

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 118/TT/2014

Coram:

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

Date of Order : 29.12.2016

In the matter of:

Approval of transmission tariff **Asset-1:** 1 no. 3x105 Single Phase, 400/220 kV Transformer (3rd) with associated bays under Rangpo Sub-station, **Asset-2:** 1 no. 100 MVA, 220/132 kV transformer (2nd), 1 no. 132 kV Bus Coupler bay and 1 no. 132 kV Bus Sectionalizer with associated bays at Rangpo Sub-station, **Asset-3:** 1 no. 80 MVAR Bus Reactor (2nd) and associated bays at Rangpo Sub-station, **Asset-4:** 1 no. 3x105 Single Phase, 400/220 kV Transformer (4th) with associated bays under Rangpo Sub-station, **Asset-5:** 1 no. 3x105 Single Phase, 400/220 kV Transformer (5th) with associated bays under Rangpo Sub-station, **Asset-6:** 1 no. 100 MVA, 220/132 kV transformer (3rd) with associated bays under Rangpo Sub-station and **Asset-7:** LILO of 400 kV D/C Teesta V-Siliguri line (Ckt.-II) at Rangpo and associated bays at Rangpo Sub-station, under Transmission System for Transfer of Power from Generation Projects in Sikkim to NR/WR Part-B in Eastern Region for 2014-19 tariff block under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission(Terms and Conditions of Tariff) Regulations, 2014.

And in the matter of:

Power Grid Corporation of India Limited
"Soudamini", Plot No. 2, Sector 29
Gurgaon -122001

....Petitioner

Vs

1. Bihar State Electricity Board,
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, Kolkatta-700 091
3. Grid Corporation of Orissa Limited,
Shahid Nagar,
Bhubaneswar-751 007
4. Damodar Valley Corporation,
DVC Tower, Maniktala
Civic Centre, VIP Road,
Kolkatta-700 054
5. Power Department,
Govt. of Sikkim, Gangtok-737 101
6. Jharkhand State Electricity Board,
In front of Main Secretariat,
Doranda, Ranchi-834 002

.....Respondents

For petitioner : Shri M.M. Mondal, PGCIL
Shri S.K. Venkatesan, PGCIL
Shri S.S. Raju, PGCIL
Shri Subash C. Taneja, PGCIL
Shri Rakesh Prasad, PGCIL

For respondents: None

ORDER

The present petition has been filed by Power Grid Corporation of India Limited (PGCIL) seeking approval of transmission charges for **Asset-1**: 1 no. 3x105 Single Phase, 400/220 kV Transformer (3rd) with associated bays under Rangpo Sub-station, **Asset-2**: 1 no. 100 MVA, 220/132 kV transformer (2nd), 1 no. 132 kV Bus Coupler bay and 1 no. 132 kV Bus Sectionalizer with associated bays at Rangpo Sub-station, **Asset-3**: 1 no. 80 MVAR Bus Reactor (2nd) and associated



bays at Rangpo Sub-station, **Asset-4:** 1 no. 3x105 Single Phase, 400/220 kV Transformer (4th) with associated bays under Rangpo Sub-station, **Asset-5:** 1 no. 3x105 Single Phase, 400/220 kV Transformer (5th) with associated bays under Rangpo Sub-station, **Asset-6:** 1 no. 100 MVA, 220/132 kV transformer (3rd) with associated bays under Rangpo Sub-station and **Asset-7:** LILO of 400 kV D/C Teesta V-Siliguri line (Ckt.-II) at Rangpo and associated bays at Rangpo Sub-station (hereinafter referred to as “transmission assets”) under Transmission System for Transfer of Power from Generation Projects in Sikkim to NR/WR Part-B in Eastern Region (hereinafter referred to as “project”), from the date of commercial operation to 31.3.2019 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”).

2. The petitioner was entrusted with the implementation of transmission system for transfer of power from generation projects in Sikkim to NR/WR Part-B. The system requirements under Part-B alongwith Part-A and Part-C were discussed and agreed in the 27th SCM of NR held on 30.5.2009 and 29th SCM of WR held on 10.9.2009. Further, the scope of the system was also discussed in the 16th ERPC meeting held on 18.12.2010. The Investment Approval (IA) and expenditure sanction for the transmission project was accorded by the Board of Directors of the petitioner vide Memorandum No C/CP/Sikkim Generation Projects-Part-B dated 17.3.2011 at an estimated cost of ₹158512 lakh including an IDC of ₹10183 lakh (based on 3rd Qtr 2010 price level). The project was scheduled to be commissioned



within 32 months from the date of IA. Therefore, the scheduled date of commissioning of the transmission project was 16.11.2013 say 1.12.2013.

3. The scope of work covered under the project is broadly as under:-

Transmission Lines:

- a. LILO of Teesta III-Kishanganj 400 kV D/C line (quad) (line being constructed under JV route) at Rangpo : 22.5 km (21 km D/C+1.5 km multi circuit portion)
- b. Rangpo-New Melli 220 kV D/c line (with twin Moose conductor) :22 km {20.5 km D/C+1.5 km multi circuit portion (2 Ckts. of 220 kV Line with twin Moose and 2 Ckts. of 132 kV line i.e. portion of LILO of Gangtok-Rangit 132 kV S/C line at Rangpo)}
- c. LILO of Gangtok-Rangit 132 kV S/c line at Rangpo : 3 km and Termination of Gangtok-Rangpo/Chuzachen and Melli-Rangpo/Chuzachen 132 kV line at Rangpo (with Zebra conductor)-1 km, Termination of Gangtok-Rangpo/Chuzachen and Melli-Rangpo/Chuzachen 132 kV line at Rangpo (with Panther conductor)-0.5 km and Termination of Gangtok-Rangpo/Chuzachen and Melli-Rangpo/Chuzachen 132 kV line at Rangpo multi circuit portion (2 Ckts. of 132 kV line with ACSR Zebra and 2 Ckts. of 132 kV line with ACSR Panther)-1 km (Gangtok-Rangpo/Chuzachen and Melli-Rangpo/Chuzachen 132 kV lines are to be constructed under part-A through LILO of Gangtok-Melli 132 kV S/C line upto Rangpo)
- d. LILO of Teesta V-Siliguri 400 kV D/C line at Rangpo : 2.5 km (1km D/C+1.5 km Multi circuit portion)
- e. Kishanganj-Patna 400 kV D/C (quad) line : 351 km



Sub-stations:

- a. Establishment of 400/220/132 kV Gas Insulated Sub-station at Rangpo with 16x105 MVA, 400/220 kV 1-Ø transformers and 3x100 MVA, 220/132 kV 1-Ø transformers
- b. Establishment of 220 kV Gas Insulated switching station at New Melli
- c. Extension of bays at Kishanganj 400/220 kV sub-station
- d. Extension of bays at Patna 400/220 kV sub-station

4. The petitioner initially in the petition claimed approval of the transmission charges from the anticipated dates of commercial operation (COD) of instant assets. However, the petitioner vide affidavit dated 22.12.2014 submitted the actual dates of commercial operation of the instant transmission assets. The actual dates of commercial operation of the instant assets, submitted by the petitioner vide affidavit dated 22.12.2014 are as under:-

Particulars	Actual COD	Delay (in months)
Asset-1	9.6.2014	6
Asset-2	22.5.2014	6
Asset-3	9.6.2014	6
Asset-4	30.6.2014	7
Asset-5	3.7.2014	7
Asset-6	13.6.2014	6
Asset-7	31.10.2014	11

5. The details of the other assets covered in the project are as follows:-



S. No	Name of Asset	COD	Remarks
1	Asset-I: Termination of GangtokRangpo/Chujachen and Melli-Rangpo/Chujachen Line at Rangpo and associated bays at Rangpo Sub-station, LILO of 400 kV D/C Teesta V- Siliguri Line (Ckt-I) at Rangpo and associated bays alongwith 1 No, 400 kV Bus Coupler bay at Rangpo Sub-station, 01 no. 3X105 MVA Single Phase 400/220 kV Transformer (1st) and associated bays alongwith 1 No. 1X105 MVA Single Phase, 400/220 kV Spare Transformer at Rangpo Sub-station, and One no. 100 MVA 220/132 kV Transformer (1st) and associated bays alongwith 01 number 132 kV Bus Coupler Bay and 01 number 132 kV Bus Sectionalizer bay at Rangpo Sub-station	24.4.2014	Covered under 68/TT/2016 (Order dated 29.7.2016)
2	Asset-II: LILO of 132 kV S/C Gangtok-Rangit Line at Rangpo and associated bays at Rangpo Sub-station	31.10.2014	
3	Asset-III: 01no. 3X105 MVA Single Phase 400/220 kV Transformer (2nd) and associated bays at Rangpo Sub-station	22.5.2014	
4	Asset-IV: 01 no. 80 MVAR Bus Reactor (1st) & associated bays at Rangpo Sub-station	22.5.2014	
5	Asset-I: 125 MVAR, Bus Reactor along with associated bays at Patna Sub-station	1.6.2013	Covered under 292/TT/2013 (Order dated 8.2.2016)
6	Asset-I: 220 kV D/C Rangpo-New Melli Line and associated bays at Rangpo and New Melli alongwith one no. 220 kV Bus Coupler Bay each at Rangpo and New Melli	21.5.2015	
7	Asset-II: 1 no. 31.5 MVAR Bus Reactor (1st) at New Melli and associated bay	31.1.2016	
8	Asset-III: 1 no. 31.5 MVAR Bus Reactor (2nd) at New Melli and associated bay	23.3.2016	Covered under 530/TT/2014 (Order dated 29.2.2016)
9	Asset-IV: 63 MVAR Line Reactor of Ckt.-I of 400 kV D/C Patna-Kishanganj line at Patna Sub-station as Bus Reactor	2.10.2014	
10	Asset-V: 63 MVAR Line Reactor of Ckt.-II of 400 kV D/C Patna-Kishanganj line at Patna Sub-station as Bus Reactor	29.11.2014	



6. This order has been issued considering PGCIL's affidavits dated 22.12.2014, 9.10.2015, 12.10.2015, 27.5.2016, 22.8.2016 and 9.9.2016.

7. Annual Fixed Charges (AFC) was allowed for the above mentioned transmission assets vide order dated 15.4.2015 for 2014-15 and 2015-16 under the first proviso to Regulation 7(7) of the 2014 Tariff Regulations, subject to adjustment as per the said Regulation.

8. The details of the transmission charges claimed by the petitioner for the instant assets are as under:-

(₹ in lakh)

Particulars	Asset-1				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	87.43	116.04	120.35	120.35	120.35
Interest on Loan	64.86	82.53	79.67	73.26	65.84
Return on Equity	97.42	129.92	134.74	134.74	134.74
Interest on Working Capital	9.94	12.91	13.23	13.27	13.29
O & M Expenses	76.04	96.86	100.08	103.39	106.83
Total	335.69	438.26	448.07	445.01	441.05
Particulars	Asset-2				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	63.41	80.51	84.75	84.75	84.75
Interest on Loan	52.96	63.58	61.80	56.47	50.39
Return on Equity	70.65	89.71	94.43	94.43	94.43
Interest on Working Capital	9.18	11.23	11.59	11.67	11.74
O & M Expenses	88.18	105.91	109.42	113.05	116.82
Total	284.38	350.94	361.99	360.37	358.13
Particulars	Asset-3				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	43.07	53.86	53.99	53.99	53.99
Interest on Loan	31.78	37.20	34.14	31.18	27.67
Return on Equity	47.99	60.30	60.45	60.45	60.45
Interest on Working Capital	5.13	6.43	6.46	6.49	6.51
O & M Expenses	41.80	53.25	55.02	56.84	58.73



Total	169.77	211.04	210.06	208.95	207.35
Particulars	Asset-4				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	81.04	116.35	120.66	120.66	120.66
Interest on Loan	74.01	100.58	96.15	87.85	78.55
Return on Equity	90.30	130.26	135.09	135.09	135.09
Interest on Working Capital	9.55	13.34	13.63	13.62	13.60
O & M Expenses	70.57	96.86	100.08	103.39	106.83
Total	325.47	457.39	465.61	460.61	454.73
Particulars	Asset-5				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	80.43	116.38	120.69	120.69	120.69
Interest on Loan	70.75	97.02	92.72	84.68	75.80
Return on Equity	89.62	130.30	135.13	135.13	135.13
Interest on Working Capital	9.40	13.26	13.55	13.55	13.53
O & M Expenses	69.81	96.86	100.08	103.39	106.83
Total	320.01	453.82	462.17	457.44	451.98
Particulars	Asset-6				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	41.71	57.01	60.11	60.11	60.11
Interest on Loan	30.39	39.54	38.47	35.16	31.38
Return on Equity	46.47	63.82	67.29	67.29	67.29
Interest on Working Capital	5.93	7.82	8.09	8.15	8.21
O & M Expenses	57.89	74.76	77.24	79.80	82.46
Total	182.39	242.95	251.20	250.51	249.45
Particulars	Asset-7				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	60.06	161.40	177.85	177.85	177.85
Interest on Loan	56.72	145.11	148.57	136.09	122.46
Return on Equity	66.92	180.69	199.12	199.12	199.12
Interest on Working Capital	6.69	17.29	18.37	18.29	18.19
O & M Expenses	44.61	109.90	113.55	117.31	121.21
Total	235.00	614.39	657.46	648.66	638.83

9. The details submitted by the petitioner in support of its claim for interest on working capital are as follows:-



(₹ in lakh)

Particulars	Asset-1				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	14.06	14.53	15.01	15.51	16.02
O & M expenses	7.81	8.07	8.34	8.62	8.90
Receivables	68.98	73.04	74.68	74.17	73.51
Total	90.85	95.64	98.03	98.30	98.43
Interest Rate	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	9.94	12.91	13.23	13.27	13.29
Particulars	Asset-2				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	15.38	15.89	16.41	16.96	17.52
O & M expenses	8.54	8.83	9.12	9.42	9.74
Receivables	55.10	58.49	60.33	60.06	59.69
Total	79.02	83.21	85.86	86.44	86.95
Interest Rate	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	9.18	11.23	11.59	11.67	11.74
Particulars	Asset-3				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	7.73	7.99	8.25	8.53	8.81
O & M expenses	4.29	4.44	4.59	4.74	4.89
Receivables	34.89	35.17	35.01	34.83	34.56
Total	46.91	47.60	47.85	48.10	48.26
Interest Rate	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	5.13	6.43	6.46	6.49	6.51
Particulars	Asset-4				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	14.06	14.53	15.01	15.51	16.02
O & M expenses	7.81	8.07	8.34	8.62	8.90
Receivables	72.06	76.23	77.60	76.77	75.79
Total	93.93	98.83	100.95	100.90	100.71
Interest Rate	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	9.55	13.34	13.63	13.62	13.60
Particulars	Asset-5				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	14.06	14.53	15.01	15.51	16.02
O & M expenses	7.81	8.07	8.34	8.62	8.90
Receivables	71.63	75.64	77.03	76.24	75.33
Total	93.50	98.24	100.38	100.37	100.25
Interest Rate	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	9.40	13.26	13.55	13.55	13.53
Particulars	Asset-6				



	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	10.85	11.21	11.59	11.97	12.37
O & M expenses	6.03	6.23	6.44	6.65	6.87
Receivables	38.00	40.49	41.87	41.75	41.58
Total	54.88	57.93	59.90	60.37	60.82
Interest Rate	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	5.93	7.82	8.09	8.15	8.21
Particulars	Asset-7				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	15.96	16.49	17.03	17.60	18.18
O & M expenses	8.87	9.16	9.46	9.78	10.10
Receivables	93.40	102.40	109.58	108.11	106.47
Total	118.23	128.05	136.07	135.49	134.75
Interest Rate	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	6.69	17.29	18.37	18.29	18.19

10. 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. None of the respondents have filed any reply.

11. Having heard the representatives of the petitioner and perused the material available on record we proceed to dispose of the petition.

Capital cost

12. Clause (1) and (2) of Regulation 9 of the 2014 Tariff Regulations provides as follows:-

“(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.

13. The petitioner has submitted details of the approved apportioned capital cost, capital cost as on the date of commercial operation (COD) and estimated additional capital expenditure incurred or projected to be incurred for the instant transmission assets vide affidavit dated 27.5.2016 (as per Auditors' Certificate dated 29.7.2015). The details as submitted by the petitioner and considered for the purpose of tariff are as below:-

Particulars	Approved apportioned cost	Cost as on COD	Additional capital expenditure Incurred/Projected		Total estimated completion cost
			2014-15	2015-16	
Asset-1	2766.12	2006.57	109.39	163.44	2279.40
Asset-2	1694.11	1377.46	66.98	160.76	1605.20
Asset-3	1079.74	1012.56	5.00	5.00	1022.56
Asset-4	2766.12	2015.34	106.48	163.46	2285.28
Asset-5	2766.12	2015.91	106.49	163.46	2285.86
Asset-6	1396.69	974.07	46.89	117.41	1138.37



Asset-7	3279.22	2722.54	60.48	585.34	3368.36
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*Capital expenditure is stated to have been verified from the audited book of accounts of the petitioner by the Auditors, upto 31.3.2015.

Cost over-run

14. The total estimated completion cost of all assets, except Asset-7, is within their respective approved apportioned cost. The petitioner was directed vide RoP dated 15.4.2015 to submit the reasons for cost variation in certain heads as per Form-5S along with documentary evidence. The petitioner, in response, vide affidavit dated 12.10.2015 has submitted that the cost variation is mainly attributable to the cost of transformers obtained through the open competitive bidding. The cost variation from the FR (i.e., 1st quarter of 2011) upto March 2014 (i.e., the period of major supplies) in respect of sub-station equipments is attributable to inflationary trends prevalent during the execution of project and also due to market forces prevailing at the time of bidding process of various packages. With regard to price variation from FR to award, the contracts for various packages under this project were awarded to the lowest evaluated and responsive bidder, on the basis of Open Competitive Bidding. Thus, the award prices represent the lowest prices available at the time of bidding of various packages. The price variation from award to final execution is mainly on the basis of PV based on indices as per provisions of respective contracts. The petitioner has submitted that in case of Asset-7, in addition to price variation, the line length, type of various towers and foundations in the FR were estimated on the basis of walk-over/preliminary survey. However, during execution of project there has been increase in the cost by approximately



₹496 lakh due to increase in line length by 1.367 km and increase in no. of angle towers due to site conditions, which interalia lead to increase in quantity of tower steel, conductor, no. of insulators, hardware fittings, foundation, etc.

15. The cost variation in case of Assets 1 to 6 is allowed. The estimated completion cost Asset-7 is higher than approved apportioned cost. Therefore, in the absence of Revised Cost Estimate (RCE), the approved apportioned cost of the individual asset is considered for the purpose of tariff calculations. However, the capital cost in case of Asset-7 shall be reviewed at the time truing-up.

Time over-run

16. The project was scheduled to be commissioned within 32 months from the date of investment approval of 17.3.2011. Accordingly, the scheduled date of commercial works out to 16.11.2013, say 1.12.2013. However, all the assets were put into commercial operation after the scheduled date of commercial operation.

The details of COD and time over-run is as under:-

Particulars	Date of commercial operation	Delay
Asset-1	9.6.2014	6 months 8 days
Asset-2	22.5.2014	5 months 21 days
Asset-3	9.6.2014	6 months 8 days
Asset-4	30.6.2014	6 months 29 days
Asset-5	3.7.2014	7 months 2 days
Asset-6	13.6.2014	6 months 12 days
Asset-7	31.10.2014	11 Months



17. The petitioner was directed to submit the reasons for time over-run alongwith documentary evidence and asset wise chronology of the activities.

18. The petitioner has submitted that various constraints like forest clearance, RoW issues, landslides in hills, unapproachable hilly terrain and procedural delays in assessment of crop damage by the local administration have led to time over-run.

19. The petitioner has submitted following reasons for time over-run:-

Delay due to forest clearance:

It had applied for permission to conduct the survey work of the proposed transmission routes falling within the forest area, vide letter dated 12.7.2011, addressed to the PCCF-cum-Secretary, Forest, E&WMD, Government of Sikkim and thereafter applied for the forest clearance, after conducting the detailed survey work of the aforesaid line falling within the forest area on 3.3.2012. Thus, after compliance of Stage-I clearance guideline/Terms & Conditions, Stage-II clearance (final approval) was issued on 17.4.2013. The tree cutting orders were issued on 13.11.2013 i.e. after a period of seven months. The petitioner has also submitted complete chronology of events related to forest clearances as mentioned hereunder:-

Request for start of preliminary survey	: 12.7.2011
Submission of forest proposal	: 3.3.2012
Stage II clearance (Final approval)	: 17.4.2013
Tree felling order received	: 13.11.2013



Date	Remarks
12.7.2011	Letter from POWERGRID to Department of Forest (DOF), Govt. of Sikkim regarding permission for transmission line route survey.
29.7.2011	Letter from POWERGRID to Department of Forest, Environment & Wildlife Management, Government of Sikkim regarding permission for transmission line route survey.
2.2.2012	Preliminary Survey completed
2.2.2012	Letter to Director, Land Revenue Department, Government of Sikkim, requesting for deputing revenue surveyors along transmission corridor for ease of demarcation of forest stretch as well as mitigation of local ROW.
12.2.2012	(ROW during final survey) Letter to DM, South Sikkim, requesting his intervention to resolve ROW issue created by local villagers.
3.3.2012	Submission of Forest Proposal
3.5.2012	Letter to DC, Sikkim regarding issuance of instructions to District land & Revenue Department regarding compliance of FRA 2006 for timely forest clearance.
25.7.2012	Letter to Principal Secretary, Government of Sikkim, regarding delay by District administration in compliance of FRA 2006.
28.1.2013	NOC from DC, Sikkim certifying compliance of FRA 2006
15.2.2013	Stage-I clearance (in principle approval)
2.4.2013	Letter to Divisional Forest Officer, South Sikkim requesting to start of preliminary work in the forest stretch.
17.4.2013	Stage-II approval
13.11.2013	Tree felling permission granted
	Supplementary documents submitted
8.5.2013	Letter to Divisional Forest Officer, South Sikkim requesting for construction of lines.
8.7.2013	Letter to Divisional Forest Officer, Sikkim for handing and taking report of forest land
20.8.2013	Letter to Divisional Forest Officer, South Sikkim for depositing payment for boundary pillars diversion of forest land
11.10.2013	Letter to POWERGRID from Divisional Forest Officer, South Sikkim regarding diversion of forest land

20. The petitioner has submitted that there was delay in submission of forest proposal mainly on account of RoW encountered at the preliminary survey stage itself. Therefore, the entire process of forest clearance took around 1 year and 8 months.



Delay due to compensation and RoW issues for Transmission Lines:

The petitioner has further submitted that the compensation of land/crop had to be disbursed in Sikkim via State's Land & Revenue Department. Further, in view of the RoW issues that had crept at the preliminary survey stage itself, it had requested the concerned Land & Revenue Department of Sikkim, to deploy the revenue surveyors to carry out the parallel assessment of the crop/affected area compensation as well as to mitigate the RoW issue along the line corridor as various instances of RoW issues were encountered, while carrying out the foundation works of the subject transmission line even after deployment of various land surveyors. In the meantime, Joint Director, Land & Revenue Department, Sikkim, vide their letter dated 27.9.2012 asked the petitioner to provide the land compensation in addition to the crop compensation to the affected land owners, since the land is very scarce and costly in the State of Sikkim. However, in its reply to the Land & Revenue Department, Sikkim, the petitioner mentioned that compensation can be paid only for crop/area affected, while construction can be provided as per the relevant Telegraph Act, 1885. The petitioner submitted that few meetings were called between the State Administration, local land owners and the petitioner, but no consensus could be reached regarding compensation. The demand for value of land as compensation in transmission line corridor was called off only after various meetings and deliberations. Thereafter, the issue of disproportionate claims in lieu of crop/fruit compensation cropped up. The land



owners were demanding exorbitant amounts of compensation and the Land & Revenue Department, Sikkim made the crop damage assessment based on 40 years' yield, while as per the direction of the Apex Court, only 8 years' yield is to be considered for assessing the crop compensation. This led to high escalation in amounts claimed against crop compensation. As such, the petitioner requested the Sikkim Authorities/State Government to review their compensation assessment mechanism. The issue was followed up for timely resolution with concerned Land & Revenue Authorities, State Government, Chief Secretary, Secretary, Energy and Power Department, Sikkim, etc. The process took considerable time and no substantial progress could be made in the construction of transmission line.

21. The petitioner has also submitted detailed chronology of the above events related to land compensation issues and the corresponding RoW issues, which took approximately 21 months (February, 2012 to November, 2013) and approximately 22 months (February, 2012 to December, 2013) respectively. The details submitted are as under:-

Date	Remark
2.2.2012	POWERGRID requested Joint Director Land & revenue Department, Sikkim, to deploy revenue/ land surveyors for assessment of compensation regarding construction of transmission line.
12.2.2012	Letter to Joint Director, Land Revenue Department, South Sikkim, requesting deputing of revenue surveyors for assessment of crop compensation at tower locations of the transmission line during initiation of foundation works.
12.2.2012	(POWERGRID requested District Collector, South Sikkim, to intervene in the matter of ROW problem created by villagers thereby not allowing to carry out any survey work.
8.5.2012	Letter to District Magistrate (DM), South Sikkim requesting deputing of



	revenue surveyors for assessment of crop compensation at tower locations of the transmission line.
28.5.2012	Dy. Director, Land & Revenue Department, Sikkim, writes to Panchayat members to allow for construction of transmission line through the boundary of Forest and Village as per Meeting held in presence of POWERGRID, Villagers and State Admin on 18.5.2012 at Bermiok Village. It may be seen that the request for solving the issue was made on 12.02.2012. However, latter on the villagers denied passing the line even though the border of forest and village and thereafter no work taken up.
3.7.2012	POWERGRID requested DC, Namchi for compensation assessment at various places in line route.
16.7.2012	Letter highlight ROW problem created by villagers at foundation locations of 132kV line.
30.7.2012	Joint Director, L & R Department, Sikkim, writes for a meeting at village on 02.08.12
25.8.2012	POWERGRID officials met DC, South Sikkim & requested for compensation assessment at various places in line route.
17.9.2012	Letter from contractor highlight ROW problem created by villagers at Loc. 49 to 61.
27.9.2012	Letter from Joint Director, Land & revenue Department, Sikkim to POWERGRID for payment of compensation for land cost also stating that land is very scarce in Sikkim and it will not be possible to convince the landowners to allow putting towers on their land without giving land cost/long term yield of land.
29.9.2012	Letter from contractor highlight ROW problem created by villagers at some Loc. Of the subject transmission line.
1.10.2012	Letter to District Collector (DC), Sikkim, asking for advice for compensation policy with regards to other projects completed or going on in same area.
4.10.2012	FIR lodged in Police Station against threats of villagers.
1.12.2012	Letter from contractor highlight ROW problem created by villagers at Loc. 40/1.
6.12.2012	Letter from contractor highlight ROW problem created by villagers at Loc. AP 30/a.
January 2013	Letter from Minister of Sikkim, Govt. asking POWERGRID to consider the prayer & demands of the villagers related to land issue.
30.11.2012 to 7.3.2013	Follow up for expediting the compensation assessment for various locations under transmission line by POWERGRID officials.
4.3.2013	Police Wireless memo highlighting the action to be taken in wake of ROW issue created by villagers.
23.3.2013	District Collector, South Sikkim calls a meeting of all tower line construction agencies to arrive at uniform rate of compensation, meeting fixed on 03.04.2013.



26.3.2013	Letter from L&R Department, Sikkim to POWERGRID to release crop compensation money based on assessment of 48 locations. In spite of this the first lot of compensation took about 13.5 months. During this period the progress of work was very slow due to frequent stoppage of work by the landowners. This is evident from the various correspondences dated 16.7.2012, 28.08.2012, 29.9.2012, 03.10.2012, 01.11.2012, 22.11.2012, 23.11.2012 and 06.12.2012 made by Shyama Power (I) Limited, the executing agency. Letter enclosed under ROW delay enclosures as mentioned above in the table.
8.4.2013	Letter from Joint Director, Human Resource Department South Sikkim, refusing NOC for permission for erecting tower in school land in view of pressure and non-compliance from locals.
12.4.2013	Letter to L&R Department Sikkim, requesting to review amount of compensation that had assessed amount based on 40 years crop value which is not as per Indian Telegraph Act which is followed at the entire country for assessment of compensation for construction of transmission line. This has escalated the compensation value to an unreasonable extent. Also for fruit bearing trees there is Supreme Court Ruling of payment of maximum 8 years yield. Hence Govt. of Sikkim was requested to review the compensation assessment procedure.
14.5.2013	Letter from Asst. Director, L & R Department, Sikkim, requesting POWERGRID to arrange relocation of ROW affected person to a nearby location.
12.6.2013	Letter from SDM, South Sikkim, directing to stop transmission line works as per Government's order during monsoon considering safety during construction.
17.6.2013	Minute of Meeting that was conducted by the District Collector in order to review the compensation assessment. But the villagers did not agree to review of compensation amount.
26.6.2013	Letter to Executive Engineer, Energy Department, Sikkim, to shift poles obstructing the transmission line work.
9.7.2013 & 17.7.2013	Order from DM, South Sikkim, to stop the transmission line construction work in view of dispute of compensation amount.
16.7.2013	Letter from POWERGRID to DC, South Sikkim, requesting to continue the transmission line construction till the time compensation issue is resolved which is being discussed at higher levels.
23.7.2013	Letter to SDM, South Sikkim, requesting kind co-operation and deputing of revenue surveyors for assessment of surface damage compensation so that payment can be done at the earliest.
1.8.2013	Letter from POWERGRID to Secretary, Land & Revenue Department, Government of Sikkim, to review its compensation mechanism in view of exorbitant claims which violets the order of Supreme Court regarding compensation of crop damage.
30.8.2013	Letter from Secretary, Land & Revenue Department, Government of Sikkim, reverting that compensation amount can't be compromised in view of scarcity and unprecedented industrial, tourism and residential growth which has increased the land value manifold.



19.9.2013	Letter from POWERGRID to Chief Secretary, Government of Sikkim, intimating him that compensation as decided by State Government, is being paid, however, assessment of the same at various locations and thereafter approval and disbursement of compensation is taking considerable time. He was requested to expedite and simplify the process since ROW issues at the affected sites has stalled the progress of transmission line construction.
The localized assessment of sites required land surveyors which had to be deputed by L&R Department, Sikkim on repeated requests of POWERGRID. Thereafter, demand of compensation was made. After payment of claim POWERGRID, the permission of disbursed allowed by DC, South Sikkim only after approval from Secretary, Revenue Department, Sikkim. The whole process consumed lot of time considering it was done in batches and separately for individual sites.	
30.10.2013	Letter to DM, South Sikkim, requesting to deploy land surveyors and arrange a meeting with concerned officials and villagers to reach a consensus on receipt of compensation payment by villagers who were regularly created ROW issue. The matter was later resolved by November, 2013
22.11.2013	Letter to DC, South Sikkim, to intervene to resolve ROW issue at various transmission line locations

22. The petitioner has also submitted that there was delay in construction of Rangpo Sub-station because of the delay in consignments containing the transformers/reactors. Consignments were not allowed over the bridge on Rangpo River by the State Government agencies due to an earlier accident, as the bridge was not strong enough to carry heavy consignments. Transportation of heavy consignments on the bridge over Rangpo River was banned by Border Road Organization (“BRO”) and Government of Sikkim in December, 2011. As such, the transporter constructed a diversion road to cross the Rangpo River for transportation of such assets. However, the diversion road was washed away due to sudden outbreak of artificial reservoir at the upstream and resultant inrush of water in the river. In the meantime, monsoon in Sikkim started and the transportation of the subject asset was postponed till the monsoon was over. In the



meantime the strengthening work on the Rangpo River Bridge was complete and permission to transport the assets over the bridge was granted by the BRO on 30.8.2013.

23. The petitioner has further submitted that there was a delay of around 1 month in commencing of work in some portions of sub-station area due to non-removal of stone wall, stone chips, sheds, transformers of LANCO from the sub-station area.

24. The petitioner has submitted that various hurdles were faced from the beginning of construction of Rangpo Sub-station like law and order problems and threat to stop construction work due to non-payment of balance 20% compensation amount to land owners although it had deposited full compensation amount with the authorities. As a result, work of boundary wall could not be started. Further, the acquisition of land for sub-station at Rangpo GIS was done by Sikkim Power Development Company (SPDC) on behalf of the petitioner. Full payment of land was made to SPDC, which later had to transfer the same to Land & Revenue Department, Sikkim for disbursement through DC Office, Sikkim. The whole process of complete disbursement of land compensation to owners took considerable time. Delay and receipt of incomplete compensation by landowners, various RoW and law and order issues had crept up. The petitioner has submitted chronology of important events in this regard, which are as below:-

Date	Remark
14.3.2011	Publication of declaration of Land Acquisition as per Sec. 6



26.3.2011	Transfer of 100% land value to SPDC by PGCIL
October, 2011	Disbursement of 80% land compensation to land owners
Persuaded SPDC and L&R Department, Sikkim for disbursement of balance 20% land compensation	
9.10.2012	Letter to Secretary, L&R Department, Sikkim, requesting him to process the balance land payment at the earliest.
October, 2012	Letter from Deputy Secretary, L&R Department, Sikkim, to DC, South Sikkim intimating the transfer of balance 20% land compensation to DC office and requesting him to disburse compensation at the earliest.
<p>Meanwhile in absence of 20% balance land compensation, Law & Order issues crop up Rangpo Sub-station site, leading to halt of construction at S/S site / boundary wall construction, etc</p> <p>The contract for boundary wall construction was awarded on 18.01.2012, however the same could not be completed till October, 2013 (even though the completion schedule for the same was kept as July, 2012 as per LOA). The delay due to this issue was around 14 months.</p>	
22.3.2013	Letter To BDO, South Sikkim, to intervene since land owners are not allowing construction of Sub-station boundary wall, as payment (20% balance) has not yet been disbursed to them
12.5.2013	Letter from Revenue Office, L&R Department, Sikkim to Secretary, Energy & Power Department, requesting him to release full amount corresponding to 20% balance land compensation as only a part of same has been transferred by SPDC.
9.7.2013/ 16.7.2013/ 30.7.2013	Letter dated 30.7.2013 to MD, SPDC, requesting him to release full amount corresponding to 20% balance land compensation. The letter makes references to letters by POWERGRID dated 9.7.2013 and 16.7.2013 to Chief Secretary, Government of Sikkim, requesting the authorities to kindly take note of the threat of agitation by land owners in plead of balance payment and to take necessary action as discussed in meeting with various POWERGRID and State officials.
Finally, the payment to land owners was initiated in a phased manner taking another couple of months.	

25. The petitioner has submitted that due to above, besides valuable loss of time, it affected moral of executing agency and work gangs who had to be mobilised/re-mobilised on several occasion as these issues had halted the progress of construction activity at Rangpo GIS site, thereby leading to delays. Though, the delay period due to the above issues is not explicitly quantifiable, the adverse



effects on the project completion were always felt. There was delay of approximately 2.5 years from 26.3.2011 (100% payment made by the petitioner) to August/September, 2013 (disbursement of final balance payment by Sikkim Government) on account of disbursement of land compensation by Sikkim Authorities. There was delay of 14 months (from July, 2012 to October, 2013) on account of delay in completion of boundary wall construction. The delay was beyond the control of the petitioner and the petitioner has requested to condone the time over-run in commissioning of the instant assets.

26. We have considered the submissions of the petitioner regarding time over-run in case of Asset-7, LILO of 400 kV D/C Teesta V-Siliguri line (Ckt.-II) at Rangpo and associated bays at Rangpo Sub-station. The time over-run of 11 months in case of Asset-7 has been attributed to delay in obtaining forest clearance, delay in tree felling orders, delay in payment of compensation and RoW issues in case of transmission lines which is associated with Asset-7. It is observed that the petitioner approached the Department of Forest (DOF), Government of Sikkim for starting the preliminary survey on 12.7.2011 i.e. after 117 days from the date of investment approval i.e. 17.3.2011. The petitioner has not explained the reasons for delay in approaching the Department of Forest (DOF), Government of Sikkim. Hence, delay on this account for period 17.3.2011 to 12.7.2011 is attributable to the petitioner and it is not condoned. As regards forest clearance, it is observed that the petitioner submitted the proposal for forest clearance on 3.3.2012. The Stage-I clearance was



received on 15.2.2013 and Stage-II clearance was received on 17.4.2013 and the tree felling order was received on 13.11.2013. The petitioner has also submitted letters for the communication made after Stage-II clearance in getting tree felling orders. It took 855 days for obtaining the forest clearance and the tree felling orders. As per the Forest (Conservation) Amendment Rules, 2004 notified by MoEF dated 3.2.2004, the timeline for forest approval after submission of proposal is 210 days by State Government and 90 days by Forest Advisory Committee of Central Government i.e. total 300 days. We are of the view that the time taken beyond 300 days in obtaining forest clearance is beyond the petitioner. Accordingly, time over-run of 438 days ($855-117-300=438$ days) out of 855 days due to delay in obtaining forest approval is condoned. As regards compensation issues, it is observed that the petitioner has made the request for damage compensation assessment in February, 2012. However, the demand was raised by the State Government authorities on 27.9.2012 and the payment was made by the petitioner, after settlement of issues related to compensation, on 19.9.2013. The demand for payment of land compensation was received after a period of 19 months. Further, the petitioner was facing RoW issue from 12.2.2012 to 22.11.2013 due to the problems created by the villagers who did not allow to carry out the work. The delay in obtaining the demand for payment of land compensation and RoW issues cannot be attributed to the petitioner and hence is condoned. However, it is subsumed in the delay in obtaining forest clearance.



27. The time over-run in case of Assets-1, 2, 3, 4, 5 and 6, which are associated with 400/220 kV at Rangpo Sub-station, has been attributed to delay in transportation of transformers/reactors over the Rangpo bridge, infringement of other party and compensation issues. We have considered the submissions of the petitioner and documentary evidence in support of delay of work at Rangpo Sub-station. There is a delay of 5 months and 21 days to 7 months and 2 days for commissioning of the assets at Rangpo Sub-station. It is observed that the petitioner was unable to transport the transformers/reactors over the Rangpo Bridge from 21.12.2011 due to collapse of Rangpo Bridge. The permission to transport the transformers/reactors over the Rangpo Bridge was received on 30.8.2013. Therefore, the time period from 21.12.2011 to 30.8.2013 (20 months and 10 days) is considered to be beyond the control of the petitioner. As regards the delay of one month due to infringement of material of LANCO, we are of the view that the petitioner should have taken appropriate steps in coordination with LANCO and settled the matter. We are not inclined to condone the time over-run of one month claimed by the petitioner in this regard. As regards the compensation issue, it is observed that the petitioner has transferred 100% land value to the authorities concerned on 26.3.2011. However, 20% land compensation disbursement was pending with L&R Department, Sikkim and the payment of land compensation issue was finally resolved on 30.7.2013. The delay due to compensation issues is subsumed by the delay due to transportation problems. Though there was delay of about 20 months in getting permission to transport the transformers/reactors over



the Rangpo Bridge, the petitioner was able to reduce the period of time over-run in case of Assets-1 to 6 to 7 months and 2 days. Further, we are of the view that the time over-run due to transportation problems is beyond the control of the petitioner. Accordingly, the time over-run in case of Assets-1 to 6 is condoned.

Treatment of IDC and IEDC

28. As regards IDC and IEDC, Regulation 11 of the 2014 Tariff Regulations provides as follows:-

"11. Interest during construction (IDC), Incidental Expenditure during Construction (IEDC)

(A) Interest during Construction (IDC):

(1) Interest during construction shall be computed corresponding to the loan from the date of infusion of debt fund, and after taking into account the prudent phasing of funds upto SCOD.

(2) In case of additional costs on account of IDC due to delay in achieving the SCOD, the generating company or the transmission licensee as the case may be, shall be required to furnish detailed justifications with supporting documents for such delay including prudent phasing of funds: Provided that if the delay is not attributable to the generating company or the transmission licensee as the case may be, and is due to uncontrollable factors as specified in Regulation 12 of these regulations, IDC may be allowed after due prudence check.

Provided further that only IDC on actual loan may be allowed beyond the SCOD to the extent, the delay is found beyond the control of generating company or the transmission licensee, as the case may be, after due prudence and taking into account prudent phasing of funds.

(B) Incidental Expenditure during Construction (IEDC):

(1) Incidental expenditure during construction shall be computed from the zero date and after taking into account pre-operative expenses upto SCOD:

Provided that any revenue earned during construction period up to SCOD on account of interest on deposits or advances, or any other receipts may be taken into account for reduction in incidental expenditure during construction.



(2) In case of additional costs on account of IEDC due to delay in achieving the SCOD, the generating company or the transmission licensee as the case may be, shall be required to furnish detailed justification with supporting documents for such delay including the details of incidental expenditure during the period of delay and liquidated damages recovered or recoverable corresponding to the delay:

Provided that if the delay is not attributable to the generating company or the transmission licensee, as the case may be, and is due to uncontrollable factors as specified in regulation 12, IEDC may be allowed after due prudence check:

Provided further that where the delay is attributable to an agency or contractor or supplier engaged by the generating company or the transmission licensee, the liquidated damages recovered from such agency or contractor or supplier shall be taken into account for computation of capital cost

(3) In case the time over-run beyond SCOD is not admissible after due prudence, the increase of capital cost on account of cost variation corresponding to the period of time over run may be excluded from capitalization irrespective of price variation provisions in the contracts with supplier or contractor of the generating company or the transmission licensee.

29. The petitioner has claimed Interest During Construction (IDC) and has submitted Auditors' Certificate dated 29.7.2015 vide affidavit dated 27.5.2016 for information related to IDC. The IDC discharged upto COD and discharged after COD i.e. in 2014-15 and 2015-16 has also been indicated as under:-

Particulars	Claimed as on COD as per the Auditors' Certificates 29.7.2015	Discharged up to COD (as claimed)	Allowed/ worked out on cash basis as on COD	(₹ in lakh)			
				Balance Accrued IDC discharged during 2014-15		Balance Accrued IDC to be discharged during 2015-16	
				As claimed	Worked out	As claimed	Worked out
Asset-1	105.11	65.64	64.47	39.47	39.47	-	-
Asset-2	68.91	38.98	38.31	29.93	29.93	-	-
Asset-3	49.59	30.69	30.01	18.90	18.90	-	-
Asset-4	110.83	51.72	51.72	59.11	59.11	-	-
Asset-5	111.40	64.60	63.60	46.80	46.80	-	-
Asset-6	51.79	31.61	31.61	20.18	19.45	-	-
Asset-7	187.44	144.83	144.83	4.57	4.57	38.03	-



30. The IDC on cash basis has been worked out based on the loans deployed for the instant assets as per Form-9C assuming that the petitioner has not made any default in the payment of interest. Thus, the amount of IDC accrued as on COD and being discharged after COD has been considered in the capital cost during 2014-15, over and above the additional capital expenditure claimed for instant assets. However, amount of ₹38.03 lakh, being balance accrued IDC, in case of Asset-7 has not been considered presently, as additional capital expenditure during 2015-16, has been claimed by the petitioner on projected basis. The un-discharged liability pertaining to IDC, in case of Asset-7 would be considered once it is paid, subject to submission of adequate information and prudence check at the time of truing-up. The petitioner is directed to submit detailed working of capital expenditure duly certified by the Auditors at the time of truing-up.

31. Further, there is a difference in the gross loan claimed as on COD, as per Form-9C and the gross loan considered for the IDC calculation, as submitted vide affidavit dated 27.5.2016 for instant assets. We have considered, gross loan as per Form-9C for the IDC calculation purpose as it indicates the actual loan deployed for instant asset. Therefore, the petitioner is directed to reconcile the gross loan for the calculation of weighted average Rate of Interest and for the calculation of IDC, which would be subject to review at the time of truing-up.

32. The petitioner has claimed Incidental Expenditure During Construction (IEDC) for the instant assets but has not submitted year-wise details in respect of its



claim. Instead, the petitioner has submitted that the entire IEDC claimed has been discharged as on COD in case of all the instant assets. Further, the maximum allowable IEDC limit being applied in most of the petitions is 10.75% of the Hard cost. However, in the instant petition, IEDC limit of 5% has been indicated in the abstract cost estimate submitted by the petitioner. Therefore, 5% of the Hard cost is the allowable limit and the claimed IEDC is allowed in this order in case of instant assets, as the claimed IEDC is within the percentage of 5% on Hard cost. Thus, the details of IEDC for computing tariff, subject to review at the time of truing-up, on submission of year-wise disbursement details and cost data by the petitioner, in this order are as under:-

(₹ in lakh)

Particulars	IEDC as on COD	
	Claimed	Allowed
Asset-1	52.75	52.75
Asset-2	36.30	36.30
Asset-3	25.69	25.69
Asset-4	52.91	52.91
Asset-5	52.92	52.92
Asset-6	25.74	25.74
Asset-7	72.21	72.21

Initial Spares

33. Regulation 13 of the 2014 Tariff Regulations specifies ceiling norms for capitalization of initial spares in respect of transmission system as under:-

“13. Initial Spares

Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:

(d) Transmission system

(i) Transmission line - 1.00%



- (ii) Transmission Sub-station (Green Field) - 4.00%
- (iii) Transmission Sub-station (Brown Field) - 6.00%
- (iv) Series Compensation devices and HVDC Station - 4.00%
- (v) Gas Insulated Sub-station (GIS)-5.00%
- (vi) Communication system-3.5%

Provided that:

(i) where the benchmark norms for initial spares have been published as part of the benchmark norms for capital cost by the Commission, such norms shall apply to the exclusion of the norms specified above:

(ii) -----

(iii) Once the transmission project is commissioned, the cost of initial spares shall be restricted on the basis of plant and machinery cost corresponding to the transmission project at the time of truing up:

(iv) for the purpose of computing the cost of initial spares, plant and machinery cost shall be considered as project cost as on cut-off date excluding IDC, IEDC, Land Cost and cost of civil works. The transmission licensee shall submit the breakup of head wise IDC & IEDC in its tariff application.”

34. The petitioner has submitted Auditors' Certificates dated 29.7.2015, vide affidavit dated 27.5.2016 in support of its claim of initial spares for the instant assets. In these certificates, the projected capital costs have been indicated up to 31.3.2016 for the instant assets. However, none of the Auditors' Certificates indicate any add-cap during 2016-17 for any of the asset, whereas, the petitioner, vide affidavit dated 27.5.2016 (Page no. 11) has submitted the amount of initial spares discharged as on COD and projected to be discharged during 2016-17, for instant assets. Therefore, the petitioner is directed to submit and clarify, if there is any projected add-cap during 2016-17, which includes the initial spares claimed, for instant assets.



35. The permissible limit of initial spares for Gas Insulated Sub-station is 5% as per Regulation 13 of the 2014 Tariff Regulations. Initial spares claimed in respect of the instant transmission assets, except Asset-2 and Asset-6, are within their permitted ceiling limits as specified in the above mentioned Regulations and thus considered for the purpose of tariff in this order.

36. Accordingly, excess initial spares in the case of Asset-2 and Asset-6 have been worked out as under:-

(₹ in lakh)					
Particulars	Capital cost up to available cut-off date	Claimed Initial spares as on available cut-off date	Ceiling limit	Initial spares worked out/ allowed	Excess Initial spares
Asset-2	1499.99	121.24	5.00%	72.57	48.67
Asset-6	1060.84	62.46	5.00%	52.55	9.91

37. As discussed above, in view of difference between the Auditors' certificates dated 29.7.2015 and affidavit dated 27.5.2016, in case of instant assets, we have worked out initial spares, considering the expenditure upto available cut-off date i.e. expenditure up to 2015-16 for instant assets. Thus, the initial spares allowed in this order are subject to review at the time of truing-up, on the submission of the relevant year-wise breakup of the initial spares claimed.

Capital cost as on COD

38. The details of capital cost considered as on COD after adjusting/allowing the claim of IDC, IEDC and initial spares is as follows:-



(₹ in lakh)

Particulars	Capital cost as on COD claimed	Less: IDC & IEDC claimed	Add: allowed		As on COD	
			IDC on cash basis	IEDC	Less: Excess initial spares	Capital cost considered for tariff
Asset-1	2006.57	157.86	64.47	52.75	-	1965.93
Asset-2	1377.46	105.21	38.31	36.30	48.67	1298.19
Asset-3	1012.56	75.28	30.01	25.69	-	992.98
Asset-4	2015.34	163.74	51.72	52.91	-	1956.23
Asset-5	2015.91	164.32	63.60	52.92	-	1968.11
Asset-6	974.07	77.53	31.61	25.74	9.91	943.98
Asset-7	2722.54	259.65	144.83	72.21	-	2679.93

Additional Capitalisation and De-capitalisation

39. Clause (1) of Regulation 14 of the 2014 Tariff Regulations provides as under:-

“ (1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

- (i) Undischarged liabilities recognised to be payable at a future date;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (v) Change in Law or compliance of any existing law:”

Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff.

40. Clause (13) of Regulation 3 of the 2014 Tariff Regulations defines “cut-off” date as under:

“cut-off date” means 31st March of the year closing after two years of the year of commercial operation of whole or part of the project, and in case the whole or part of the project is declared under commercial operation in the last quarter of the year,



the cut-off date shall be 31st March of the year closing after three years of the year of commercial operation”.

41. The cut-off date in the case of instant transmission assets is 31.3.2017.
42. The additional capital expenditure incurred or projected to be incurred and claimed by the petitioner in respect of the instant transmission assets is within the cut-off date and is on account of balance payments and it is allowed. Further, the balance accrued IDC as on COD for instant assets has been added over and above the add-cap claimed for respective asset in 2014-15. Thus, the additional capital expenditure claimed in respect of the instant transmission assets is allowed. The details of additional capital expenditure allowed are as under:-

(₹ in lakh)

Particulars	Capital Cost allowed as on COD	Revised additional capitalisation for 2014-15	Additional capitalisation for 2015-16	Total estimated completion cost up to 31.3.2016
Asset-1	1965.93	148.86	163.44	2278.23
Asset-2	1298.19	96.91	160.76	1555.86
Asset-3	992.98	23.90	5.00	1021.88
Asset-4	1956.23	165.59	163.46	2285.28
Asset-5	1968.11	153.29	163.46	2284.86
Asset-6	943.98	67.07	117.41	1127.73
Asset-7	2679.93	65.05	534.24*	3279.22

*The amount of add-cap has been reduced to restrict the completion cost to approved apportioned cost of Asset-7.

Debt- Equity ratio

43. Clause 1 and 5 of Regulation 19 of the 2014 Tariff Regulations specifies as follows:-

“(1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the equity actually deployed



is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

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

ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

a. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt : equity ratio.

Explanation.-The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.”

“(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”

44. The capital cost on the dates of commercial operation arrived at as above and additional capitalization allowed have been considered in the normative debt-equity ratio of 70:30. The details of debt-equity as on dates of commercial operation and 31.3.2019 considered on normative basis are as follows:-

(₹ in lakh)				
Asset-1 Particulars	As on COD		As on 31.3.2019	
	Amount	% age	Amount	% age
Debt	1376.16	70.00	1594.77	70.00
Equity	589.77	30.00	683.46	30.00
Total	1965.93	100.00	2278.23	100.00
Asset-2 Particulars	As on COD		As on 31.3.2019	
	Amount	% age	Amount	% age
Debt	908.73	70.00	1089.10	70.00
Equity	389.46	30.00	466.76	30.00
Total	1298.19	100.00	1555.86	100.00



Asset-3	As on COD		As on 31.3.2019	
Particulars	Amount	% age	Amount	% age
Debt	695.09	70.00	715.32	70.00
Equity	297.90	30.00	306.57	30.00
Total	992.98	100.00	1021.88	100.00
Asset-4	As on COD		As on 31.3.2019	
Particulars	Amount	% age	Amount	% age
Debt	1369.36	70.00	1599.70	70.00
Equity	586.87	30.00	685.59	30.00
Total	1956.23	100.00	2285.28	100.00
Asset-5	As on COD		As on 31.3.2019	
Particulars	Amount	% age	Amount	% age
Debt	1377.68	70.00	1599.40	70.00
Equity	590.43	30.00	685.46	30.00
Total	1968.11	100.00	2284.86	100.00
Asset-6	As on COD		As on 31.3.2019	
Particulars	Amount	% age	Amount	% age
Debt	660.78	70.00	789.41	70.00
Equity	283.19	30.00	338.32	30.00
Total	943.98	100.00	1127.73	100.00
Asset-7	As on COD		As on 31.3.2019	
Particulars	Amount	% age	Amount	% age
Debt	1875.95	70.00	2295.46	70.00
Equity	803.98	30.00	983.76	30.00
Total	2679.93	100.00	3279.22	100.00

Return on equity

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

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

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system 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.”

46. The petitioner has submitted that RoE has been calculated 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 further 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.

47. 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.

48. 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. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return



on equity, which shall be tried up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the RoE allowed is as under:-

(₹ in lakh)

Particulars	Asset-1				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Equity	589.77	634.43	683.46	683.46	683.46
Addition due to Additional Capitalization	44.66	49.03	-	-	-
Closing Equity	634.43	683.46	683.46	683.46	683.46
Average Equity	612.10	658.94	683.46	683.46	683.46
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	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)	97.34	129.22	134.03	134.03	134.03
Particulars	Asset-2				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Equity	389.46	418.53	466.76	466.76	466.76
Addition due to Additional Capitalization	29.07	48.23	-	-	-
Closing Equity	418.53	466.76	466.76	466.76	466.76
Average Equity	403.99	442.64	466.76	466.76	466.76
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	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)	68.15	86.80	91.53	91.53	91.53
Particulars	Asset-3				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Equity	297.90	305.07	306.57	306.57	306.57
Addition due to Additional Capitalization	7.17	1.50	-	-	-
Closing Equity	305.07	306.57	306.57	306.57	306.57
Average Equity	301.48	305.82	306.57	306.57	306.57
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	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)	47.94	59.97	60.12	60.12	60.12
Particulars	Asset-4				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19



Opening Equity	586.87	636.55	685.59	685.59	685.59
Addition due to Additional Capitalization	49.68	49.04	-	-	-
Closing Equity	636.55	685.59	685.59	685.59	685.59
Average Equity	611.71	661.07	685.59	685.59	685.59
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	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)	90.38	129.63	134.44	134.44	134.44
Particulars	Asset-5				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Equity	590.43	636.42	685.46	685.46	685.46
Addition due to Additional Capitalization	45.99	49.04	-	-	-
Closing Equity	636.42	685.46	685.46	685.46	685.46
Average Equity	613.43	660.94	685.46	685.46	685.46
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	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)	89.64	129.61	134.42	134.42	134.42
Particulars	Asset-6				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Equity	283.19	303.10	338.32	338.32	338.32
Addition due to Additional Capitalization	19.90	35.22	-	-	-
Closing Equity	303.10	338.32	338.32	338.32	338.32
Average Equity	293.14	320.71	338.32	338.32	338.32
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	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)	45.99	62.89	66.34	66.34	66.34
Particulars	Asset-7				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Equity	803.98	823.49	983.76	983.76	983.76
Addition due to Additional Capitalization	19.52	160.27	-	-	-
Closing Equity	823.49	983.76	983.76	983.76	983.76
Average Equity	813.73	903.63	983.76	983.76	983.76
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	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)	66.45	177.20	192.92	192.92	192.92



Interest on loan

49. Regulation 26 of the 2014 Tariff Regulations are provides 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 decapitalization 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.”

50. The petitioner’s entitlement to interest on loan has been calculated as per the provisions of Regulation 26 of the 2014 Tariff Regulations as detailed below:-

(a) Gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual average loans have been considered as per the petition;



- (b) The repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that period;
- (c) Weighted average rate of interest on actual average loan worked out as per (a) above is applied on the notional average loan during the year to arrive at the interest on loan;
- (d) The rates of interest claimed by the petitioner in Form-9C are being considered for all loans except FC Bond. The rate of interest for FC Bond is considered as 3.875% as per loan agreement submitted by the petitioner vide affidavit dated 27.5.2016;
- (e) The exchange rates for Foreign loans have been considered as on COD for the respective asset, as submitted by the petitioner vide affidavit dated 27.5.2016; and
- (f) The repayment schedule for all foreign loans have been considered as per affidavit dated 18.9.2015 submitted by the petitioner.

51. The petitioner has submitted that the interest on loan has been considered on the basis of rate prevailing as on actual COD/1.4.2014 and the change in interest due to floating rate of interest applicable, if any, for the project needs to be claimed/adjusted over the tariff block 2014-19. We would like to clarify that the interest on loan 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. Further, as discussed at para-31, the petitioner is directed to submit reconciliation of the total



gross loan for calculation of weighted average rate of interest and of IDC, which would be subject to review, at the time of truing-up.

52. Detailed calculations in support of interest on loan have been calculated as given at Annexure I to Annexure VII of this order.

53. The details of Interest on Loan calculated are as under:-

(₹ in lakh)

Particulars	Asset-1				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	1376.16	1480.37	1594.77	1594.77	1594.77
Cumulative Repayment upto Previous Year	-	87.37	203.34	323.63	443.92
Net Loan-Opening	1376.16	1393.00	1391.43	1271.14	1150.85
Addition due to Additional Capitalisation	104.20	114.41	-	-	-
Repayment during the year	87.37	115.98	120.29	120.29	120.29
Net Loan-Closing	1393.00	1391.43	1271.14	1150.85	1030.56
Average Loan	1384.58	1392.22	1331.29	1211.00	1090.71
Weighted Average Rate of Interest on Loan	5.7629%	5.9162%	5.9728%	6.0370%	6.0228%
Interest on Loan	64.71	82.37	79.52	73.11	65.69
Particulars	Asset-2				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	908.73	976.57	1089.10	1089.10	1089.10
Cumulative Repayment upto Previous Year	-	61.17	139.07	221.22	303.37
Net Loan-Opening	908.73	915.40	950.03	867.88	785.73
Addition due to Additional Capitalisation	67.84	112.53	-	-	-
Repayment during the year	61.17	77.91	82.15	82.15	82.15
Net Loan-Closing	915.40	950.03	867.88	785.73	703.58
Average Loan	912.06	932.71	908.95	826.80	744.65
Weighted Average Rate of Interest on Loan	6.4870%	6.5740%	6.5696%	6.5994%	6.5357%
Interest on Loan	50.90	61.32	59.71	54.56	48.67
Particulars	Asset-3				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	695.09	711.82	715.32	715.32	715.32
Cumulative Repayment upto Previous Year	-	43.03	96.85	150.81	204.76
Net Loan-Opening	695.09	668.79	618.47	564.51	510.55
Addition due to Additional Capitalisation	16.73	3.50	-	-	-



Repayment during the year	43.03	53.82	53.96	53.96	53.96
Net Loan-Closing	668.79	618.47	564.51	510.55	456.60
Average Loan	681.94	643.63	591.49	537.53	483.58
Weighted Average Rate of Interest on Loan	5.7077%	5.7420%	5.7338%	5.7616%	5.6801%
Interest on Loan	31.56	36.96	33.91	30.97	27.47
Particulars	Asset-4				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	1369.36	1485.27	1599.70	1599.70	1599.70
Cumulative Repayment upto Previous Year	-	81.11	197.46	318.12	438.79
Net Loan-Opening	1369.36	1404.16	1402.24	1281.57	1160.91
Addition due to Additional Capitalisation	115.91	114.42	-	-	-
Repayment during the year	81.11	116.35	120.66	120.66	120.66
Net Loan-Closing	1404.16	1402.24	1281.57	1160.91	1040.25
Average Loan	1386.76	1403.20	1341.91	1221.24	1100.58
Weighted Average Rate of Interest on Loan	7.0729%	7.1508%	7.1484%	7.1759%	7.1179%
Interest on Loan	73.90	100.34	95.93	87.63	78.34
Particulars	Asset-5				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	1377.68	1484.98	1599.40	1599.40	1599.40
Cumulative Repayment upto Previous Year	-	80.45	196.78	317.42	438.06
Net Loan-Opening	1377.68	1404.52	1402.62	1281.98	1161.34
Addition due to Additional Capitalisation	107.30	114.42	-	-	-
Repayment during the year	80.45	116.33	120.64	120.64	120.64
Net Loan-Closing	1404.52	1402.62	1281.98	1161.34	1040.70
Average Loan	1391.10	1403.57	1342.30	1221.66	1101.02
Weighted Average Rate of Interest on Loan	6.8005%	6.8842%	6.8790%	6.9025%	6.8526%
Interest on Loan	70.50	96.62	92.34	84.32	75.45
Particulars	Asset-6				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	660.78	707.22	789.41	789.41	789.41
Cumulative Repayment upto Previous Year	-	41.27	97.72	157.26	216.81
Net Loan-Opening	660.78	665.95	691.69	632.15	572.60
Addition due to Additional Capitalisation	46.44	82.19	-	-	-
Repayment during the year	41.27	56.44	59.54	59.54	59.54
Net Loan-Closing	665.95	691.69	632.15	572.60	513.06
Average Loan	663.37	678.82	661.92	602.37	542.83
Weighted Average Rate of Interest on Loan	5.6330%	5.7346%	5.7242%	5.7487%	5.6889%
Interest on Loan	29.89	38.93	37.89	34.63	30.88
Particulars	Asset-7				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	1875.95	1921.49	2295.46	2295.46	2295.46
Cumulative Repayment upto Previous Year	-	59.64	218.68	391.82	564.97



Net Loan-Opening	1875.95	1861.85	2076.78	1903.63	1730.49
Addition due to Additional Capitalisation	45.54	373.97	-	-	-
Repayment during the year	59.64	159.04	173.14	173.14	173.14
Net Loan-Closing	1861.85	2076.78	1903.63	1730.49	1557.35
Average Loan	1868.90	1969.31	1990.20	1817.06	1643.92
Weighted Average Rate of Interest on Loan	7.2167%	7.2380%	7.2345%	7.2568%	7.2144%
Interest on Loan	56.17	142.54	143.98	131.86	118.60

Depreciation

54. 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.”

55. The petitioner has claimed actual depreciation as a component of annual fixed charges. In our calculations, depreciation has been calculated in accordance with Regulation 27 of the 2014 Tariff Regulations extracted above.

56. The instant transmission assets were put under commercial operation during 2014-15. Accordingly, they will complete 12 years after 2018-19. As such, depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-II to the 2014 Tariff Regulations.

57. The details of the depreciation worked out are as follows:-



(₹ in lakh)

Particulars	Asset-1				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Block as on COD	1965.93	2114.79	2278.23	2278.23	2278.23
Addition during 2014-19 due to Projected Additional Capitalisation	148.86	163.44	-	-	-
Gross Block as on 31 st March	2114.79	2278.23	2278.23	2278.23	2278.23
Average Gross Block	2040.36	2196.51	2278.23	2278.23	2278.23
Rate of Depreciation	5.2800%	5.2800%	5.2800%	5.2800%	5.2800%
Depreciable Value	1836.33	1976.86	2050.41	2050.41	2050.41
Remaining Depreciable Value	1836.33	1889.50	1847.07	1726.78	1606.49
Depreciation	87.37	115.98	120.29	120.29	120.29
Particulars	Asset-2				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Block as on COD	1298.19	1395.10	1555.86	1555.86	1555.86
Addition during 2014-19 due to Projected Additional Capitalisation	96.91	160.76	-	-	-
Gross Block as on 31 st March	1395.10	1555.86	1555.86	1555.86	1555.86
Average Gross Block	1346.64	1475.48	1555.86	1555.86	1555.86
Rate of Depreciation	5.2800%	5.2800%	5.2800%	5.2800%	5.2800%
Depreciable Value	1211.98	1327.93	1400.27	1400.27	1400.27
Remaining Depreciable Value	1211.98	1266.76	1261.20	1179.05	1096.90
Depreciation	61.17	77.91	82.15	82.15	82.15
Particulars	Asset-3				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Block as on COD	992.98	1016.88	1021.88	1021.88	1021.88
Addition during 2014-19 due to Projected Additional Capitalisation	23.90	5.00	-	-	-
Gross Block as on 31 st March	1016.88	1021.88	1021.88	1021.88	1021.88
Average Gross Block	1004.93	1019.38	1021.88	1021.88	1021.88
Rate of Depreciation	5.2800%	5.2800%	5.2800%	5.2800%	5.2800%
Depreciable Value	904.44	917.45	919.70	919.70	919.70
Remaining Depreciable Value	904.44	874.42	822.84	768.89	714.93
Depreciation	43.03	53.82	53.96	53.96	53.96
Particulars	Asset-4				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Block as on COD	1956.23	2121.82	2285.28	2285.28	2285.28
Addition during 2014-19 due to Projected Additional Capitalisation	165.59	163.46	-	-	-



Gross Block as on 31 st March	2121.82	2285.28	2285.28	2285.28	2285.28
Average Gross Block	2039.03	2203.55	2285.28	2285.28	2285.28
Rate of Depreciation	5.2800%	5.2800%	5.2800%	5.2800%	5.2800%
Depreciable Value	1835.12	1983.20	2056.76	2056.76	2056.76
Remaining Depreciable Value	1835.12	1902.08	1859.29	1738.63	1617.97
Depreciation	81.11	116.35	120.66	120.66	120.66
Particulars	Asset-5				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Block as on COD	1968.11	2121.40	2284.86	2284.86	2284.86
Addition during 2014-19 due to Projected Additional Capitalisation	153.29	163.46	-	-	-
Gross Block as on 31 st March	2121.40	2284.86	2284.86	2284.86	2284.86
Average Gross Block	2044.75	2203.13	2284.86	2284.86	2284.86
Rate of Depreciation	5.2800%	5.2800%	5.2800%	5.2800%	5.2800%
Depreciable Value	1840.28	1982.82	2056.38	2056.38	2056.38
Remaining Depreciable Value	1840.28	1902.36	1859.60	1738.95	1618.31
Depreciation	80.45	116.33	120.64	120.64	120.64
Particulars	Asset-6				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Block as on COD	943.98	1010.32	1127.73	1127.73	1127.73
Addition during 2014-19 due to Projected Additional Capitalisation	66.34	117.41	-	-	-
Gross Block as on 31 st March	1010.32	1127.73	1127.73	1127.73	1127.73
Average Gross Block	977.15	1069.02	1127.73	1127.73	1127.73
Rate of Depreciation	5.28%	5.28%	5.28%	5.28%	5.28%
Depreciable Value	879.43	962.12	1014.96	1014.96	1014.96
Remaining Depreciable Value	879.43	920.85	917.24	857.69	798.15
Depreciation	41.27	56.44	59.54	59.54	59.54
Particulars	Asset-7				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Block as on COD	2679.93	2744.98	3279.22	3279.22	3279.22
Addition during 2014-19 due to Projected Additional Capitalisation	65.05	534.24	-	-	-
Gross Block as on 31 st March	2744.98	3279.22	3279.22	3279.22	3279.22
Average Gross Block	2712.46	3012.10	3279.22	3279.22	3279.22
Rate of Depreciation	5.2800%	5.2800%	5.2800%	5.2800%	5.2800%
Depreciable Value	2441.21	2710.89	2951.30	2951.30	2951.30
Remaining Depreciable Value	2441.21	2651.25	2732.62	2559.47	2386.33
Depreciation	59.64	159.04	173.14	173.14	173.14



Operation & maintenance expenses (O&M Expenses)

58. Regulation 29(4) (a) of the 2014 Tariff Regulations specifies the norms for operation and maintenance expenses for the transmission system based on the type of sub-station and the transmission line. Norms specified in respect of the elements covered in the instant petition are as under:-

Elements	2014-15	2015-16	2016-17	2017-18	2018-19
400 kV GIS (₹ lakh per GIS)	51.54	53.25	55.02	56.84	58.73
220 kV bay (₹ lakh per bay)	42.21	43.61	45.06	46.55	48.10
132 kV bay (₹ lakh per bay)	30.15	31.15	32.18	33.25	34.36
Double Circuit (Bundled conductor with four or more sub-conductor) (₹ lakh per km)	1.062	1.097	1.133	1.171	1.210
Double Circuit (Twin & Triple conductor) (₹ lakh per km)	0.707	0.731	0.755	0.780	0.806

59. The petitioner has computed normative O&M Expenses as per sub-clause (a) of clause (4) of Regulation 29 of the 2014 Tariff Regulations. Accordingly, the petitioner's entitlement to O&M Expenses has been worked out. The allowable O&M Expenses for the instant transmission assets are as under:-

Particulars	(₹ in lakh)				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Asset-1					
1 no. 400 kV GIS	41.80	53.25	55.02	56.84	58.73
1 no. 220 kV bay	34.23	43.61	45.06	46.55	48.10
Total	76.03	96.86	100.08	103.39	106.83
Asset-2					
1 no. 220 kV bay	36.31	43.61	45.06	46.55	48.10
2 no. 132 kV bay	51.87	62.30	64.36	66.50	68.72
Total	88.18	105.91	109.42	113.05	116.82
Asset-3					
1 no. 400 kV GIS	41.79	53.25	55.02	56.84	58.73
Total	41.79	53.25	55.02	56.84	58.73
Asset-4					



1 no. 400 kV GIS	38.83	53.25	55.02	56.84	58.73
1 no. 220 kV bay	31.80	43.61	45.06	46.55	48.10
Total	70.63	96.86	100.08	103.39	106.83
Asset-5					
1 no. 400 kV GIS	38.40	53.25	55.02	56.84	58.73
1 no. 220 kV bay	31.46	43.61	45.06	46.55	48.10
Total	69.86	96.86	100.08	103.39	106.83
Asset-6					
1 no. 220 kV bay	33.76	43.61	45.06	46.55	48.10
1 no. 132 kV bay	24.12	31.15	32.18	33.25	34.36
Total	57.88	74.76	77.24	79.80	82.46
Asset-7					
2.298 km 400 kV D/C TL	0.68	1.679	1.734	1.792	1.852
1.569 km 400 kV TL	0.69	1.721	1.777	1.837	1.898
2 nos. 400 kV GIS	42.92	106.500	110.040	113.680	117.460
Total	44.29	109.900	113.550	117.310	121.210

60. The petitioner has submitted that O&M Expenses for the tariff period 2014-19 had been arrived at on the basis of normalized actual O&M Expenses during the period 2008-09 to 2012-13. The petitioner has further submitted that the wage revision of the employees is due during 2014-19 and actual impact of wage hike effective from a future date has not been factored in fixation of the normative O&M rates specified for the tariff block 2014-19. The petitioner has submitted that it would approach the Commission for suitable revision in norms for O&M Expenses for claiming the impact of wage hike during 2014-19, if any.

61. The O&M Expenses have been worked out as per the norms of O&M Expenses specified in the 2014 Tariff Regulations. As regards impact of wage revision, any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.



Interest on working capital

62. 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:

(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;”

63. 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 determined is as under:-

Particulars	Asset-1				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	14.06	14.53	15.01	15.51	16.02
O & M expenses	7.81	8.07	8.34	8.62	8.90
Receivables	68.93	72.89	74.52	74.01	73.35
Total	90.80	95.49	97.87	98.13	98.28

(₹ in lakh)



Interest Rate	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	9.94	12.89	13.21	13.25	13.27
Particulars	Asset-2				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	15.38	15.89	16.41	16.96	17.52
O & M expenses	8.54	8.83	9.12	9.42	9.74
Receivables	53.75	57.16	59.04	58.80	58.46
Total	77.66	81.88	84.57	85.18	85.71
Interest Rate	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	9.02	11.05	11.42	11.50	11.57
Particulars	Asset-3				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	7.73	7.99	8.25	8.53	8.81
O & M expenses	4.29	4.44	4.59	4.74	4.89
Receivables	34.83	35.07	34.91	34.73	34.46
Total	46.85	47.49	47.75	47.99	48.17
Interest Rate	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	5.13	6.41	6.45	6.48	6.50
Particulars	Asset-4				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	14.06	14.53	15.01	15.51	16.02
O & M expenses	7.81	8.07	8.34	8.62	8.90
Receivables	72.02	76.08	77.45	76.62	75.64
Total	93.89	98.68	100.81	100.75	100.57
Interest Rate	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	9.55	13.32	13.61	13.60	13.58
Particulars	Asset-5				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	14.06	14.53	15.01	15.51	16.02
O & M expenses	7.81	8.07	8.34	8.62	8.90
Receivables	71.54	75.44	76.83	76.05	75.14
Total	93.41	98.04	100.19	100.17	100.07
Interest Rate	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	9.40	13.24	13.53	13.52	13.51
Particulars	Asset-6				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	10.85	11.21	11.59	11.97	12.37
O & M expenses	6.03	6.23	6.44	6.65	6.87
Receivables	37.69	40.13	41.51	41.40	41.23
Total	54.58	57.58	59.53	60.02	60.47
Interest Rate	13.50%	13.50%	13.50%	13.50%	13.50%



Interest	5.89	7.77	8.04	8.10	8.16
Particulars	Asset-7				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	15.95	16.49	17.03	17.60	18.18
O & M expenses	8.86	9.16	9.46	9.78	10.10
Receivables	93.33	100.96	106.93	105.53	103.95
Total	118.14	126.61	133.43	132.90	132.24
Interest Rate	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	6.64	17.09	18.01	17.94	17.85

Transmission charges

64. The transmission charges allowed for the instant transmission assets are summarized as under:-

(₹ in lakh)

Particulars	Asset-1				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	87.37	115.98	120.29	120.29	120.29
Interest on Loan	64.71	82.37	79.52	73.11	65.69
Return on Equity	97.34	129.22	134.03	134.03	134.03
Interest on Working Capital	9.94	12.89	13.21	13.25	13.27
O & M Expenses	76.03	96.86	100.08	103.39	106.83
Total	335.39	437.31	447.13	444.06	440.11
Particulars	Asset-2				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	61.17	77.91	82.15	82.15	82.15
Interest on Loan	50.90	61.32	59.71	54.56	48.67
Return on Equity	68.15	86.80	91.53	91.53	91.53
Interest on Working Capital	9.02	11.05	11.42	11.50	11.57
O & M Expenses	88.18	105.91	109.42	113.05	116.82
Total	277.42	342.99	354.23	352.79	350.74
Particulars	Asset-3				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	43.03	53.82	53.96	53.96	53.96
Interest on Loan	31.56	36.96	33.91	30.97	27.47
Return on Equity	47.94	59.97	60.12	60.12	60.12
Interest on Working Capital	5.13	6.41	6.45	6.48	6.50
O & M Expenses	41.79	53.25	55.02	56.84	58.73
Total	169.46	210.41	209.45	208.36	206.77



Particulars	Asset-4				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	81.11	116.35	120.66	120.66	120.66
Interest on Loan	73.90	100.34	95.93	87.63	78.34
Return on Equity	90.38	129.63	134.44	134.44	134.44
Interest on Working Capital	9.55	13.32	13.61	13.60	13.58
O & M Expenses	70.63	96.86	100.08	103.39	106.83
Total	325.57	456.51	464.72	459.73	453.85
Particulars	Asset-5				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	80.45	116.33	120.64	120.64	120.64
Interest on Loan	70.50	96.62	92.34	84.32	75.45
Return on Equity	89.64	129.61	134.42	134.42	134.42
Interest on Working Capital	9.40	13.24	13.53	13.52	13.51
O & M Expenses	69.86	96.86	100.08	103.39	106.83
Total	319.85	452.66	461.00	456.30	450.85
Particulars	Asset-6				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	41.27	56.44	59.54	59.54	59.54
Interest on Loan	29.89	38.93	37.89	34.63	30.88
Return on Equity	45.99	62.89	66.34	66.34	66.34
Interest on Working Capital	5.89	7.77	8.04	8.10	8.16
O & M Expenses	57.88	74.76	77.24	79.80	82.46
Total	180.93	240.80	249.05	248.42	247.39
Particulars	Asset-7				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	59.64	159.04	173.14	173.14	173.14
Interest on Loan	56.17	142.54	143.98	131.86	118.60
Return on Equity	66.45	177.20	192.92	192.92	192.92
Interest on Working Capital	6.64	17.09	18.01	17.94	17.85
O & M Expenses	44.29	109.90	113.55	117.31	121.21
Total	233.19	605.77	641.60	633.17	623.72

65. 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 filing fees, license fee RLDC fees and charges 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 and the petitioner can make claims as per the prevailing regulations. We would like to clarify that we have allowed transmission tariff as per the 2014 Tariff Regulations.

Filing Fee and the Publication Expenses

66. 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

67. 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.

Service Tax

68. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if service tax on transmission is withdrawn from negative list at any time in future. The petitioner has



further prayed that if any taxes and duties including cess etc. are imposed by any statutory/Government/municipal authorities, it shall be allowed to be recovered from the beneficiaries. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

Deferred Tax Liability

69. The petitioner has sought recovery of deferred tax liability accrued before 1.4.2009 from the beneficiaries or long term consumers/DICs as and when materialized under Regulation 49 of the 2014 Tariff Regulations. However, the instant assets were commissioned during 2014-15 and hence the petitioner's prayer is infructuous.

Sharing of Transmission Charges

70. The Commission vide RoP dated 15.4.2015 directed the petitioner to submit status of generating station for which the transmission assets covered in the instant petition were planned. In response, the petitioner vide affidavit dated 12.10.2015 has submitted the matching of commissioning of transmission lines with the generators, the status is as below:-

Srl. No.	Generator	Commissioning schedule	Revised status as per JCC meeting					
			1st (20.10.10)	2nd (4.3.2011)	3rd (27.5.2011)	4th (30.1.2015)	5th (21.1.2015)	6th (26.5.2015)
1.		BPTA						
2.	Teesta-III	August, 2011	December, 2011	February, 2012	December, 2011	June, 2013	December, 2015- May-16	April, 2016 to July, 2016
3.	Lanco energy Pvt. Ltd	November, 2011	-do-	June, 2012	November, 2013	November, 2014	April 16	April, 2018
4.	Dans energy Co. Ltd	April, 2012	June, 2012	June, 2012	December, 2012	December, 2012	October, 2014	July, 2015
5.	Jal Power Co. Ltd	June 2013	June, 2013	June, 2013	June, 2013	June, 2013	June, 2016	November, to



								December, 2017
6.	MBPC Ltd	September, 2014	-do-	September 2014	June, 2014	May, 2014	June, 18 to July, 18	June, 2018 to July, 2018
7.	Gati Infra Ltd (chuzachen)	September, 2010	March, 2011	-do-	October, 2011	May, 2013	Commissioned on May 2013	
8.	Gati Infra Bhasmey Power Ltd	June, 2012	-do-	-do-	June, 2013	June, 2013	December, 2017	December, 2017

71. The petitioner has submitted the status of generator as informed by generation developers in the 7th JCC meeting held on 6.10.2015 and is as under:-

S. No.	Generation Project	Commissioning schedule as per 7 th JCC meeting
1	Teesta-III	U-1: December, 2016, U 2-6: Progressively by March, 2017
2	Teesta-V	April, 2018
3	Jorethang (Dans Energy co. Ltd.)	U 1 and 2: September, 2015 (commissioned)
4	Rangit-IV	U 1 May, 2018, U2 and 3: June, 2018
5	Rongnichu	U 1 June, 2018, U 2 July, 2018 (As per 6 th JCC)-Developer not attend 7 th JCC
6	Chuzachen	U1&2: commissioned
7	Bhasmey	U-1-February, 2018, U2:March, 2018

72. It is further observed that the award of supply for sub-station, transformer and transmission line related to the transmission system at Rangpo 400/220/132 kV GIS Sub-station were placed on 24.3.2011, 8.9.2011 and 3.10.2011 respectively.

73. It was recorded in SCM that charges for Part "B" of the scheme covered in the instant petition shall be initially borne by generation developers and accordingly the petitioner was directed to clarify the same as no mention about the same was made in the petition. In response, the petitioner vide affidavit dated 12.10.2015 has submitted that at the time of signing the LTA agreement, the sharing of transmission



charges was based on the postage stamp method. However, currently the sharing of transmission charges is applicable as per POC mechanism. Therefore, the transmission charges for the instant assets shall be as per PoC mechanism and governed by "2010 Sharing Regulations". The petitioner has further submitted that, while granting regulatory approval, in order dated 31.5.2010 in Petition No. 233/2009, the Commission held that the transmission charges and its sharing by the constituents will be determined in accordance with the applicable regulations and accordingly the sharing of transmission charges should be as per 2010 Sharing Regulations.

74. We have considered the submissions of the petitioner. 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.

75. This order disposes of Petition No. 118/TT/2014.

sd/-
(M.K. Iyer)
Member

sd/-
(A.S. Bakshi)
Member

sd/-
(A.K. Singhal)
Member

sd/-
(Gireesh B Pradhan)
Chairperson



Annexure-I

(₹ 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 XL					
	Gross loan opening	150.00	150.00	150.00	150.00	150.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	12.50	25.00
	Net Loan-Opening	150.00	150.00	150.00	137.50	125.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	12.50	12.50	12.50
	Net Loan-Closing	150.00	150.00	137.50	125.00	112.50
	Average Loan	150.00	150.00	143.75	131.25	118.75
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	13.95	13.95	13.37	12.21	11.04
	Rep Schedule	12 annual instalments from 28.06.2016				
2	Bond XLII					
	Gross loan opening	36.35	36.35	36.35	36.35	36.35
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	36.35	36.35	36.35	36.35	36.35
	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	36.35	36.35	36.35	36.35	36.35
	Average Loan	36.35	36.35	36.35	36.35	36.35
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	3.20	3.20	3.20	3.20	3.20
	Rep Schedule	13.3.2023 Bullet Payment				
3	Bond XLIV					
	Gross loan opening	279.67	279.67	279.67	279.67	279.67
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	279.67	279.67	279.67	279.67	279.67
	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	93.22
	Net Loan-Closing	279.67	279.67	279.67	279.67	186.45
	Average Loan	279.67	279.67	279.67	279.67	233.06
	Rate of Interest	8.70%	8.70%	8.70%	8.70%	8.70%
	Interest	24.33	24.33	24.33	24.33	20.28
	Rep Schedule	3 equal annual instalments 15.7.2018, 15.7.2023, 15.7.2028				
4	Bond XLIV-Add-cap 2014-15					
	Gross loan opening	0.00	27.63	27.63	27.63	27.63
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00



	Net Loan-Opening	0.00	27.63	27.63	27.63	27.63
	Additions during the year	27.63	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	9.21
	Net Loan-Closing	27.63	27.63	27.63	27.63	18.42
	Average Loan	13.82	27.63	27.63	27.63	23.03
	Rate of Interest	8.70%	8.70%	8.70%	8.70%	8.70%
	Interest	1.20	2.40	2.40	2.40	2.00
	Rep Schedule	3 equal annual instalments 15.7.2018, 15.7.2023, 15.7.2028				
5	Bond XLIII					
	Gross loan opening	144.42	144.42	144.42	144.42	144.42
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	12.04
	Net Loan-Opening	144.42	144.42	144.42	144.42	132.39
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	12.04	12.04
	Net Loan-Closing	144.42	144.42	144.42	132.39	120.35
	Average Loan	144.42	144.42	144.42	138.40	126.37
	Rate of Interest	7.93%	7.93%	7.93%	7.93%	7.93%
	Interest	11.45	11.45	11.45	10.98	10.02
	Rep Schedule	12 annual instalments from 20.5.2017				
6	Bond XLVI – Add-Cap for 2014-15					
	Gross loan opening	0.00	76.57	76.57	76.57	76.57
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	76.57	76.57	76.57	76.57
	Additions during the year	76.57	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	76.57	76.57	76.57	76.57	76.57
	Average Loan	38.29	76.57	76.57	76.57	76.57
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	3.56	7.12	7.12	7.12	7.12
	Rep Schedule	Redeemable at par in 3 equal instalments on 04.09.2019, 04.09.2024 & 04.09.2029				
7	IFC - A Loan					
	Gross loan opening	620.50	620.50	620.50	620.50	620.50
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	62.05
	Net Loan-Opening	620.50	620.50	620.50	620.50	558.45
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	62.05	62.05
	Net Loan-Closing	620.50	620.50	620.50	558.45	496.40
	Average Loan	620.50	620.50	620.50	589.48	527.43
	Rate of Interest	3.23%	3.23%	3.23%	3.23%	3.23%
	Interest	20.06	20.06	20.06	19.06	17.05



	Rep Schedule	20 Half yearly equal instalments from 15.09.2017				
8	IFC - B Loan					
	Gross loan opening	57.83	57.83	57.83	57.83	57.83
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	28.92	57.83	57.83
	Net Loan-Opening	57.83	57.83	28.92	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	28.92	28.92	0.00	0.00
	Net Loan-Closing	57.83	28.92	0.00	0.00	0.00
	Average Loan	57.83	43.37	14.46	0.00	0.00
	Rate of Interest	2.38%	2.38%	2.38%	2.38%	2.38%
	Interest	1.38	1.03	0.34	0.00	0.00
	Rep Schedule	4 Half yearly equal instalments from 15.9.2015				
9	ICFF Loan					
	Gross loan opening	30.38	30.38	30.38	30.38	30.38
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	3.04
	Net Loan-Opening	30.38	30.38	30.38	30.38	27.34
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	3.04	3.04
	Net Loan-Closing	30.38	30.38	30.38	27.34	24.30
	Average Loan	30.38	30.38	30.38	28.86	25.82
	Rate of Interest	3.23%	3.23%	3.23%	3.23%	3.23%
	Interest	0.98	0.98	0.98	0.93	0.83
	Rep Schedule	20 Half yearly equal instalments from 15.09.2017				
10	FC Bond					
	Gross loan opening	57.83	57.83	57.83	57.83	57.83
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	57.83	57.83	57.83	57.83	57.83
	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	57.83	57.83	57.83	57.83	57.83
	Average Loan	57.83	57.83	57.83	57.83	57.83
	Rate of Interest	3.875%	3.875%	3.875%	3.875%	3.875%
	Interest	2.24	2.24	2.24	2.24	2.24
	Rep Schedule	The Note matures on 17.01.2023				
	Total Loan					
	Gross loan opening	1376.98	1481.18	1481.18	1481.18	1481.18
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	28.92	70.33	159.95
	Net Loan-Opening	1376.98	1481.18	1452.27	1410.85	1321.23
	Additions during the year	104.20	0.00	0.00	0.00	0.00



	Repayment during the year	0.00	28.92	41.42	89.62	192.06
	Net Loan-Closing	1481.18	1452.27	1410.85	1321.23	1129.17
	Average Loan	1429.08	1466.72	1431.56	1366.04	1225.20
	Rate of Interest	5.7629%	5.9162%	5.9728%	6.0370%	6.0228%
	Interest	82.36	86.77	85.50	82.47	73.79



Annexure-II

(₹ 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 XXXIV					
	Gross loan opening	4.00	4.00	4.00	4.00	4.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.33	0.67	1.00	1.33
	Net Loan-Opening	4.00	3.67	3.33	3.00	2.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.33	0.33	0.33	0.33	0.33
	Net Loan-Closing	3.67	3.33	3.00	2.67	2.33
	Average Loan	3.83	3.50	3.17	2.83	2.50
	Rate of Interest	8.84%	8.84%	8.84%	8.84%	8.84%
	Interest	0.34	0.31	0.28	0.25	0.22
	Rep Schedule	12 annual instalments from 21.10.2014				
2	Bond XXXV					
	Gross loan opening	1.00	1.00	1.00	1.00	1.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.08	0.17	0.25
	Net Loan-Opening	1.00	1.00	0.92	0.83	0.75
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.08	0.08	0.08	0.08
	Net Loan-Closing	1.00	0.92	0.83	0.75	0.67
	Average Loan	1.00	0.96	0.88	0.79	0.71
	Rate of Interest	9.64%	9.64%	9.64%	9.64%	9.64%
	Interest	0.10	0.09	0.08	0.08	0.07
	Rep Schedule	12 annual instalments from 31.05.2015.				
3	Bond XXXVI					
	Gross loan opening	1.00	1.00	1.00	1.00	1.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.07	0.13
	Net Loan-Opening	1.00	1.00	1.00	0.93	0.87
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.07	0.07	0.07
	Net Loan-Closing	1.00	1.00	0.93	0.87	0.80
	Average Loan	1.00	1.00	0.97	0.90	0.83
	Rate of Interest	9.35%	9.35%	9.35%	9.35%	9.35%
	Interest	0.09	0.09	0.09	0.08	0.08
	Rep Schedule	15 annual instalments from 29.08.2016.				
4	Bond XXXVII					
	Gross loan opening	3.00	3.00	3.00	3.00	3.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.25	0.50	0.75
	Net Loan-Opening	3.00	3.00	2.75	2.50	2.25



	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.25	0.25	0.25	0.25
	Net Loan-Closing	3.00	2.75	2.50	2.25	2.00
	Average Loan	3.00	2.88	2.63	2.38	2.13
	Rate of Interest	9.25%	9.25%	9.25%	9.25%	9.25%
	Interest	0.28	0.27	0.24	0.22	0.20
	Rep Schedule	12 annual instalments from 26.12.2015				
5	Bond XXXIX					
	Gross loan opening	5.00	5.00	5.00	5.00	5.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	5.00	5.00	5.00	5.00	5.00
	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	5.00	5.00	5.00	5.00	5.00
	Average Loan	5.00	5.00	5.00	5.00	5.00
	Rate of Interest	9.40%	9.40%	9.40%	9.40%	9.40%
	Interest	0.47	0.47	0.47	0.47	0.47
	Rep Schedule	29.3.2027 Bullet Payment				
6	Bond XL					
	Gross loan opening	15.00	15.00	15.00	15.00	15.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	1.25	2.50
	Net Loan-Opening	15.00	15.00	15.00	13.75	12.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	1.25	1.25	1.25
	Net Loan-Closing	15.00	15.00	13.75	12.50	11.25
	Average Loan	15.00	15.00	14.38	13.13	11.88
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	1.40	1.40	1.34	1.22	1.10
	Rep Schedule	12 annual instalments from 28.06.2016				
7	SBI (21.03.2012)					
	Gross loan opening	6.00	6.00	6.00	6.00	6.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.54	1.09
	Net Loan-Opening	6.00	6.00	6.00	5.46	4.91
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.54	0.54	0.54
	Net Loan-Closing	6.00	6.00	5.46	4.91	4.37
	Average Loan	6.00	6.00	5.73	5.18	4.64
	Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
	Interest	0.62	0.62	0.59	0.53	0.48
	Rep Schedule	22 half yearly instalment from 31.08.2016				
8	Bond XLII					
	Gross loan opening	3.00	3.00	3.00	3.00	3.00



	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	3.00	3.00	3.00	3.00	3.00
	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	3.00	3.00	3.00	3.00	3.00
	Average Loan	3.00	3.00	3.00	3.00	3.00
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	0.26	0.26	0.26	0.26	0.26
	Rep Schedule	13.3.2023 Bullet Payment				
9	Bond XLIV					
	Gross loan opening	331.82	331.82	331.82	331.82	331.82
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	331.82	331.82	331.82	331.82	331.82
	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	110.61
	Net Loan-Closing	331.82	331.82	331.82	331.82	221.21
	Average Loan	331.82	331.82	331.82	331.82	276.52
	Rate of Interest	8.70%	8.70%	8.70%	8.70%	8.70%
	Interest	28.87	28.87	28.87	28.87	24.06
	Rep Schedule	3 equal annual instalments 15.7.2018, 15.7.2023, 15.7.2028				
10	Bond XLIV-Add-cap 2014-15					
	Gross loan opening	0.00	20.95	20.95	20.95	20.95
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	20.95	20.95	20.95	20.95
	Additions during the year	20.95	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	6.98
	Net Loan-Closing	20.95	20.95	20.95	20.95	13.97
	Average Loan	10.48	20.95	20.95	20.95	17.46
	Rate of Interest	8.70%	8.70%	8.70%	8.70%	8.70%
	Interest	0.91	1.82	1.82	1.82	1.52
	Rep Schedule	3 equal annual instalments 15.7.2018, 15.7.2023, 15.7.2028				
11	Bond XLIII					
	Gross loan opening	184.00	184.00	184.00	184.00	184.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	15.33
	Net Loan-Opening	184.00	184.00	184.00	184.00	168.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	15.33	15.33
	Net Loan-Closing	184.00	184.00	184.00	168.67	153.33
	Average Loan	184.00	184.00	184.00	176.33	161.00
	Rate of Interest	7.93%	7.93%	7.93%	7.93%	7.93%



	Interest	14.59	14.59	14.59	13.98	12.77
	Rep Schedule	12 annual instalments from 20.5.2017				
12	Bond XLVI-Add-Cap for 2014-15					
	Gross loan opening	0.00	46.89	46.89	46.89	46.89
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	46.89	46.89	46.89	46.89
	Additions during the year	46.89	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	46.89	46.89	46.89	46.89	46.89
	Average Loan	23.45	46.89	46.89	46.89	46.89
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	2.18	4.36	4.36	4.36	4.36
	Rep Schedule	Redeemable at par in 3 equal instalments on 04.09.2019, 04.09.2024 & 04.09.2029				
13	IFC - A Loan					
	Gross loan opening	282.37	282.37	282.37	282.37	282.37
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	28.24
	Net Loan-Opening	282.37	282.37	282.37	282.37	254.13
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	28.24	28.24
	Net Loan-Closing	282.37	282.37	282.37	254.13	225.90
	Average Loan	282.37	282.37	282.37	268.25	240.01
	Rate of Interest	3.23%	3.23%	3.23%	3.23%	3.23%
	Interest	9.13	9.13	9.13	8.67	7.76
	Rep Schedule	20 Half yearly equal instalments from 15.09.2017				
14	FC Bond					
	Gross loan opening	107.08	107.08	107.08	107.08	107.08
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	107.08	107.08	107.08	107.08	107.08
	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	107.08	107.08	107.08	107.08	107.08
	Average Loan	107.08	107.08	107.08	107.08	107.08
	Rate of Interest	3.875%	3.875%	3.875%	3.875%	3.875%
	Interest	4.15	4.15	4.15	4.15	4.15
	Rep Schedule	The Note matures on 17.01.2023				
	Total Loan					
	Gross loan opening	943.27	1011.11	1011.11	1011.11	1011.11
	Cumulative Repayment upto DOCO/previous year	0.00	0.33	1.00	3.53	49.63
	Net Loan-Opening	943.27	1010.78	1010.11	1007.58	961.48
	Additions during the year	67.84	0.00	0.00	0.00	0.00



	Repayment during the year	0.33	0.67	2.53	46.10	163.69
	Net Loan-Closing	1010.78	1010.11	1007.58	961.48	797.79
	Average Loan	977.02	1010.44	1008.85	984.53	879.64
	Rate of Interest	6.4870%	6.5740%	6.5696%	6.5994%	6.5357%
	Interest	63.38	66.43	66.28	64.97	57.49



Annexure-III

(₹ 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 XXXIV					
	Gross loan opening	4.00	4.00	4.00	4.00	4.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.33	0.67	1.00	1.33
	Net Loan-Opening	4.00	3.67	3.33	3.00	2.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.33	0.33	0.33	0.33	0.33
	Net Loan-Closing	3.67	3.33	3.00	2.67	2.33
	Average Loan	3.83	3.50	3.17	2.83	2.50
	Rate of Interest	8.84%	8.84%	8.84%	8.84%	8.84%
	Interest	0.34	0.31	0.28	0.25	0.22
	Rep Schedule	12 annual instalments from 21.10.2014				
2	Bond XXXV					
	Gross loan opening	1.00	1.00	1.00	1.00	1.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.08	0.17	0.25
	Net Loan-Opening	1.00	1.00	0.92	0.83	0.75
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.08	0.08	0.08	0.08
	Net Loan-Closing	1.00	0.92	0.83	0.75	0.67
	Average Loan	1.00	0.96	0.88	0.79	0.71
	Rate of Interest	9.64%	9.64%	9.64%	9.64%	9.64%
	Interest	0.10	0.09	0.08	0.08	0.07
	Rep Schedule	12 annual instalments from 31.05.2015.				
3	Bond XXXVI					
	Gross loan opening	1.00	1.00	1.00	1.00	1.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.07	0.13
	Net Loan-Opening	1.00	1.00	1.00	0.93	0.87
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.07	0.07	0.07
	Net Loan-Closing	1.00	1.00	0.93	0.87	0.80
	Average Loan	1.00	1.00	0.97	0.90	0.83
	Rate of Interest	9.35%	9.35%	9.35%	9.35%	9.35%
	Interest	0.09	0.09	0.09	0.08	0.08
	Rep Schedule	15 annual instalments from 29.08.2016.				
4	Bond XXXVII					
	Gross loan opening	3.00	3.00	3.00	3.00	3.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.25	0.50	0.75
	Net Loan-Opening	3.00	3.00	2.75	2.50	2.25



	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.25	0.25	0.25	0.25
	Net Loan-Closing	3.00	2.75	2.50	2.25	2.00
	Average Loan	3.00	2.88	2.63	2.38	2.13
	Rate of Interest	9.25%	9.25%	9.25%	9.25%	9.25%
	Interest	0.28	0.27	0.24	0.22	0.20
	Rep Schedule	12 annual instalments from 26.12.2015				
5	Bond XXXIX					
	Gross loan opening	5.00	5.00	5.00	5.00	5.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	5.00	5.00	5.00	5.00	5.00
	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	5.00	5.00	5.00	5.00	5.00
	Average Loan	5.00	5.00	5.00	5.00	5.00
	Rate of Interest	9.40%	9.40%	9.40%	9.40%	9.40%
	Interest	0.47	0.47	0.47	0.47	0.47
	Rep Schedule	29.3.2027 Bullet Payment				
6	Bond XL					
	Gross loan opening	15.00	15.00	15.00	15.00	15.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	1.25	2.50
	Net Loan-Opening	15.00	15.00	15.00	13.75	12.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	1.25	1.25	1.25
	Net Loan-Closing	15.00	15.00	13.75	12.50	11.25
	Average Loan	15.00	15.00	14.38	13.13	11.88
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	1.40	1.40	1.34	1.22	1.10
	Rep Schedule	12 annual instalments from 28.06.2016				
7	SBI (21.03.2012)					
	Gross loan opening	6.00	6.00	6.00	6.00	6.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.54	1.09
	Net Loan-Opening	6.00	6.00	6.00	5.46	4.91
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.54	0.54	0.54
	Net Loan-Closing	6.00	6.00	5.46	4.91	4.37
	Average Loan	6.00	6.00	5.73	5.18	4.64
	Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
	Interest	0.62	0.62	0.59	0.53	0.48
	Rep Schedule	22 half yearly instalment from 31.08.2016				
8	Bond XLII					
	Gross loan opening	3.00	3.00	3.00	3.00	3.00



	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	3.00	3.00	3.00	3.00	3.00
	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	3.00	3.00	3.00	3.00	3.00
	Average Loan	3.00	3.00	3.00	3.00	3.00
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	0.26	0.26	0.26	0.26	0.26
	Rep Schedule	13.3.2023 Bullet Payment				
9	Bond XLIV					
	Gross loan opening	189.48	189.48	189.48	189.48	189.48
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	189.48	189.48	189.48	189.48	189.48
	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	63.16
	Net Loan-Closing	189.48	189.48	189.48	189.48	126.32
	Average Loan	189.48	189.48	189.48	189.48	157.90
	Rate of Interest	8.70%	8.70%	8.70%	8.70%	8.70%
	Interest	16.48	16.48	16.48	16.48	13.74
	Rep Schedule	3 equal annual instalments 15.7.2018, 15.7.2023, 15.7.2028				
10	Bond XLIV-Add-cap 2014-15					
	Gross loan opening	0.00	13.23	13.23	13.23	13.23
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	13.23	13.23	13.23	13.23
	Additions during the year	13.23	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	4.41
	Net Loan-Closing	13.23	13.23	13.23	13.23	8.82
	Average Loan	6.62	13.23	13.23	13.23	11.03
	Rate of Interest	8.70%	8.70%	8.70%	8.70%	8.70%
	Interest	0.58	1.15	1.15	1.15	0.96
	Rep Schedule	3 equal annual instalments 15.7.2018, 15.7.2023, 15.7.2028				
11	Bond XLIII					
	Gross loan opening	76.00	76.00	76.00	76.00	76.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	6.33
	Net Loan-Opening	76.00	76.00	76.00	76.00	69.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	6.33	6.33
	Net Loan-Closing	76.00	76.00	76.00	69.67	63.33
	Average Loan	76.00	76.00	76.00	72.83	66.50
	Rate of Interest	7.93%	7.93%	7.93%	7.93%	7.93%



	Interest	6.03	6.03	6.03	5.78	5.27
	Rep Schedule	12 annual instalments from 20.5.2017				
12	Bond XLVI-Add-Cap for 2014-15					
	Gross loan opening	0.00	3.50	3.50	3.50	3.50
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	3.50	3.50	3.50	3.50
	Additions during the year	3.50	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	3.50	3.50	3.50	3.50	3.50
	Average Loan	1.75	3.50	3.50	3.50	3.50
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	0.16	0.33	0.33	0.33	0.33
	Rep Schedule	Redeemable at par in 3 equal instalments on 04.09.2019, 04.09.2024 & 04.09.2029				
13	IFC - A Loan					
	Gross loan opening	284.28	284.28	284.28	284.28	284.28
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	28.43
	Net Loan-Opening	284.28	284.28	284.28	284.28	255.85
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	28.43	28.43
	Net Loan-Closing	284.28	284.28	284.28	255.85	227.42
	Average Loan	284.28	284.28	284.28	270.07	241.64
	Rate of Interest	3.23%	3.23%	3.23%	3.23%	3.23%
	Interest	9.19	9.19	9.19	8.73	7.81
	Rep Schedule	20 Half yearly equal instalments from 15.09.2017				
14	FC Bond					
	Gross loan opening	107.80	107.80	107.80	107.80	107.80
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	107.80	107.80	107.80	107.80	107.80
	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	107.80	107.80	107.80	107.80	107.80
	Average Loan	107.80	107.80	107.80	107.80	107.80
	Rate of Interest	3.875%	3.875%	3.875%	3.875%	3.875%
	Interest	4.18	4.18	4.18	4.18	4.18
	Rep Schedule	The Note matures on 17.01.2023				
	Total Loan					
	Gross loan opening	695.56	712.29	712.29	712.29	712.29



	Cumulative Repayment upto DOCO/previous year	0.00	0.33	1.00	3.53	40.82
	Net Loan-Opening	695.56	711.96	711.29	708.76	671.47
	Additions during the year	16.73	0.00	0.00	0.00	0.00
	Repayment during the year	0.33	0.67	2.53	37.29	104.86
	Net Loan-Closing	711.96	711.29	708.76	671.47	566.61
	Average Loan	703.76	711.62	710.03	690.12	619.04
	Rate of Interest	5.7077%	5.7420%	5.7338%	5.7616%	5.6801%
	Interest	40.17	40.86	40.71	39.76	35.16



Annexure-IV

(₹ 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 XXXIV					
	Gross loan opening	4.00	4.00	4.00	4.00	4.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.33	0.67	1.00	1.33
	Net Loan-Opening	4.00	3.67	3.33	3.00	2.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.33	0.33	0.33	0.33	0.33
	Net Loan-Closing	3.67	3.33	3.00	2.67	2.33
	Average Loan	3.83	3.50	3.17	2.83	2.50
	Rate of Interest	8.84%	8.84%	8.84%	8.84%	8.84%
	Interest	0.34	0.31	0.28	0.25	0.22
	Rep Schedule	12 annual instalments from 21.10.2014				
2	Bond XXXV					
	Gross loan opening	1.00	1.00	1.00	1.00	1.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.08	0.17	0.25
	Net Loan-Opening	1.00	1.00	0.92	0.83	0.75
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.08	0.08	0.08	0.08
	Net Loan-Closing	1.00	0.92	0.83	0.75	0.67
	Average Loan	1.00	0.96	0.88	0.79	0.71
	Rate of Interest	9.64%	9.64%	9.64%	9.64%	9.64%
	Interest	0.10	0.09	0.08	0.08	0.07
	Rep Schedule	12 annual instalments from 31.05.2015.				
3	Bond XXXVI					
	Gross loan opening	1.00	1.00	1.00	1.00	1.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.07	0.13
	Net Loan-Opening	1.00	1.00	1.00	0.93	0.87
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.07	0.07	0.07
	Net Loan-Closing	1.00	1.00	0.93	0.87	0.80
	Average Loan	1.00	1.00	0.97	0.90	0.83
	Rate of Interest	9.35%	9.35%	9.35%	9.35%	9.35%
	Interest	0.09	0.09	0.09	0.08	0.08
	Rep Schedule	15 annual instalments from 29.08.2016.				
4	Bond XXXVII					
	Gross loan opening	3.00	3.00	3.00	3.00	3.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.25	0.50	0.75
	Net Loan-Opening	3.00	3.00	2.75	2.50	2.25



	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.25	0.25	0.25	0.25
	Net Loan-Closing	3.00	2.75	2.50	2.25	2.00
	Average Loan	3.00	2.88	2.63	2.38	2.13
	Rate of Interest	9.25%	9.25%	9.25%	9.25%	9.25%
	Interest	0.28	0.27	0.24	0.22	0.20
	Rep Schedule	12 annual instalments from 26.12.2015				
5	Bond XXXIX					
	Gross loan opening	5.00	5.00	5.00	5.00	5.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	5.00	5.00	5.00	5.00	5.00
	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	5.00	5.00	5.00	5.00	5.00
	Average Loan	5.00	5.00	5.00	5.00	5.00
	Rate of Interest	9.40%	9.40%	9.40%	9.40%	9.40%
	Interest	0.47	0.47	0.47	0.47	0.47
	Rep Schedule	29.3.2027 Bullet Payment				
6	Bond XL					
	Gross loan opening	15.00	15.00	15.00	15.00	15.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	1.25	2.50
	Net Loan-Opening	15.00	15.00	15.00	13.75	12.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	1.25	1.25	1.25
	Net Loan-Closing	15.00	15.00	13.75	12.50	11.25
	Average Loan	15.00	15.00	14.38	13.13	11.88
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	1.40	1.40	1.34	1.22	1.10
	Rep Schedule	12 annual instalments from 28.06.2016				
7	SBI (21.03.2012)					
	Gross loan opening	6.00	6.00	6.00	6.00	6.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.54	1.09
	Net Loan-Opening	6.00	6.00	6.00	5.46	4.91
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.54	0.54	0.54
	Net Loan-Closing	6.00	6.00	5.46	4.91	4.37
	Average Loan	6.00	6.00	5.73	5.18	4.64
	Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
	Interest	0.62	0.62	0.59	0.53	0.48
	Rep Schedule	22 half yearly instalment from 31.08.2016				
8	Bond XLII					
	Gross loan opening	3.00	3.00	3.00	3.00	3.00



	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	3.00	3.00	3.00	3.00	3.00
	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	3.00	3.00	3.00	3.00	3.00
	Average Loan	3.00	3.00	3.00	3.00	3.00
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	0.26	0.26	0.26	0.26	0.26
	Rep Schedule	13.3.2023 Bullet Payment				
9	Bond XLIV					
	Gross loan opening	595.36	595.36	595.36	595.36	595.36
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	595.36	595.36	595.36	595.36	595.36
	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	198.45
	Net Loan-Closing	595.36	595.36	595.36	595.36	396.91
	Average Loan	595.36	595.36	595.36	595.36	496.13
	Rate of Interest	8.70%	8.70%	8.70%	8.70%	8.70%
	Interest	51.80	51.80	51.80	51.80	43.16
	Rep Schedule	3 equal annual instalments 15.7.2018, 15.7.2023, 15.7.2028				
10	Bond XLIV-Add-cap 2014-15					
	Gross loan opening	0.00	41.38	41.38	41.38	41.38
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	41.38	41.38	41.38	41.38
	Additions during the year	41.38	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	13.79
	Net Loan-Closing	41.38	41.38	41.38	41.38	27.59
	Average Loan	20.69	41.38	41.38	41.38	34.48
	Rate of Interest	8.70%	8.70%	8.70%	8.70%	8.70%
	Interest	1.80	3.60	3.60	3.60	3.00
	Rep Schedule	3 equal annual instalments 15.7.2018, 15.7.2023, 15.7.2028				
11	Bond XLIII					
	Gross loan opening	337.00	337.00	337.00	337.00	337.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	28.08
	Net Loan-Opening	337.00	337.00	337.00	337.00	308.92
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	28.08	28.08
	Net Loan-Closing	337.00	337.00	337.00	308.92	280.83
	Average Loan	337.00	337.00	337.00	322.96	294.88
	Rate of Interest	7.93%	7.93%	7.93%	7.93%	7.93%



	Interest	26.72	26.72	26.72	25.61	23.38
	Rep Schedule	12 annual instalments from 20.5.2017				
12	Bond XLVI-Add-Cap for 2014-15					
	Gross loan opening	0.00	74.54	74.54	74.54	74.54
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	74.54	74.54	74.54	74.54
	Additions during the year	74.54	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	74.54	74.54	74.54	74.54	74.54
	Average Loan	37.27	74.54	74.54	74.54	74.54
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	3.47	6.93	6.93	6.93	6.93
	Rep Schedule	Redeemable at par in 3 equal instalments on 04.09.2019, 04.09.2024 & 04.09.2029				
13	IFC - A Loan					
	Gross loan opening	289.29	289.29	289.29	289.29	289.29
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	28.93
	Net Loan-Opening	289.29	289.29	289.29	289.29	260.36
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	28.93	28.93
	Net Loan-Closing	289.29	289.29	289.29	260.36	231.43
	Average Loan	289.29	289.29	289.29	274.83	245.90
	Rate of Interest	3.23%	3.23%	3.23%	3.23%	3.23%
	Interest	9.35	9.35	9.35	8.89	7.95
	Rep Schedule	20 Half yearly equal instalments from 15.09.2017				
14	FC Bond					
	Gross loan opening	109.70	109.70	109.70	109.70	109.70
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	109.70	109.70	109.70	109.70	109.70
	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	109.70	109.70	109.70	109.70	109.70
	Average Loan	109.70	109.70	109.70	109.70	109.70
	Rate of Interest	3.875%	3.875%	3.875%	3.875%	3.875%
	Interest	4.25	4.25	4.25	4.25	4.25
	Rep Schedule	The Note matures on 17.01.2023				
	Total Loan					
	Gross loan opening	1369.35	1485.27	1485.27	1485.27	1485.27



	Cumulative Repayment upto DOCO/previous year	0.00	0.33	1.00	3.53	63.07
	Net Loan-Opening	1369.35	1484.94	1484.27	1481.74	1422.20
	Additions during the year	115.92	0.00	0.00	0.00	0.00
	Repayment during the year	0.33	0.67	2.53	59.54	271.79
	Net Loan-Closing	1484.94	1484.27	1481.74	1422.20	1150.41
	Average Loan	1427.14	1484.60	1483.01	1451.97	1286.31
	Rate of Interest	7.0729%	7.1508%	7.1484%	7.1759%	7.1179%
	Interest	100.94	106.16	106.01	104.19	91.56



Annexure-V

(₹ 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	SBI (21.03.2012)					
	Gross loan opening	50.00	50.00	50.00	50.00	50.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	4.54	9.08
	Net Loan-Opening	50.00	50.00	50.00	45.46	40.92
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	4.54	4.54	4.54
	Net Loan-Closing	50.00	50.00	45.46	40.92	36.38
	Average Loan	50.00	50.00	47.73	43.19	38.65
	Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
	Interest	5.13	5.13	4.89	4.43	3.96
	Rep Schedule	22 half yearly instalment from 31.08.2016				
2	Bond XLII					
	Gross loan opening	100.00	100.00	100.00	100.00	100.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	100.00	100.00	100.00	100.00	100.00
	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	100.00	100.00	100.00	100.00	100.00
	Average Loan	100.00	100.00	100.00	100.00	100.00
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	8.80	8.80	8.80	8.80	8.80
	Rep Schedule	13.3.2023 Bullet Payment				
3	Bond XLIV					
	Gross loan opening	467.66	467.66	467.66	467.66	467.66
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	467.66	467.66	467.66	467.66	467.66
	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	155.89
	Net Loan-Closing	467.66	467.66	467.66	467.66	311.77
	Average Loan	467.66	467.66	467.66	467.66	389.72
	Rate of Interest	8.70%	8.70%	8.70%	8.70%	8.70%
	Interest	40.69	40.69	40.69	40.69	33.91
	Rep Schedule	3 equal annual instalments 15.7.2018, 15.7.2023, 15.7.2028				
4	Bond XLIV-Add-cap 2014-15					
	Gross loan opening	0.00	32.76	32.76	32.76	32.76
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00



	Net Loan-Opening	0.00	32.76	32.76	32.76	32.76
	Additions during the year	32.76	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	10.92
	Net Loan-Closing	32.76	32.76	32.76	32.76	21.84
	Average Loan	16.38	32.76	32.76	32.76	27.30
	Rate of Interest	8.70%	8.70%	8.70%	8.70%	8.70%
	Interest	1.43	2.85	2.85	2.85	2.38
	Rep Schedule	3 equal annual instalments 15.7.2018, 15.7.2023, 15.7.2028				
5	Bond XLIII					
	Gross loan opening	260.00	260.00	260.00	260.00	260.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	21.67
	Net Loan-Opening	260.00	260.00	260.00	260.00	238.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	21.67	21.67
	Net Loan-Closing	260.00	260.00	260.00	238.33	216.67
	Average Loan	260.00	260.00	260.00	249.17	227.50
	Rate of Interest	7.93%	7.93%	7.93%	7.93%	7.93%
	Interest	20.62	20.62	20.62	19.76	18.04
	Rep Schedule	12 annual instalments from 20.5.2017				
6	Bond XLVI-Add-Cap for 2014-15					
	Gross loan opening	0.00	74.54	74.54	74.54	74.54
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	74.54	74.54	74.54	74.54
	Additions during the year	74.54	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	74.54	74.54	74.54	74.54	74.54
	Average Loan	37.27	74.54	74.54	74.54	74.54
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	3.47	6.93	6.93	6.93	6.93
	Rep Schedule	Redeemable at par in 3 equal instalments on 04.09.2019, 04.09.2024 & 04.09.2029				
7	IFC - A Loan					
	Gross loan opening	333.01	333.01	333.01	333.01	333.01
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	33.30
	Net Loan-Opening	333.01	333.01	333.01	333.01	299.71
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	33.30	33.30
	Net Loan-Closing	333.01	333.01	333.01	299.71	266.41
	Average Loan	333.01	333.01	333.01	316.36	283.06
	Rate of Interest	3.23%	3.23%	3.23%	3.23%	3.23%
	Interest	10.77	10.77	10.77	10.23	9.15
	Rep Schedule	20 Half yearly equal instalments from 15.09.2017				



8	FC Bond					
	Gross loan opening	167.71	167.71	167.71	167.71	167.71
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	167.71	167.71	167.71	167.71	167.71
	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	167.71	167.71	167.71	167.71	167.71
	Average Loan	167.71	167.71	167.71	167.71	167.71
	Rate of Interest	3.875%	3.875%	3.875%	3.875%	3.875%
	Interest	6.50	6.50	6.50	6.50	6.50
	Rep Schedule	The Note matures on 17.01.2023				
	Total Loan					
	Gross loan opening	1378.38	1485.68	1485.68	1485.68	1485.68
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	4.54	64.05
	Net Loan-Opening	1378.38	1485.68	1485.68	1481.14	1421.63
	Additions during the year	107.30	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	4.54	59.51	226.31
	Net Loan-Closing	1485.68	1485.68	1481.14	1421.63	1195.32
	Average Loan	1432.03	1485.68	1483.41	1451.39	1308.48
	Rate of Interest	6.8005%	6.8842%	6.8790%	6.9025%	6.8526%
	Interest	97.39	102.28	102.04	100.18	89.67



Annexure-VI

(₹ 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 XXXIV					
	Gross loan opening	10.00	10.00	10.00	10.00	10.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.83	1.67	2.50	3.33
	Net Loan-Opening	10.00	9.17	8.33	7.50	6.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.83	0.83	0.83	0.83	0.83
	Net Loan-Closing	9.17	8.33	7.50	6.67	5.83
	Average Loan	9.58	8.75	7.92	7.08	6.25
	Rate of Interest	8.84%	8.84%	8.84%	8.84%	8.84%
	Interest	0.85	0.77	0.70	0.63	0.55
	Rep Schedule	12 annual instalments from 21.10.2014				
2	Bond XXXV					
	Gross loan opening	1.00	1.00	1.00	1.00	1.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.08	0.17	0.25
	Net Loan-Opening	1.00	1.00	0.92	0.83	0.75
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.08	0.08	0.08	0.08
	Net Loan-Closing	1.00	0.92	0.83	0.75	0.67
	Average Loan	1.00	0.96	0.88	0.79	0.71
	Rate of Interest	9.64%	9.64%	9.64%	9.64%	9.64%
	Interest	0.10	0.09	0.08	0.08	0.07
	Rep Schedule	12 annual instalments from 31.05.2015.				
3	Bond XXXVI					
	Gross loan opening	1.00	1.00	1.00	1.00	1.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.07	0.13
	Net Loan-Opening	1.00	1.00	1.00	0.93	0.87
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.07	0.07	0.07
	Net Loan-Closing	1.00	1.00	0.93	0.87	0.80
	Average Loan	1.00	1.00	0.97	0.90	0.83
	Rate of Interest	9.35%	9.35%	9.35%	9.35%	9.35%
	Interest	0.09	0.09	0.09	0.08	0.08
	Rep Schedule	15 annual instalments from 29.08.2016.				
4	Bond XXXVII					
	Gross loan opening	3.00	3.00	3.00	3.00	3.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.25	0.50	0.75
	Net Loan-Opening	3.00	3.00	2.75	2.50	2.25



	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.25	0.25	0.25	0.25
	Net Loan-Closing	3.00	2.75	2.50	2.25	2.00
	Average Loan	3.00	2.88	2.63	2.38	2.13
	Rate of Interest	9.25%	9.25%	9.25%	9.25%	9.25%
	Interest	0.28	0.27	0.24	0.22	0.20
	Rep Schedule	12 annual instalments from 26.12.2015				
5	Bond XXXIX					
	Gross loan opening	5.00	5.00	5.00	5.00	5.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	5.00	5.00	5.00	5.00	5.00
	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	5.00	5.00	5.00	5.00	5.00
	Average Loan	5.00	5.00	5.00	5.00	5.00
	Rate of Interest	9.40%	9.40%	9.40%	9.40%	9.40%
	Interest	0.47	0.47	0.47	0.47	0.47
	Rep Schedule	29.3.2027 Bullet Payment				
6	Bond XL					
	Gross loan opening	15.00	15.00	15.00	15.00	15.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	1.25	2.50
	Net Loan-Opening	15.00	15.00	15.00	13.75	12.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	1.25	1.25	1.25
	Net Loan-Closing	15.00	15.00	13.75	12.50	11.25
	Average Loan	15.00	15.00	14.38	13.13	11.88
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	1.40	1.40	1.34	1.22	1.10
	Rep Schedule	12 annual instalments from 28.06.2016				
7	SBI (21.03.2012)					
	Gross loan opening	6.00	6.00	6.00	6.00	6.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.54	1.09
	Net Loan-Opening	6.00	6.00	6.00	5.46	4.91
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.54	0.54	0.54
	Net Loan-Closing	6.00	6.00	5.46	4.91	4.37
	Average Loan	6.00	6.00	5.73	5.18	4.64
	Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
	Interest	0.62	0.62	0.59	0.53	0.48
	Rep Schedule	22 half yearly instalment from 31.08.2016				
8	Bond XLII					
	Gross loan opening	3.00	3.00	3.00	3.00	3.00



	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	3.00	3.00	3.00	3.00	3.00
	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	3.00	3.00	3.00	3.00	3.00
	Average Loan	3.00	3.00	3.00	3.00	3.00
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	0.26	0.26	0.26	0.26	0.26
	Rep Schedule	13.3.2023 Bullet Payment				
9	Bond XLIV					
	Gross loan opening	145.73	145.73	145.73	145.73	145.73
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	145.73	145.73	145.73	145.73	145.73
	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	48.58
	Net Loan-Closing	145.73	145.73	145.73	145.73	97.15
	Average Loan	145.73	145.73	145.73	145.73	121.44
	Rate of Interest	8.70%	8.70%	8.70%	8.70%	8.70%
	Interest	12.68	12.68	12.68	12.68	10.57
	Rep Schedule	3 equal annual instalments 15.7.2018, 15.7.2023, 15.7.2028				
10	Bond XLIV-Add-cap 2014-15					
	Gross loan opening	0.00	14.12	14.12	14.12	14.12
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	14.12	14.12	14.12	14.12
	Additions during the year	14.12	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	4.71
	Net Loan-Closing	14.12	14.12	14.12	14.12	9.41
	Average Loan	7.06	14.12	14.12	14.12	11.77
	Rate of Interest	8.70%	8.70%	8.70%	8.70%	8.70%
	Interest	0.61	1.23	1.23	1.23	1.02
	Rep Schedule	3 equal annual instalments 15.7.2018, 15.7.2023, 15.7.2028				
11	Bond XLIII					
	Gross loan opening	84.00	84.00	84.00	84.00	84.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	7.00
	Net Loan-Opening	84.00	84.00	84.00	84.00	77.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	7.00	7.00
	Net Loan-Closing	84.00	84.00	84.00	77.00	70.00
	Average Loan	84.00	84.00	84.00	80.50	73.50
	Rate of Interest	7.93%	7.93%	7.93%	7.93%	7.93%



	Interest	6.66	6.66	6.66	6.38	5.83
	Rep Schedule	12 annual instalments from 20.5.2017				
12	Bond XLVII-Add-Cap 2014-15					
	Gross loan opening	0.00	32.82	32.82	32.82	32.82
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	32.82	32.82	32.82	32.82
	Additions during the year	32.82	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	2.74
	Net Loan-Closing	32.82	32.82	32.82	32.82	30.09
	Average Loan	16.41	32.82	32.82	32.82	31.45
	Rate of Interest	8.93%	8.93%	8.93%	8.93%	8.93%
	Interest	1.47	2.93	2.93	2.93	2.81
	Rep Schedule	12 annual instalments from 20.10.2018.				
13	IFC - A Loan					
	Gross loan opening	285.66	285.66	285.66	285.66	285.66
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	28.57
	Net Loan-Opening	285.66	285.66	285.66	285.66	257.09
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	28.57	28.57
	Net Loan-Closing	285.66	285.66	285.66	257.09	228.53
	Average Loan	285.66	285.66	285.66	271.38	242.81
	Rate of Interest	3.23%	3.23%	3.23%	3.23%	3.23%
	Interest	9.24	9.24	9.24	8.77	7.85
	Rep Schedule	20 Half yearly equal instalments from 15.09.2017				
14	FC Bond					
	Gross loan opening	108.33	108.33	108.33	108.33	108.33
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	108.33	108.33	108.33	108.33	108.33
	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	108.33	108.33	108.33	108.33	108.33
	Average Loan	108.33	108.33	108.33	108.33	108.33
	Rate of Interest	3.875%	3.875%	3.875%	3.875%	3.875%
	Interest	4.20	4.20	4.20	4.20	4.20
	Rep Schedule	The Note matures on 17.01.2023				
	Total Loan					
	Gross loan opening	667.72	714.66	714.66	714.66	714.66
	Cumulative Repayment upto DOCO/previous year	0.00	0.83	2.00	5.03	43.62



	Net Loan-Opening	667.72	713.83	712.66	709.63	671.04
	Additions during the year	46.94	0.00	0.00	0.00	0.00
	Repayment during the year	0.83	1.17	3.03	38.59	94.61
	Net Loan-Closing	713.83	712.66	709.63	671.04	576.43
	Average Loan	690.77	713.24	711.15	690.33	623.73
	Rate of Interest	5.6330%	5.7346%	5.7242%	5.7487%	5.6889%
	Interest	38.91	40.90	40.71	39.69	35.48



Annexure-VII

(₹ 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 XXXIV					
	Gross loan opening	50.00	50.00	50.00	50.00	50.00
	Cumulative Repayment upto DOCO/previous year	0.00	4.17	8.33	12.50	16.67
	Net Loan-Opening	50.00	45.83	41.67	37.50	33.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	4.17	4.17	4.17	4.17	4.17
	Net Loan-Closing	45.83	41.67	37.50	33.33	29.17
	Average Loan	47.92	43.75	39.58	35.42	31.25
	Rate of Interest	8.84%	8.84%	8.84%	8.84%	8.84%
	Interest	4.24	3.87	3.50	3.13	2.76
	Rep Schedule	12 annual instalments from 21.10.2014				
2	Bond XXXIX					
	Gross loan opening	25.00	25.00	25.00	25.00	25.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	25.00	25.00	25.00	25.00	25.00
	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	25.00	25.00	25.00	25.00	25.00
	Average Loan	25.00	25.00	25.00	25.00	25.00
	Rate of Interest	9.40%	9.40%	9.40%	9.40%	9.40%
	Interest	2.35	2.35	2.35	2.35	2.35
	Rep Schedule	29.3.2027 Bullet Payment				
3	Bond XLIV					
	Gross loan opening	680.00	680.00	680.00	680.00	680.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	680.00	680.00	680.00	680.00	680.00
	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	226.67
	Net Loan-Closing	680.00	680.00	680.00	680.00	453.33
	Average Loan	680.00	680.00	680.00	680.00	566.67
	Rate of Interest	8.70%	8.70%	8.70%	8.70%	8.70%
	Interest	59.16	59.16	59.16	59.16	49.30
	Rep Schedule	3 equal annual instalments 15.7.2018, 15.7.2023, 15.7.2028				
4	Bond XLIII					
	Gross loan opening	464.00	464.00	464.00	464.00	464.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	38.67



	Net Loan-Opening	464.00	464.00	464.00	464.00	425.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	38.67	38.67
	Net Loan-Closing	464.00	464.00	464.00	425.33	386.67
	Average Loan	464.00	464.00	464.00	444.67	406.00
	Rate of Interest	7.93%	7.93%	7.93%	7.93%	7.93%
	Interest	36.80	36.80	36.80	35.26	32.20
	Rep Schedule	12 annual instalments from 20.5.2017				
5	Bond XLVI					
	Gross loan opening	161.27	161.27	161.27	161.27	161.27
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	161.27	161.27	161.27	161.27	161.27
	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	161.27	161.27	161.27	161.27	161.27
	Average Loan	161.27	161.27	161.27	161.27	161.27
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	15.00	15.00	15.00	15.00	15.00
	Rep Schedule	Redeemable at par in 3 equal instalments on 04.09.2019, 04.09.2024 & 04.09.2029				
6	Bond XLVI-Add-Cap for 2014-15					
	Gross loan opening	0.00	3.20	3.20	3.20	3.20
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	3.20	3.20	3.20	3.20
	Additions during the year	3.20	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	3.20	3.20	3.20	3.20	3.20
	Average Loan	1.60	3.20	3.20	3.20	3.20
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	0.15	0.30	0.30	0.30	0.30
	Rep Schedule	Redeemable at par in 3 equal instalments on 04.09.2019, 04.09.2024 & 04.09.2029				
7	Bond XLVI-Add-Cap for 2014-15					
	Gross loan opening	0.00	42.34	42.34	42.34	42.34
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	42.34	42.34	42.34	42.34
	Additions during the year	42.34	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	42.34	42.34	42.34	42.34	42.34
	Average Loan	21.17	42.34	42.34	42.34	42.34
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	1.97	3.94	3.94	3.94	3.94



	Rep Schedule	Redeemable at par in 3 equal instalments on 04.09.2019, 04.09.2024 & 04.09.2029				
8	IFC - A Loan					
	Gross loan opening	309.80	309.80	309.80	309.80	309.80
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	30.98
	Net Loan-Opening	309.80	309.80	309.80	309.80	278.82
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	30.98	30.98
	Net Loan-Closing	309.80	309.80	309.80	278.82	247.84
	Average Loan	309.80	309.80	309.80	294.31	263.33
	Rate of Interest	3.23%	3.23%	3.23%	3.23%	3.23%
	Interest	10.02	10.02	10.02	9.52	8.51
	Rep Schedule	20 Half yearly equal instalments from 15.09.2017				
9	FC Bond					
	Gross loan opening	185.88	185.88	185.88	185.88	185.88
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	185.88	185.88	185.88	185.88	185.88
	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	185.88	185.88	185.88	185.88	185.88
	Average Loan	185.88	185.88	185.88	185.88	185.88
	Rate of Interest	3.875%	3.875%	3.875%	3.875%	3.875%
	Interest	7.20	7.20	7.20	7.20	7.20
	Rep Schedule	The Note matures on 17.01.2023				
	Total Loan					
	Gross loan opening	1875.95	1921.49	1921.49	1921.49	1921.49
	Cumulative Repayment upto DOCO/previous year	0.00	4.17	8.33	12.50	86.31
	Net Loan-Opening	1875.95	1917.32	1913.16	1908.99	1835.18
	Additions during the year	45.54	0.00	0.00	0.00	0.00
	Repayment during the year	4.17	4.17	4.17	73.81	300.48
	Net Loan-Closing	1917.32	1913.16	1908.99	1835.18	1534.70
	Average Loan	1896.64	1915.24	1911.07	1872.08	1684.94
	Rate of Interest	7.2167%	7.2380%	7.2345%	7.2568%	7.2144%
	Interest	136.88	138.62	138.26	135.85	121.56

