012-13	2013-14	
		Asset-A	1261.35	
Asset-B	249.62	7.18	182.14	438.94
Asset-D	640.59	119.44	230.70	990.73
Asset-E	331.44	-	104.81	436.25
Asset-F	768.91	-	217.40	986.31



Debt: Equity

25. Clause (2) of Regulation 12 of the 2009 Tariff Regulations provides that:-

“12. Debt-Equity Ratio. (1) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff:

(2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.

(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”

26. The petitioner has claimed trued up Annual Fixed Charge based on debt: equity ratio of 70:30 as considered in order dated 10.7.2015 in Petition No. 43/TT/2013. The admitted debt: equity ratio of 70:30 as on COD and 70: 30 for add-cap has been considered for the purpose of truing up of the approved tariff for tariff period 2009-14.

27. The details of the debt: equity considered for the purpose of tariff for 2009-14 tariff period are as under:-

Particulars	Asset-A				Asset-B			
	Cost as on COD		Cost as on 31.3.2014		Cost as on COD		Cost as on 31.3.2014	
	Amount	%	Amount	%	Amount	%	Amount	%
Debt	882.95	70.00	1534.21	70.00	174.73	70.00	307.26	70.00
Equity	378.41	30.00	657.52	30.00	74.89	30.00	131.68	30.00
Total	1261.35	100.00	2191.72	100.00	249.62	100.00	438.94	100.00

(₹ in lakh)

Particulars	Asset-D				Asset-E			
	Cost as on COD		Cost as on 31.3.2014		Cost as on COD		Cost as on 31.3.2014	
	Amount	%	Amount	%	Amount	%	Amount	%
Debt	448.41	70.00	693.51	70.00	232.01	70.00	305.37	70.00
Equity	192.18	30.00	297.22	30.00	99.43	30.00	130.87	30.00
Total	640.59	100.00	990.73	100.00	331.44	100.00	436.25	100.00

(₹ in lakh)

Particulars	Asset-F	
	Cost as on COD	Cost as on 31.3.2014



	Amount	%	Amount	%
Debt	538.24	70.00	690.42	70.00
Equity	230.67	30.00	295.89	30.00
Total	768.91	100.00	986.31	100.00

Return on Equity ("RoE")

28. Clause (3), (4) and (5) of the Regulation 15 of the 2009 Tariff Regulations provide that:-

“(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.

(4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where “t” is the applicable tax rate in accordance with clause (3) of this regulation.

(5) The generating company or the transmission licensee, as the case may be, shall recover the shortfall or refund the excess Annual Fixed Charge on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission:

Provided further that Annual Fixed Charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations.”

29. The petitioner has submitted that MAT rate of 11.330% applicable for 2008-09 was considered in the order dated 10.7.2015. However, for truing up purpose, the computation of RoE for the tariff period 2009-14 has been done on the basis of actual MAT rate applicable during 2009-14. The petitioner has submitted the variation in the MAT rate during 2009-14 as per the Finance Act of the relevant year for the purpose of grossing up of RoE, as under:-

Particulars	MAT Rate	Grossed up RoE (Base rate/(1-t))
2009-10	16.995 %	18.674%
2010-11	19.931 %	19.358%
2011-12	20.008 %	19.377%



2012-13	20.008 %	19.377%
2013-14	20.961 %	19.610%

30. Accordingly, the RoE as trued up is shown in the table as under:-

Particulars	(₹ in lakh)			
	Asset-A		Asset-B	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved vide order dated 10.7.2015	55.43	124.89	8.38	24.44
Allowed after trued up	58.53	128.92	8.59	20.47

Particulars	(₹ in lakh)			
	Asset-D		Asset-E	Asset-F
	2012-13 (pro-rata)	2013-14	2013-14 (pro-rata)	2013-14
Approved vide order dated 10.7.2015	3.06	48.68	20.76	48.62
Allowed after trued up	3.39	51.50	18.82	51.63

Interest on Loan (“IOL”)

31. Regulation 16 of the 2009 Tariff Regulations provides the methodology for working out weighted average rate of interest on loan. The petitioner has claimed interest on loan based on actual interest rates for each year during the 2009-14 tariff period.

32. We have calculated the IOL based on actual interest rate submitted by the petitioner, in accordance with Regulation 16 of the 2009 Tariff Regulations. The details of weighted average rate of interest are attached at Annexure-1 to Annexure-5 to this order and the IOL has been worked out and allowed as under:-

Particulars	(₹ in lakh)			
	Asset-A		Asset-B	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved vide order dated 10.7.2015	67.30	144.00	10.21	28.40
Allowed after trued up	63.43	129.89	9.48	21.07

Particulars	(₹ in lakh)			
	Asset-D		Asset-E	Asset-F
	2012-13 (pro-rata)	2013-14	2013-14 (pro-rata)	2013-14
Approved vide order dated 10.7.2015	3.65	55.39	24.83	57.90
Allowed after trued up	3.67	53.68	19.68	52.65



Depreciation

33. Clause (42) of Regulation 3 of the 2009 Tariff Regulations defines useful life as under:-

“‘**useful life**’ in relation to a unit of a generating station and transmission system from the COD shall mean the following, namely:-

.....	
(c) AC and DC sub-station	25 years
(d) Hydro generating station	35 years
(e) Transmission line	35 years”

34. Further, Clause (4) of Regulation 17 of the 2009 Tariff Regulations provide as under:-

“17. **Depreciation** (1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.

(2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site;

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.

(3) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the assets of the generating station and transmission system:

Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.

(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.

(6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.”



35. In order dated 10.7.2015, depreciation was worked out in accordance with Regulation 17 of the 2009 Tariff Regulations. As per Regulations 3(42) and 17(4) of the 2009 Tariff Regulations, useful life for transmission line and sub-station is 35 years and 25 years, respectively. The actual COD of the instant assets is during 2012-13 and 2013-14. Hence, the instant assets will complete their useful life beyond 31.3.2014. Accordingly, the depreciation for the tariff period 2009-14 has been worked out in accordance with Regulation 17 of the 2009 Tariff Regulations based on admitted capital expenditure and additional capitalisation as under:-

Particulars	(₹ in lakh)			
	Asset-A		Asset-B	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved vide order dated 10.7.2015	55.81	125.75	8.44	24.60
Allowed after trued up	53.17	115.70	7.80	18.37

Particulars	(₹ in lakh)			
	Asset-D		Asset-E	Asset-F
	2012-13 (pro-rata)	2013-14	2013-14 (pro-rata)	2013-14
Approved vide order dated 10.7.2015	3.08	49.01	20.90	48.95
Allowed after trued up	3.08	46.22	16.89	46.34

Operation & Maintenance Expenses (“O&M Expenses”)

36. The petitioner has not claimed O&M Expenses for the instant assets as these are Spare ICTs at various sub-stations of Eastern Region. Accordingly, the O&M Expenses were not allowed vide order dated 10.7.2015 in Petition No. 43/TT/2015 and are not allowed now also.

Interest on Working Capital (“IWC”)

37. Sub-clause (c) of clause (1) of Regulation 18 of the 2009 Tariff Regulations provides the components of the working capital for the transmission system and clause (3) of Regulation 18 of the 2009 Tariff Regulations provides for the rate of interest of working capital.



38. The petitioner has submitted that the rate of interest on working capital has been considered as 13.50% and 13.20% as per clause (3) of Regulation 18 of the 2009 Tariff Regulations and the components of working capital are also considered in accordance with sub-clause (c) of clause (1) of Regulation 18 of the 2009 Regulations.

39. In accordance with clause (3) of Regulation 18 of the 2009 Tariff Regulations, as amended, rate of interest on working capital shall be on normative basis and in case of transmission assets declared under commercial operation after 1.4.2009, shall be equal to State Bank of India Base Rate as applicable on 1st April of the year of commercial operation plus 350 bps. State Bank of India base interest rate on 1.4.2012 and 1.4.2013 was 10.00% and 9.70% respectively. In order dated 10.7.2015 in Petition No. 43/TT/2013, 13.50% and 13.20% rate of interest on working capital applicable for assets commissioned during 2012-13 and 2013-14 respectively was allowed in accordance with the 2009 Tariff Regulations. Therefore, interest rate of 13.50% and 13.20% has been considered to work out the interest on working capital for assets commissioned during 2012-13 and 2013-14 respectively, in the instant case.

40. The IWC trued up is as under:-

Particulars	(₹ in lakh)			
	Asset-A		Asset-B	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Maintenance Spares	-	-	-	-
O & M Expenses	-	-	-	-
Receivables	51.19	63.86	7.56	10.21
Total	51.19	63.86	7.56	10.21
Rate of Interest	13.50%	13.50%	13.50%	13.50%
Interest	4.03	8.62	0.60	1.38



(₹ in lakh)

Particulars	Asset-D		Asset-E	Asset-F
	2012-13 (pro-rata)	2013-14	2013-14 (pro-rata)	2013-14
Maintenance Spares	-	-	-	-
O & M Expenses	-	-	-	-
Receivables	20.75	25.81	11.33	25.67
Total	20.75	25.81	11.33	25.67
Rate of Interest	13.50%	13.50%	13.20%	13.20%
Interest	0.23	3.48	1.25	3.39

41. The summary of IWC allowed and trued up are as shown in the table as under:-

(₹ in lakh)

Particulars	Asset-A		Asset-B	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved vide order dated 10.7.2015	4.11	9.08	0.62	1.78
Allowed after true up	4.03	8.62	0.60	1.38

(₹ in lakh)

Particulars	Asset-D		Asset-E	Asset-F
	2012-13 (pro-rata)	2013-14	2013-14 (pro-rata)	2013-14
Approved vide order dated 10.7.2015	0.23	3.52	1.50	3.50
Allowed after true up	0.23	3.48	1.25	3.39

Annual Fixed Charges for 2009-14 Tariff Period

42. The trued up annual fixed charges for the instant transmission assets for the tariff period 2009-14 is as under:-

(₹ in lakh)

Particulars	Asset-A		Asset-B	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Depreciation	53.17	115.70	7.80	18.37
Interest on Loan	63.43	129.89	9.48	21.07
Return on Equity	58.53	128.92	8.59	20.47
Interest on Working Capital	4.03	8.62	0.60	1.38
O & M Expenses	-	-	-	-
Total	179.16	383.14	26.46	61.29

(₹ in lakh)

Particulars	Asset-D		Asset-E	Asset-F
	2012-13	2013-14	2013-14	2013-14



	(pro-rata)		(pro-rata)	
Depreciation	3.08	46.22	16.89	46.34
Interest on Loan	3.67	53.68	19.68	52.65
Return on Equity	3.39	51.50	18.82	51.63
Interest on Working Capital	0.23	3.48	1.25	3.39
O & M Expenses	-	-	-	-
Total	10.37	154.89	56.64	154.00

Determination of Annual Transmission Charges for 2014-19

43. The true-up tariff for the instant transmission system up to 2009-14 tariff period has been granted based on the actual COD/tariff COD of individual assets irrespective of the project as whole is completed or not. This leads to granting of multiple tariffs for the assets covered under the single project/transmission system. The Commission, vide Regulation 6 of the 2014 Tariff Regulations has brought in the concept of a single consolidated petition to be submitted by a petitioner where if all the elements of a transmission system have been declared under commercial operation prior to 1.4.2014, then a single tariff can be granted for all the assets covered under such a single project/transmission system. However, to determine a single transmission tariff for different assets after combining them, as per the 2014 Tariff Regulations, the concept of effective date of commercial operation and weighted average life has also been introduced in Regulation 27 (Depreciation) of the 2014 Tariff Regulations. The relevant portions of Regulation 6 and Regulation 27 of the 2014 Tariff Regulations are as follows:-

“6. Tariff determination

(1) Tariff in respect of a generating station may be determined for the whole of the generating station or stage or generating unit or block thereof, and tariff in respect of a transmission system may be determined for the whole of the transmission system or transmission line or sub-station or communication system forming part of transmission system:

Provided that:

(i) where all the generating units of a stage of a generating station or all elements of a transmission system have been declared under commercial operation prior to



1.4.2014, the generating company or the transmission licensee, as the case may be, shall file consolidated petition in respect of the entire generating station or transmission system for the purpose of determination of tariff for the period 2014-15 to 2018-19:

Xxx
Xxx”

“27. Depreciation:

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

Xxx
Xxx”

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-II** to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

Xxx
Xxx”

44. The instant petition relates to the assets under provision of spare ICTs and Reactors for Eastern, Northern, Southern and Western Region in Eastern Region. The final tariff of each of the assets was approved separately vide order dated 10.7.2015 in Petition No. 43/TT/2013. Hence, the tariff for Asset-A, Asset-B, Asset-D, Asset-E and Asset-F for period 2009-14 has been trued-up separately in



the preceding paras. The petitioner has submitted that there are certain other assets, over and above the instant assets which, comprise in the same scope of work. However, the petitioner has submitted the tariff forms, combining the instant 6 assets claimed into a single asset. However, tariff for Asset-C has not been allowed. Accordingly, single tariff for the five combined assets i.e. excluding Asset-C has been worked out for the tariff period 2014-19 with the Effective COD of instant assets. Single tariff for all the other assets comprising in the same scope of work of the transmission system shall be worked out for the complete project as a whole at the time of truing-up for 2014-19 tariff period. For the purpose of calculation of single tariff, the Effective COD and Weighted Average life of the project comprising of the instant five assets has been computed as discussed in the following paragraphs.

Effective Date of Commercial Operation (E-COD)

45. The Effective Date of Commercial Operation (E-COD) for the project as a whole has been worked out based on the admitted capital cost of individual assets as on 31.3.2014 and the actual COD of individual assets. Accordingly, the Effective Date of Commercial Operation (E-COD) for the instant project as a whole has been worked out as 4.11.1995 as under:-

(₹ in lakh)

Particulars	Actual COD	Admitted capital cost as on 31.3.2014	Weight of the cost	No. of days from last COD	Weighted days	Effective COD (Latest COD-Weighted days)
Asset-A	1.9.2012 (tariff COD)	2191.72	43.45%	273	118.63	13.12.2012
Asset-B	1.10.2012	438.94	8.70%	243	21.15	
Asset-D	1.3.2013	990.73	19.64%	92	18.07	
Asset-E	1.6.2013	436.25	8.65%	-	-	
Asset-F	1.4.2013	986.31	19.55%	61	11.93	
Total		5043.95	100.00%		169.77	



Thus, the E-COD has been used to determine the lapsed life of the project as whole, which works out as 1 year as on 1.4.2014. (i.e. the number of completed years as on 1.4.2014 from E-COD).

Weighted Average Life (WAL)

46. The project as a whole has multiple elements (i.e. Land, Building, Transmission line, Substation and PLCC) and each element may have different span of life. Therefore, in the 2014 Tariff Regulations, the concept of Weighted Average Life (WAL) has been introduced which has been used as the useful life of the project as whole. The Weighted Average Life (WAL) has been determined based on the admitted capital cost of individual elements as on 31.3.2014 and their respective life as stipulated in the 2014 Tariff Regulations. The element wise life as it was defined in Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. The life as defined in the 2014 Tariff Regulations has been considered for determination of WAL. Accordingly, the Weighted Average Life of the project as whole has been worked out as 25 years as under:-

(₹ in lakh)

Determination of Weighted Average Life			
Particulars	Admitted capital cost as on 31.3.2014 for combined assets	Life as per the 2014 Tariff Regulations	Weight
	(a)	(b)	(a) x (b)
Freehold Land	-	-	-
Leasehold Land	-	-	-
Building & Other Civil Works	-	-	-
Transmission Line	-	-	-
Sub-Station Equipments	5043.95	25	126098.75
PLCC	-	-	-
Total	5043.95		126098.75
Weighted average life=Total weight/capital cost of project	25 Years		



47. Further, it is assumed that, the Weighted average life of the instant combined assets as whole as on 1.4.2014 as determined above is applicable prospectively (i.e. for 2014-19 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required. Accordingly, the WAL has been used to determine the remaining useful life as on 31.3.2014 as 24 years.

48. The petitioner has claimed AFC for the six combined assets as under:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	300.14	317.12	326.46	329.28	329.28
Interest on Loan	319.76	311.85	293.89	267.30	237.29
Return on Equity	334.42	353.33	363.74	366.89	366.89
Interest on Working Capital	21.97	22.61	22.65	22.18	21.49
O&M Expenses	-	-	-	-	-
Total	976.29	1004.91	1006.74	985.65	954.95

49. Similarly, the petitioner has submitted details in support of its claim for interest on working capital for six combined assets as under:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	-	-	-	-	-
O & M Expenses	-	-	-	-	-
Receivables	162.72	167.49	167.79	164.28	159.16
Total	162.72	167.49	167.79	164.28	159.16
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	21.97	22.61	22.65	22.18	21.49

Capital Cost

50. Clause (1) and (3) of Regulation 9 of the 2014 Tariff Regulations provides as under:-

“(1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects.”

(2) The Capital Cost of a new project shall include the following:

(a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;



(b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;

(c) Increase in cost in contract packages as approved by the Commission;

(d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;

(e) capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;

(f) expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;

(g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and

(h) adjustment of any revenue earned by the transmission licensee by using the assets before COD.

“(3) The Capital cost of an existing project shall include the following:

(a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;

(b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and

(c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15.”

51. The element wise capital cost (Land, Building, Transmission line, Sub-station and PLCC) as admitted as on 31.3.2014 for the combined assets are clubbed together and the combined cost has been considered as capital cost of as a whole as on 1.4.2014. Thus, ₹5043.95 lakh has been considered as the admitted capital cost of the project as on 1.4.2014 as under:-

(₹ in lakh)	
Particulars	Combined cost for the project as a whole as on 1.4.2014
Freehold Land	-
Leasehold Land	-
Building & Other Civil Works	-
Transmission Line	-



Sub-Station Equipments	5043.95
PLCC	-
Total	5043.95

Additional Capital Expenditure

52. The petitioner has submitted projected any additional capital expenditure during the tariff period 2014-19, vide Auditors' Certificates dated 26.8.2015, 12.5.2016, 26.5.2015, 12.7.2016 and 12.5.2016 for Asset-A, Asset-B, Asset-D, Asset-E and Asset-F respectively, which has been considered as capital cost as on 31.3.2019, as under:-

Particulars	Projected Expenditure					Estimated completion cost as on 31.3.2019
	2014-15	2015-16	2016-17	2017-18	2018-19	
Combined 5 assets	224.99	162.94	106.92	-	-	494.85

(₹ in lakh)

Treatment of IDC, IEDC and Initial Spares

53. Un-discharged IDC, IEDC and Initial Spares during 2009-14 period as discussed earlier, claimed to be discharged during 2014-19 period shall be considered at the time of trueing up.

Debt: Equity Ratio

54. Clause 3 of Regulation 19 of the 2014 Tariff Regulations specifies as follows:-

“(3) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2014, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered.”

55. The debt: equity ratio of 70: 30 was admitted after true-up for the tariff period ending 31.3.2014 for instant assets. The same debt: equity ratio i.e. 70: 30 of combined asset has been considered for add-cap during 2014-19 as well. The



details of the debt: equity as on 1.4.2014 and 31.3.2019 considered for the purpose of tariff for the 2014-19 tariff period are as under:-

(₹ in lakh)

Particulars	Cost as on 1.4.2014		Cost as on 31.3.2014	
	Amount	%	Amount	%
Debt	3530.77	70.00	3877.17	70.00
Equity	1513.18	30.00	1661.64	30.00
Total	5043.95	100.00	5538.80	100.00

Interest on Loan (“IOL”)

56. Regulation 26 of the 2014 Tariff Regulations with regard to Interest on Loan specifies as under:-

“(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalisation of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of decapitalisation of such asset.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.”



57. The petitioner has submitted combined actual loan portfolios as on 31.3.2014 in respect of Asset-A, Asset-B, Asset-D, Asset-E and Asset-F and the same has been considered as actual loan portfolio of the combined asset as on 1.4.2014. Accordingly, weighted average rate of interest has been worked out on the basis of the actual loan portfolio of the combined asset, which is subject to truing-up.

58. The interest on loan has been worked out in accordance with Regulation 26 of the 2014 Regulations by considering the actual weighted average rate of interest during 2014-15. The details of weighted average rate of interest are attached at Annexure-6 to this order and the IOL has been worked out and allowed as under:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	3530.77	3688.26	3802.32	3877.17	3877.17
Cumulative Repayment upto Previous Year	307.57	579.83	862.33	1151.96	1444.41
Net Loan-Opening	3223.20	3108.43	2939.99	2725.21	2432.76
Addition due to Additional Capitalisation	157.49	114.06	74.84	-	-
Repayment during the year	272.26	282.50	289.63	292.45	292.45
Net Loan-Closing	3108.43	2939.99	2725.21	2432.76	2140.31
Average Loan	3165.82	3024.21	2832.60	2578.98	2286.53
Weighted Average Rate of Interest on Loan	9.0821%	9.0725%	9.0719%	9.0625%	9.0556%
Interest	287.52	274.37	256.97	233.72	207.06

59. The petitioner has prayed that it be allowed to bill and adjust impact on interest on loan due to change in interest rate on account of floating rate of interest applicable during 2014-19 period, if any, from the respondents. We would like to clarify that the interest on loans has been calculated on the basis of rate prevailing as on the date of commercial operation. Any change in rate of interest subsequent to the date of commercial operation will be considered at the



time of truing-up.

Return on Equity (“ROE”)

60. Clause (1) and (2) of Regulation 24 and Clause (1) and (2) of Regulation 25 of the 2014 Tariff Regulations specify as follows:-

“24. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

Provided that:

(i) in case of projects commissioned on or after 1st April, 2014, an additional return of **0.50 %** shall be allowed, if such projects are completed within the timeline specified in **Appendix-I**:

(ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:

(iii) additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:

(iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:

(v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:

(vi) additional RoE shall not be admissible for transmission line having length of less than 50 kilometers.”

“25. Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax income on other income



stream (i.e., income of non generation or non transmission business, as the case may be) shall not be considered for the calculation of “effective tax rate”.

“(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where “t” is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.”

61. The petitioner has computed ROE at the rate of 19.610% after grossing up the ROE with MAT rate of 20.961% as per the above Regulations. The petitioner has submitted that the grossed up ROE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial year. Any under-recovery or over-recovery of grossed up ROE after truing up shall be recovered or refunded to the beneficiaries on year to year basis.

62. The petitioner has further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of the tax including interest received from IT authorities shall be recoverable/adjustable after completion of income tax assessment of the financial year.

63. We have considered the submissions made by the petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is



paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the ROE determined is as given under:-

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	1513.18	1580.68	1629.56	1661.64	1661.64
Addition due to Additional Capitalisation	67.50	48.88	32.08	-	-
Closing Equity	1580.68	1629.56	1661.64	1661.64	1661.64
Average Equity	1546.93	1605.12	1645.60	1661.64	1661.64
Return on Equity (Base Rate) (%)	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for the year (%)	20.961%	20.961%	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre Tax) (%)	19.610%	19.610%	19.610%	19.610%	19.610%
Return on Equity (Pre Tax)	303.35	314.76	322.70	325.85	325.85

Depreciation

64. Regulation 27 of the 2014 Tariff Regulations with regard to depreciation specifies as follows:-

"27. Depreciation:

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station



or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis:

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that in case of hydro generating station, the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the Plant:

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

Provided also that any depreciation disallowed on account of lower availability of the generating station or generating unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life and the extended life.

(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-II** to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets.”

66. The Capital Cost, Effective Date of Commercial Operation and Weighted Average Life (WAL) for the project as a whole as determined in preceding paragraphs have been considered for determination of depreciation during the tariff period 2014-19. Accordingly, 12 years from the effective date of commercial operation shall be completed beyond 2014-19. We have considered the submission made by the petitioner with reference to depreciation. Depreciation is



allowed as provided under Regulation 27 of the 2014 Tariff Regulations. The details of the depreciation allowed are given hereunder:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross block	5043.95	5268.94	5431.88	5538.80	5538.80
Additions during the year due to projected additional capitalization	224.99	162.94	106.92	-	-
Closing Gross block	5268.94	5431.88	5538.80	5538.80	5538.80
Average gross block	5156.45	5350.41	5485.34	5538.80	5538.80
Rate of Depreciation (%)	5.2800%	5.2800%	5.2800%	5.2800%	5.2800%
Depreciable Value	4640.80	4815.37	4936.81	4984.92	4984.92
Remaining Depreciable Value	4333.23	4235.54	4074.47	3832.96	3540.51
Depreciation	272.26	282.50	289.63	292.45	292.45

Operation & Maintenance Expenses (“O&M Expenses”)

67. As discussed earlier, the petitioner has not claimed O&M Expenses for the instant assets as these are Spare ICTs at various sub-stations of Eastern Region. Accordingly, the O&M Expenses are not allowed.

68. However, the petitioner has submitted that O&M Expenses for the tariff period 2014-19 have been arrived on the basis of normalized actual O&M Expenses during the period 2008-13. The petitioner has further submitted that the wage revision of the employees of the petitioner Company is due during 2014-19 and actual impact of wage hike, which will be effective at a future date, has not been factored in fixation of the normative O&M rate specified for the tariff period 2014-19. The petitioner has prayed to be allowed to approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase. The O&M Expenses have not been claimed and accordingly have not been allowed. Therefore, the petitioner’s prayer is infructuous.



Interest on Working Capital (“IWC”)

69. Clause 1 (c) and 3 of Regulation 28 and Clause 5 of Regulation 3 of the 2014

Tariff Regulations specify as follows:-

“28. Interest on Working Capital: (1) The working capital shall cover:

(a)-----

(c) Hydro generating station including pumped storage hydro electric generating station and transmission system including communication system:

(i) Receivables equivalent to two months of fixed cost;

(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and

(iii) Operation and maintenance expenses for one month”

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later”

“(5) ‘Bank Rate’ means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;”

70. The interest on working capital is worked out in accordance with Regulation 28 of the 2014 Tariff Regulations. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points). The interest on working capital as determined is as under:-

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	-	-	-	-	-
O & M expenses	-	-	-	-	-
Receivables	147.17	148.62	148.22	145.27	140.73
Total	147.17	148.62	148.22	145.27	140.73
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	19.87	20.06	20.01	19.61	19.00

Annual Transmission Charges

71. The Annual Transmission Charges allowed for the combined transmission asset is as follows:-



(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	272.26	282.50	289.63	292.45	292.45
Interest on Loan	287.52	274.37	256.97	233.72	207.06
Return on Equity	303.35	314.76	322.70	325.85	325.85
Interest on Working Capital	19.87	20.06	20.01	19.61	19.00
O&M Expenses	-	-	-	-	-
Total	883.00	891.70	889.31	871.63	844.35

72. The petitioner has submitted that the claim for transmission charges and other charges is exclusive of incentive, late payment surcharge, FERV, any statutory taxes, levies, duties, cess, or any other kind of impositions etc. The same, if imposed shall be borne and additionally paid by the respondents. We have considered the submissions of the petitioner. The petitioner is entitled for late payment surcharge and FERV as per Regulations 45 and 50 respectively of the 2014 Tariff Regulations.

Filing Fee and Publication Expenses

73. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 52 of the 2014 Tariff Regulations. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with clause (1) of Regulation 52 of the 2014 Tariff Regulations.

Licence Fee and RLDC Fees and Charges

74. The petitioner has requested to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a), respectively, of Regulation 52 of the 2014 Tariff Regulations.



Deferred Tax Liability

75. The petitioner has sought recovery of deferred tax liability before 1.4.2009 as per Regulation 39 of the 2009 Tariff Regulations and Regulation 49 of the 2014 Tariff Regulations from the beneficiaries or long term consumers/ DICs as and when materialized. The instant assets were commissioned during 2012-13 and 2013-14. Therefore, the prayer of the petitioner is infructuous.

Sharing of Transmission Charges

76. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time, as provided in Regulation 43 of the 2014 Tariff Regulations.

77. This order disposes of Petition No. 37/TT/2017.

sd/-
(M.K. Iyer)
Member

sd/-
(A.S. Bakshi)
Member

sd/-
(A.K. Singhal)
Member

sd/-
(Gireesh B. Pradhan)
Chairperson



(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN			
	Details of Loan	2012-13	2013-14
1	Bond XLII (Add Cap for 2012-13)		
	Gross loan opening	0.00	580.57
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	0.00	580.57
	Additions during the year	580.57	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	580.57	580.57
	Average Loan	290.29	580.57
	Rate of Interest	8.80%	8.80%
	Interest	25.55	51.09
	Rep Schedule	Bullet payment on 13.03.2023	
2	Bond XL		
	Gross loan opening	408.67	408.67
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	408.67	408.67
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	408.67	408.67
	Average Loan	408.67	408.67
	Rate of Interest	9.30%	9.30%
	Interest	38.01	38.01
	Rep Schedule	12 annual instalments from 28.06.2016	
3	Bond XL (Add Cap for 2012-13)		
	Gross loan opening	0.00	70.20
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	0.00	70.20
	Additions during the year	70.20	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	70.20	70.20
	Average Loan	35.10	70.20
	Rate of Interest	9.30%	9.30%
	Interest	3.26	6.53
	Rep Schedule	12 annual instalments from 28.06.2016	
4	Bond XLV (Add Cap for 2013-14)		
	Gross loan opening	0.00	0.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	0.00	0.00
	Additions during the year	0.00	0.49
	Repayment during the year	0.00	0.00
	Net Loan-Closing	0.00	0.49
	Average Loan	0.00	0.25
	Rate of Interest	9.65%	9.65%
	Interest	0.00	0.02



	Rep Schedule	112 annual instalments from 28.02.2018	
5	Bond XXXVI		
	Gross loan opening	489.68	489.68
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	489.68	489.68
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	489.68	489.68
	Average Loan	489.68	489.68
	Rate of Interest	9.35%	9.35%
	Interest	45.79	45.79
	Rep Schedule	15 annual instalments from 29.08.2016.	
	Total Loan		
	Gross loan opening	898.35	1549.12
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	898.35	1549.12
	Additions during the year	650.77	0.49
	Repayment during the year	0.00	0.00
	Net Loan-Closing	1549.12	1549.61
	Average Loan	1223.74	1549.37
	Rate of Interest	9.2014%	9.1285%
	Interest	112.60	141.43



Annexure-2

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN			
	Details of Loan	2012-13	2013-14
1	Bond XXXVIII		
	Gross loan opening	137.53	137.53
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	137.53	137.53
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	137.53	137.53
	Average Loan	137.53	137.53
	Rate of Interest	9.25%	9.25%
	Interest	12.72	12.72
	Rep Schedule	Bullet Payment as on 09.03.2027	
2	Bond XL(Add Cap for 2012-13)		
	Gross loan opening	0.00	5.03
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	0.00	5.03
	Additions during the year	5.03	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	5.03	5.03
	Average Loan	2.52	5.03
	Rate of Interest	9.30%	9.30%
	Interest	0.23	0.47
	Rep Schedule	12 annual instalments from 28.06.2016	
3	Bond XL (Add Cap for 2013-14)		
	Gross loan opening	0.00	0.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	0.00	0.00
	Additions during the year	0.00	0.27
	Repayment during the year	0.00	0.00
	Net Loan-Closing	0.00	0.27
	Average Loan	0.00	0.14
	Rate of Interest	9.30%	9.30%
	Interest	0.00	0.01
	Rep Schedule	12 annual instalments from 28.06.2016	
4	Bond XL		
	Gross loan opening	20.96	20.96
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	20.96	20.96
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	20.96	20.96
	Average Loan	20.96	20.96
	Rate of Interest	9.30%	9.30%
	Interest	1.95	1.95



	Rep Schedule	12 annual instalments from 28.06.2016	
5	Bond XLIII (Add Cap 2013-14)		
	Gross loan opening	0.00	0.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	0.00	0.00
	Additions during the year	0.00	37.81
	Repayment during the year	0.00	0.00
	Net Loan-Closing	0.00	37.81
	Average Loan	0.00	18.91
	Rate of Interest	7.93%	7.93%
	Interest	0.00	1.50
	Rep Schedule	12 annual instalments from 20.05.2017	
6	Bond XLV (Add Cap for 2013-14)		
	Gross loan opening	0.00	0.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	0.00	0.00
	Additions during the year	0.00	85.07
	Repayment during the year	0.00	0.00
	Net Loan-Closing	0.00	85.07
	Average Loan	0.00	42.54
	Rate of Interest	9.65%	9.65%
	Interest	0.00	4.10
	Rep Schedule	12 annual instalments from 28.02.2018	
7	SBI (21.03.2012)		
	Gross loan opening	0.00	0.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	0.00	0.00
	Additions during the year	0.00	3.64
	Repayment during the year	0.00	0.00
	Net Loan-Closing	0.00	3.64
	Average Loan	0.00	1.82
	Rate of Interest	10.29%	10.29%
	Interest	0.00	0.19
	Rep Schedule	22 annual instalments from 31.08.2016	
8	SBI (21.03.2012)		
	Gross loan opening	17.00	17.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	17.00	17.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	17.00	17.00
	Average Loan	17.00	17.00
	Rate of Interest	10.48%	10.29%
	Interest	1.78	1.75
	Rep Schedule	22 annual instalments from 31.08.2016	



	Total Loan		
	Gross loan opening	175.49	180.52
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	175.49	180.52
	Additions during the year	5.03	126.79
	Repayment during the year	0.00	0.00
	Net Loan-Closing	180.52	307.31
	Average Loan	178.01	243.92
	Rate of Interest	9.3741%	9.3030%
	Interest	16.69	22.69



Annexure-3

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN			
	Details of Loan	2012-13	2013-14
1	Bond XXXVIII		
	Gross loan opening	48.90	48.90
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	48.90	48.90
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	48.90	48.90
	Average Loan	48.90	48.90
	Rate of Interest	9.25%	9.25%
	Interest	4.52	4.52
	Rep Schedule	Bullet Payment as on 09.03.2027	
2	BOND XLI		
	Gross loan opening	30.00	30.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	30.00	30.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	30.00	30.00
	Average Loan	30.00	30.00
	Rate of Interest	8.85%	8.85%
	Interest	2.66	2.66
	Rep Schedule	12 Annual instalments from 19.10.2016	
3	Bond XLII (For add cap)		
	Gross loan opening	0.00	80.51
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	0.00	80.51
	Additions during the year	80.51	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	80.51	80.51
	Average Loan	40.26	80.51
	Rate of Interest	8.80%	8.80%
	Interest	3.54	7.08
	Rep Schedule	Bullet Payment as on 13.3.2013	
4	Bond XLII (For add cap)		
	Gross loan opening	0.00	3.10
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	0.00	3.10
	Additions during the year	3.10	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	3.10	3.10
	Average Loan	1.55	3.10
	Rate of Interest	8.80%	8.80%



	Interest	0.14	0.27
	Rep Schedule	Bullet Payment as on 13.3.2013	
5	Bond XLII (For add cap)		
	Gross loan opening	0.00	0.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	0.00	0.00
	Additions during the year	0.00	3.53
	Repayment during the year	0.00	0.00
	Net Loan-Closing	0.00	3.53
	Average Loan	0.00	1.77
	Rate of Interest	8.80%	8.80%
	Interest	0.00	0.16
	Rep Schedule	Bullet Payment as on 13.3.2013	
6	Bond XLII (For add cap)		
	Gross loan opening	220.85	220.85
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	220.85	220.85
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	220.85	220.85
	Average Loan	220.85	220.85
	Rate of Interest	8.80%	8.80%
	Interest	19.43	19.43
	Rep Schedule	Bullet Payment as on 13.3.2013	
7	SBI (21.03.2012) (For add cap)		
	Gross loan opening	0.00	0.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	0.00	0.00
	Additions during the year	0.00	157.96
	Repayment during the year	0.00	0.00
	Net Loan-Closing	0.00	157.96
	Average Loan	0.00	78.98
	Rate of Interest	10.29%	10.29%
	Interest	0.00	8.13
	Rep Schedule	22 annual instalments from 31.08.2016	
8	BOND XL		
	Gross loan opening	150.51	150.51
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	150.51	150.51
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	150.51	150.51
	Average Loan	150.51	150.51
	Rate of Interest	9.30%	9.30%
	Interest	14.00	14.00
	Rep Schedule	12 Annual instalments from 28.06.2016	



	Total Loan		
	Gross loan opening	450.26	533.87
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	450.26	533.87
	Additions during the year	83.61	161.49
	Repayment during the year	0.00	0.00
	Net Loan-Closing	533.87	695.36
	Average Loan	492.07	614.62
	Weighted Average Rate of Interest	9.0007%	9.1522%
	Interest	44.29	56.25



Annexure-4

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN		
	Details of Loan	2013-14
1	Bond XXXVIII	
	Gross loan opening	63.73
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	63.73
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	63.73
	Average Loan	63.73
	Rate of Interest	9.25%
	Interest	5.90
	Rep Schedule	Bullet Payment as on 09.03.2027
2	Bond XL	
	Gross loan opening	81.76
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	81.76
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	81.76
	Average Loan	81.76
	Rate of Interest	9.30%
	Interest	7.60
	Rep Schedule	12 annual instalments from 28.06.2016
3	Bond XLI	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	26.31
	Repayment during the year	0.00
	Net Loan-Closing	26.31
	Average Loan	13.16
	Rate of Interest	8.85%
	Interest	1.16
	Rep Schedule	12 annual instalments from 19.10.2016
4	Bond XLI (Add Cap)	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	2.55
	Repayment during the year	0.00
	Net Loan-Closing	2.55
	Average Loan	1.28
	Rate of Interest	8.85%



	Interest	0.11
	Rep Schedule	12 annual instalments from 19.10.2016
5	Bond XLI	
	Gross loan opening	87.70
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	87.70
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	87.70
	Average Loan	87.70
	Rate of Interest	8.85%
	Interest	7.76
	Rep Schedule	12 annual instalments from 19.10.2016
6	Bond XLII (Add Cap)	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	44.51
	Repayment during the year	0.00
	Net Loan-Closing	44.51
	Average Loan	22.26
	Rate of Interest	8.80%
	Interest	1.96
	Rep Schedule	Bullet Payment as on 13.03.2023
	Total Loan	
	Gross loan opening	233.19
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	233.19
	Additions during the year	73.37
	Repayment during the year	0.00
	Net Loan-Closing	306.56
	Average Loan	269.88
	Rate of Interest	9.0767%
	Interest	24.50



Annexure-5

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN		
	Details of Loan	2013-14
1	Bond XXXVIII	
	Gross loan opening	156.93
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	156.93
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	156.93
	Average Loan	156.93
	Rate of Interest	9.25%
	Interest	14.52
	Rep Schedule	Bullet Payment as on 09.03.2027
2	Bond XL	
	Gross loan opening	101.43
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	101.43
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	101.43
	Average Loan	101.43
	Rate of Interest	9.30%
	Interest	9.43
	Rep Schedule	12 annual instalments from 28.06.2016
3	Bond XLI	
	Gross loan opening	117.23
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	117.23
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	117.23
	Average Loan	117.23
	Rate of Interest	8.85%
	Interest	10.37
	Rep Schedule	12 annual instalments from 19.10.2016
4	Bond XLII (Add Cap)	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	6.69
	Repayment during the year	0.00
	Net Loan-Closing	6.69
	Average Loan	3.35
	Rate of Interest	8.80%



	Interest	0.29
	Rep Schedule	Bullet Payment as on 13.03.2023
5	Bond XLII (Add cap)	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	8.20
	Repayment during the year	0.00
	Net Loan-Closing	8.20
	Average Loan	4.10
	Rate of Interest	8.80%
	Interest	0.36
	Rep Schedule	Bullet Payment as on 13.03.2023
6	Bond XLII	
	Gross loan opening	162.91
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	162.91
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	162.91
	Average Loan	162.91
	Rate of Interest	8.80%
	Interest	14.34
	Rep Schedule	Bullet Payment as on 13.03.2023
7	Bond XLIII (Add Cap)	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	142.46
	Repayment during the year	0.00
	Net Loan-Closing	142.46
	Average Loan	71.23
	Rate of Interest	7.93%
	Interest	5.65
	Rep Schedule	12 annual instalments from 20.05.2017
	Total Loan	
	Gross loan opening	538.50
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	538.50
	Additions during the year	157.35
	Repayment during the year	0.00
	Net Loan-Closing	695.85
	Average Loan	617.18
	Rate of Interest	8.9057%
	Interest	54.96



Annexure-6

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN						
	Details of Loan	2014-15	2015-16	2016-17	2017-18	2018-19
1	Bond-XXXVI					
	Gross loan opening	489.69	489.69	489.69	489.69	489.69
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	32.65	65.29
	Net Loan-Opening	489.69	489.69	489.69	457.04	424.40
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	32.65	32.65	32.65
	Net Loan-Closing	489.69	489.69	457.04	424.40	391.75
	Average Loan	489.69	489.69	473.37	440.72	408.08
	Rate of Interest	9.35%	9.35%	9.35%	9.35%	9.35%
	Interest	45.79	45.79	44.26	41.21	38.16
	Rep Schedule	15 annual instalments from 29.08.2016				
2	Bond-XXXVIII					
	Gross loan opening	407.09	407.09	407.09	407.09	407.09
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	407.09	407.09	407.09	407.09	407.09
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	407.09	407.09	407.09	407.09	407.09
	Average Loan	407.09	407.09	407.09	407.09	407.09
	Rate of Interest	9.25%	9.25%	9.25%	9.25%	9.25%
	Interest	37.66	37.66	37.66	37.66	37.66
	Rep Schedule	Bullet Payment as on 09.03.2027				
3	Bond-XL					
	Gross loan opening	838.83	838.83	838.83	838.83	838.83
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	69.90	139.81
	Net Loan-Opening	838.83	838.83	838.83	768.93	699.03
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	69.90	69.90	69.90
	Net Loan-Closing	838.83	838.83	768.93	699.03	629.12
	Average Loan	838.83	838.83	803.88	733.98	664.07
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	78.01	78.01	74.76	68.26	61.76
	Rep Schedule	12 annual instalments from 28.06.2016				
4	Bond-XLI					
	Gross loan opening	263.25	263.25	263.25	263.25	263.25
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	21.94	43.88
	Net Loan-Opening	263.25	263.25	263.25	241.31	219.38
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	21.94	21.94	21.94
	Net Loan-Closing	263.25	263.25	241.31	219.38	197.44
	Average Loan	263.25	263.25	252.28	230.34	208.41
	Rate of Interest	8.85%	8.85%	8.85%	8.85%	8.85%



	Interest	23.30	23.30	22.33	20.39	18.44
	Rep Schedule	12 annual instalments from 19.10.2016				
4	Bond-XLII (Add Cap)					
	Gross loan opening	0.00	1.36	1.36	1.36	1.36
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	1.36	1.36	1.36	1.36
	Additions during the year	1.36	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	1.36	1.36	1.36	1.36	1.36
	Average Loan	0.68	1.36	1.36	1.36	1.36
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	0.06	0.12	0.12	0.12	0.12
	Rep Schedule	Bullet Payment as on 13.03.2023				
5	Bond-XLII					
	Gross loan opening	1110.87	1110.87	1110.87	1110.87	1110.87
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	1110.87	1110.87	1110.87	1110.87	1110.87
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	1110.87	1110.87	1110.87	1110.87	1110.87
	Average Loan	1110.87	1110.87	1110.87	1110.87	1110.87
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	97.76	97.76	97.76	97.76	97.76
	Rep Schedule	Bullet Payment as on 13.03.2023				
6	Bond-XLIII					
	Gross loan opening	0.00	102.73	102.73	102.73	102.73
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	8.56
	Net Loan-Opening	0.00	102.73	102.73	102.73	94.17
	Additions during the year	102.73	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	8.56	8.56
	Net Loan-Closing	102.73	102.73	102.73	94.17	85.61
	Average Loan	51.37	102.73	102.73	98.45	89.89
	Rate of Interest	7.93%	7.93%	7.93%	7.93%	7.93%
	Interest	4.07	8.15	8.15	7.81	7.13
	Rep Schedule	12 annual instalments from 18.05.2017				
7	Bond-XLIII					
	Gross loan opening	180.27	180.27	180.27	180.27	180.27
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	15.02
	Net Loan-Opening	180.27	180.27	180.27	180.27	165.25
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	15.02	15.02
	Net Loan-Closing	180.27	180.27	180.27	165.25	150.23
	Average Loan	180.27	180.27	180.27	172.76	157.74
	Rate of Interest	7.93%	7.93%	7.93%	7.93%	7.93%
	Interest	14.30	14.30	14.30	13.70	12.51
	Rep Schedule	12 annual instalments from 18.05.2017				
8	Bond-XLV					
	Gross loan opening	85.56	85.56	85.56	85.56	85.56



	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	7.13
	Net Loan-Opening	85.56	85.56	85.56	85.56	78.43
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	7.13	7.13
	Net Loan-Closing	85.56	85.56	85.56	78.43	71.30
	Average Loan	85.56	85.56	85.56	82.00	74.87
	Rate of Interest	9.65%	9.65%	9.65%	9.65%	9.65%
	Interest	8.26	8.26	8.26	7.91	7.22
	Rep Schedule	12 annual instalments from 28.02.2018				
9	Bond-XLVI (Add Cap for 2014-15)					
	Gross loan opening	0.00	75.00	75.00	75.00	75.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	75.00	75.00	75.00	75.00
	Additions during the year	75.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	75.00	75.00	75.00	75.00	75.00
	Average Loan	37.50	75.00	75.00	75.00	75.00
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	3.49	6.98	6.98	6.98	6.98
	Rep Schedule	Matured on 04.09.2019, 04.09.2024 and 04.09.2029 equity				
10	SBI (Add Cap 2014-15)					
	Gross loan opening	0.00	8.09	8.09	8.09	8.09
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.74	1.47
	Net Loan-Opening	0.00	8.09	8.09	7.35	6.62
	Additions during the year	8.09	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.74	0.74	0.74
	Net Loan-Closing	8.09	8.09	7.35	6.62	5.88
	Average Loan	4.05	8.09	7.72	6.99	6.25
	Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
	Interest	0.41	0.83	0.79	0.72	0.64
	Rep Schedule	22 half yearly instalment from 31.08.2016				
11	SBI (Add Cap 2014-15)					
	Gross loan opening	0.00	14.00	14.00	14.00	14.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	1.27	2.55
	Net Loan-Opening	0.00	14.00	14.00	12.73	11.45
	Additions during the year	14.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	1.27	1.27	1.27
	Net Loan-Closing	14.00	14.00	12.73	11.45	10.18
	Average Loan	7.00	14.00	13.36	12.09	10.82
	Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
	Interest	0.72	1.44	1.37	1.24	1.11
	Rep Schedule	22 half yearly instalment from 31.08.2016				
12	SBI (Add Cap 2014-15)					
	Gross loan opening	0.00	0.00	34.43	34.43	34.43
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	3.13	6.26



	Net Loan-Opening	0.00	0.00	34.43	31.30	28.17
	Additions during the year	0.00	34.43	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	3.13	3.13	3.13
	Net Loan-Closing	0.00	34.43	31.30	28.17	25.04
	Average Loan	0.00	17.22	32.87	29.74	26.61
	Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
	Interest	0.00	1.76	3.37	3.05	2.73
	Rep Schedule	22 half yearly instalment from 31.08.2016				
13	SBI					
	Gross loan opening	178.60	178.60	178.60	178.60	178.60
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	16.24	32.47
	Net Loan-Opening	178.60	178.60	178.60	162.36	146.13
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	16.24	16.24	16.24
	Net Loan-Closing	178.60	178.60	162.36	146.13	129.89
	Average Loan	178.60	178.60	170.48	154.25	138.01
	Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
	Interest	18.31	18.31	17.47	15.81	14.15
	Rep Schedule	22 half yearly instalment from 31.08.2016				
14	Bond-XLVII (Add Cap)					
	Gross loan opening	0.00	40.00	40.00	40.00	40.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	40.00	40.00	40.00	40.00
	Additions during the year	40.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	3.33
	Net Loan-Closing	40.00	40.00	40.00	40.00	36.67
	Average Loan	20.00	40.00	40.00	40.00	38.33
	Rate of Interest	8.93%	8.93%	8.93%	8.93%	8.93%
	Interest	1.79	3.57	3.57	3.57	3.42
	Rep Schedule	12 equal Annual instalments from 20.10.2018				
15	Bond-XLVIII					
	Gross loan opening	0.00	36.00	36.00	36.00	36.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	36.00	36.00	36.00	36.00
	Additions during the year	36.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	36.00	36.00	36.00	36.00	36.00
	Average Loan	18.00	36.00	36.00	36.00	36.00
	Rate of Interest	8.20%	8.20%	8.20%	8.20%	8.20%
	Interest	1.48	2.95	2.95	2.95	2.95
	Rep Schedule	4 equal instalment on 23.01.2020, 23.01.2022, 23.01.2025, 23.01.30				
	Total Loan					
	Gross loan opening	3554.16	3831.34	3865.77	3865.77	3865.77
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	145.86	322.43
	Net Loan-Opening	3554.16	3831.34	3865.77	3719.91	3543.34



	Additions during the year	277.18	34.43	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	145.86	176.57	179.91
	Net Loan-Closing	3831.34	3865.77	3719.91	3543.34	3363.43
	Average Loan	3692.75	3848.56	3792.84	3631.62	3453.38
	Weighted Average Rate of Interest	9.0821%	9.0725%	9.0719%	9.0625%	9.0556%
	Interest	335.38	349.16	344.08	329.12	312.72

