CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 87/TT/2012

Coram:

Shri Gireesh B. Pradhan, Chairperson Shri M. Deena Dayalan, Member Shri A. K. Singhal, Member Shri A. S. Bakshi, Member

Date of Hearing : 20.10.2014 Date of Order : 03.02.2015

In the matter of:

Approval of transmission tariff for assets under Common Scheme for 765 kV Pooling Stations and Network for NR, Import by NR from ER and Common Scheme for Network for WR and Import by WR from ER and from NER/SR/WR/ via ER in Eastern Region for the period from the respective dates of commercial operation to 31.3.2014 under Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009.

And

In the matter of:

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

.....Petitioner

Vs

- Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Vidyut Bhawan, Vidyut Marg, Jaipur- 302 005.
- Ajmer Vidyut Vitran Nigam Ltd.,
 400 kV GSS Building (Ground Floor), Ajmer Road,
 Heerapura, Jaipur-302 024.



- Jaipur Vidyut Vitran Nigam Ltd.,
 400 kV GSS Building (Ground Floor), Ajmer Road,
 Heerapura, Jaipur-302 024.
- Jodhpur Vidyut Vitran Nigam Ltd.,
 400 kV GSS Building (Ground Floor), Ajmer Road,
 Heerapura, Jaipur-302 024.
- Himachal Pradesh State Electricity Board,
 Vidyut Bhawan, Kumar House Complex Building II,
 Shimla-171 004.
- 6. Punjab State Electricity Board The Mall, Patiala-147 001.
- 7. Haryana Power Purchase Centre, Shakti Bhawan, Sector-6, Panchkula (Haryana)-134 109.
- 8. Power Development Department, Govt. of Jammu and Kashmir, Mini Secretariat, Jammu-180 001.
- 9. UP Power Corporation Ltd., Shakti Bhawan, 14, Ashok Marg, Lucknow-226 001.
- 10. Delhi Transco Ltd., Shakti Sadan, Kotla Road, New Delhi-110 002.
- 11. BSES Yamuna Power Ltd., BSES Bhawan, Nehru Place, New Delhi-110 019.
- 12. BSES Rajdhani Power Ltd., BSES Bhawan, Nehru Place, New Delhi-110 019.
- 13. North Delhi Power Ltd.,
 Power Trading & Load Dispatch Group,
 Cennet Building, Adjacent to 66/11kV Pitampura-3,
 Grid Building, Near PP Jewellers,
 Pitampura, New Delhi-110 034.
- 14. Chandigarh Administration, Sector-9, Chandigarh-160 009.



15. Uttarakhand Power Corporation Ltd., Urja Bhawan, Kanwali Road,

Dehradun-248 001.

16. North Central Railway, Allahabad-211 003.

17. New Delhi Municipal Council,

Palika Kendra, Sansad Marg,

New Delhi-110 002.

....Respondents

For petitioner : Shri M M Mondal, PGCIL

Shri S K Venkatesan, PGCIL Ms. Seema Gupta, PGCIL Ms. Sangeeta Edwards, PGCIL

Shri S S Raju, PGCIL

For respondent:

None

ORDER

This petition has been filed by Power Grid Corporation of India Ltd.

(PGCIL) seeking approval of transmission tariff for the assets under Common

Scheme for 765 kV Pooling Stations and Network for NR, Import by NR from

ER and Common Scheme for Network for WR and Import by WR from ER

and from NER/SR/WR/ via ER in Eastern Region (hereinafter referred to as

"transmission assets") for the period from the respective dates of commercial

operation, (hereinafter 'DOCO') to 31.3.2014, based on the Central Electricity

Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009,

(hereinafter referred to as "the 2009 Tariff Regulations").

2. Investment approval of the project was accorded by the Board of

Directors of the petitioner company vide letter dated 29.8.2008 at an

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estimated cost of ₹707533 lakh including IDC of ₹71360 lakh. (Based on 1st Quarter, 2008 price level). The scope of work covered under the project is as follows:-

Transmission Lines

- (a) Maithon-Gaya 400 kV Quad D/C line
- (b) Gaya Sasaram 765 kV S/C line
- (c) Gaya Balia 765 kV S/C line
- (d) Balia Lucknow 765 kV S/C line
- (e) Ranchi WR Pooling Station 765 kV S/C line
- (f) Lucknow 765 / 400 kV new sub-station Lucknow 400/220 kV existing sub-station 400 kV quad D/C line
- (g) Ranchi 765/400 kV new sub-station Ranchi 400/220 kV existing sub-station 400 kV Quad 2xD/C line
- (h) LILO of both circuits of Allahabad- Mainpuri 400 kV D/C line at Fatehpur 765/400 kV sub-station of POWERGRID
- (i) LILO of Barh-Balia 400 kV Quad D/C line at Patna

Sub-stations

- (a) Augmentation of Maithon 400/220 kV sub-station
 - 2 nos. of 400 kV line bays (for terminating Maithon-Gaya D/C line)
 - 2 nos. of 400 kV line bays (for terminating Mejia-Maithon D/C line)
- (b) New 765/400 kV sub-station at Gaya



- ➤ 3x1500 MVA, 765/400 kV Transformer along with associated bays
- 2 nos. of 765 kV line bays (for Gaya-Sasaram & Gaya-Balia 765 kV lines)
- 4 nos. of 400 kV line bays (for Maithon-Gaya line & Kodarm-Gaya line)

(c) New 765/400 kV sub-station at Sasaram

- 2x1500 MVA, 765/400 kV Transformer along with associated bays
- 2 nos. of 765 kV line bays (for Gaya-Sasaram 765 kV S/C & Sasaram-Fatehpur 765 kV S/C)
- 2 nos. of 400 kV bays (for Biharshariff-Sasaram 400 kV quad D/C line)
- *NOTE: New 765 / 400 kV sub-station at Sasarm is to be accommodated in the premises of existing Sasaram sub-station.
- (d) Augmentation of Biharshariff 400/220 kV sub-station
 - 2 nos. of 400 kV bays (for Biharshariff-Sasaram 400 kV Quad D/C line)
- (e) New 765/400 kV sub-station at Fatehpur
 - 2x1500 MVA, 765/400 kV Transformer along with associated bays
 - 2 nos. of 765 kV line bays (for Sasaram-Fatehpur & Fatehpur-Agra 765 kV lines)

- 4 nos. of 400 kV line bays (for LILO of Allahabad-Mainpuri 400 kV D/c line)
- (f) Augmentation of 400 kV Agra Sub-station to 765 kV
 - 2x1500 MVA, 765/400 kV transformer along with associated bays
 - ➤ 1 no. of 765 kV line bay (for Fatehpur-Agra 765 kV line)
- (g) Augmentation of 400 kV Balia Sub-station to 765 kV
 - 2x1500 MVA, 765/400 kV transformer along with associated bays
 - 2 nos. of 765 kV line bays (for Gaya-Balia & Balia-Lucknow 765 kV lines)
- (h) New 765/400 kV sub-station at Lucknow
 - 2x1500 MVA, 765/400 kV transformer along with associated bays
 - 1 no. of 765 kV line bay (for Balia-Lucknow 765 kV line)
 - 2 nos. of 400 kV bays (for Lucknow 765/400 kV new substation Lucknow 400/220 kV existing sub-station 400 kV quad D/C line)
- (i) Augmentation of existing Lucknow 400/220 kV sub-station
 - 2 nos. of 400 kV bays (for Lucknow 765/400 kV new substation Lucknow 400/220 kV existing sub-station 400 kV quad D/C line)
- (j) New 2x1500 MVA, 765/400 kV sub-station at Ranchi
 - 1 no. of 765 kV line bay (for Ranchi-WR Pooling 765 kV S/C line)



- 4 nos. of 400 kV bays (for Ranchi 400 kV new sub-station Ranchi 400/220 kV existing sub-station 400 kV quad 2xD/C line)
- (k) Augmentation of Ranchi 400/220 kV sub-station
 - 6 nos. of 400 kV bays (4 nos. for Ranchi 765/400 kV new sub-station – Ranchi 400/220 kV existing sub-station 400 kV quad 2xD/C line and 2 nos. for Raghunathpur TPS – Ranchi line)
- (I) 765/400 kV WR Pooling sub-station
 - 1 no. of 765 kV line bay (for Ranchi-WR Pooling 765 kV S/C line)
- (m) Augmentation of Patna 400/220 kV sub-station
 - 4 nos. of 400 kV line bays (for LILO of Barh-Balia 400 kV Quad line)
- 3. This petition has been filed claiming tariff in respect of the following assets based on the anticipated dates of commercial operation:-
 - A. 765/400 kV, 1500 MVA ICT-I at Gaya Sub-station along with associated Bays; (part of item (b) of Sub-stations)
 - B. 765/400 kV, 1500 MVA ICT-II at Gaya Sub-station along with associated Bays; (part of item (b) of Sub-stations)
 - C. 765/400 kV, 1500 MVA ICT-III at Gaya Sub-station along with associated Bays; (part of item (b) of Sub-stations)

- D. 765 kV S/C Gaya-Balia TL along with associated bays at both ends; (part of item (c) of Transmission Line)
- E. 765 kV S/C Gaya-Sasaram TL along with associated bays at Gaya Sub-station; (part of item (b) of Transmission Line)
- F. 400 kV D/C Quad Maithon- Gaya TL and associated bays at both ends; (part of item (a) of Transmission Line)
- G. 765 kV, 3x80 MVAR Bus Reactor-I along with associated bays at Gaya Sub-station; (part of item (b) of Sub-stations)
- H. 765 kV, 3x80 MVAR Bus Reactor-II along with associated bays at Gaya Sub-station; (part of item (b) of Sub-stations)
- 400 kV, 1x125 MVAR Bus Reactor-I along with associated bays at Gaya Sub-station; (part of item (b) of Sub-stations)
- J. 400 kV, 1x125 MVAR Bus Reactor-II along with associated bays at Gaya Sub-station. (part of item (b) of Sub-stations)
- 4. Subsequently, the petitioner has submitted vide affidavits dated 8.4.2013 and 22.4.2013 the revised scheme of segregation of assets and the actual dates of commissioning. As per the petitioner, the construction of Maithon-Gaya and Koderma-Gaya transmission line is likely to be delayed due to issue of forest clearance. Besides, 765 kV S/C Gaya-Balia TL along with associated bays, has been split up into (i) 400 kV Biharshariff-Gaya (Part of Gaya-Balia 765 kV S/C TL) and (ii) 400 kV Sasaram-Balia (Part of Gaya-Balia 765 kV TL) as interim arrangement and only a part of the Asset-F has been put under commercial operation. The petitioner has submitted that interim arrangement was evolved to overcome the forest issues and the same

was approved by CEA vide letter dated 25.1.2012. Due to this interim arrangement, the transmission assets covered in Asset D and Asset F have been revised by the petitioner. The revised scheme of combining the assets along with the respective dates of commercial operation, based on which the tariff is being approved in this order, are as under:-

S. No	Transmission Elements	Actual DOCO
1	765/400 kV, 1500 MVA ICT-I at Gaya S/S along with associated Bays (hereinafter referred as "Asset-A"),	1.6.2012
2	765/400 kV, 1500 MVA ICT-II at Gaya S/S along with associated Bays (hereinafter referred as "Asset-B"),	1.4.2012
3	765/400 kV, 1500 MVA ICT-III at Gaya S/S along with associated Bays (hereinafter referred as "Asset-C"),	1.4.2012
4	765 kV S/C Gaya-Balia TL along with associated bays at both ends (hereinafter referred as "Asset-D (i)"), (Part)	1.2.2012
5	765 kV S/C Gaya-Balia TL along with associated bays at both ends (hereinafter referred as "Asset-D(ii)"), (Part)	1.3.2012
6	765 kV S/C Gaya-Sasaram TL along with associated bays at Gaya S/S (hereinafter referred as "Asset-E"),	1.4.2012
7	400 kV D/C Quad Maithon- Gaya TL and associated bays at both ends (hereinafter referred as "Asset-F"),(declared DOCO as Maithon-Koderma) (Part)	1.2.2013
8	765 kV, 3x80 MVAR Bus Reactor-I along with associated bays at Gaya S/S (referred as "Asset-G"),	1.6.2012
9	765 kV, 3x80 MVAR Bus Reactor-II along with associated bays at Gaya S/S (referred as "Asset-H"),	1.4.2012
10	400 kV, 1x125 MVAR Bus Reactor-I along with associated bays at Gaya S/S (referred as "Asset-I"),	1.3.2012
11	400 kV, 1x125 MVAR Bus Reactor-II along with associated bays at Gaya S/S (referred as "Asset-J")	1.2.2012

5. Details of the transmission charges claimed by the petitioner are as follows:-

Particulars	As	Asset A		Asset B		Asset C	
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	
Depreciation	430.08	543.06	510.44	537.82	510.02	537.74	
Interest on Loan	512.86	605.35	597.87	585.02	628.58	615.75	
Return on equity	438.48	554.21	520.55	549.00	520.13	548.92	
Interest on Working Capital	38.64	47.87	45.70	47.16	46.39	47.87	
O & M Expenses	123.83	157.10	148.60	157.10	148.60	157.10	
Total	1543.89	1907.59	1823.16	1876.10	1853.72	1907.38	

(₹ in lakh)

Particulars	Asset D - (i)			Asset D - (ii)		
	2011-12 2012-13 2		2013-14	2011-12	2012-13	2013-14
				(pro-rata)		
Depreciation	99.85	638.87	683.47	120.58	1,520.00	1,606.00
Interest on Loan	117.52	720.24	714.52	141.43	1,711.47	1,674.39
Return on equity	100.23	641.21	686.06	119.78	1,510.65	1,596.70
Interest on Working	7.14	45.03	46.99	8.47	105.49	108.80
Capital						
O & M Expenses	16.69	105.93	111.96	7.70	224.66	237.45
Total	341.43	2151.28	2243.00	407.96	5072.27	5223.34

(₹ in lakh)

Particulars	Ass	set E	, A	Asset F
	2012-13	2013-14	2012-13	2013-14
Depreciation	1,296.12	1,320.92	365.98	2,248.60
Interest on Loan	1,485.95	1,399.06	430.26	2,527.53
Return on equity	1,293.36	1,318.68	363.51	2,233.40
Interest on Working Capital	108.57	108.57	28.83	174.90
O & M Expenses	267.22	282.46	38.70	245.37
Total	4451.22	4429.69	1227.28	7429.80
Particulars	Asset G		A	Asset H
	2012-13	2013-14	2012-13	2013-14
Depreciation	165.80	246.58	218.57	248.43
Interest on Loan	199.07	278.11	275.30	291.82
Return on equity	170.59	252.75	224.94	255.35
Interest on Working Capital	16.31	22.96	21.33	23.38
O & M Expenses	72.23	91.64	86.68	91.64
Total	624.00	892.04	826.82	910.62

Particulars	Asset I			Asset J		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Depreciation	5.07	74.40	88.97	9.57	71.82	86.27
Interest on Loan	6.70	93.83	104.84	12.75	90.81	101.96
Return on equity	5.56	80.77	95.99	10.56	78.21	93.30
Interest on Working Capital	0.58	7.94	8.93	1.12	7.78	8.76
O & M Expenses	4.88	61.92	65.46	9.76	61.92	65.46
Total	22.79	318.86	364.19	43.76	310.54	355.75



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

(₹ in lakh)

Particulars	Asset A		Asset B		Asset C	
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
Maintenance Spares	22.29	23.56	22.29	23.56	70.58	74.62
O & M expenses	12.38	13.09	12.38	13.09	39.21	41.46
Receivables	308.78	317.93	303.86	312.68	195.61	223.16
Total	343.45	354.58	338.53	349.33	305.40	339.24
Interest	38.64	47.87	45.70	47.16	30.92	45.80
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%	13.50%

(₹ in lakh)

Particulars	Asset D - (i)			Asset D - (ii)		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Maintenance	15.02	15.89	16.79	31.86	33.70	35.62
Spares						
O & M expenses	8.35	8.83	9.33	17.70	18.72	19.79
Receivables	341.43	358.55	373.83	815.92	845.38	870.56
Total	364.80	383.27	399.95	865.48	897.80	925.97
Interest	7.14	45.03	46.99	8.47	105.49	108.80
Rate of Interest	11.75%	11.75%	11.75%	13.50%	13.50%	13.50%

(₹ in lakh)

Particulars	Ass	et E	As	set F
	2012-13 2013-14		2012-13	2013-14
Maintenance Spares	40.08	42.37	34.83	36.81
O & M expenses	22.27	23.54	19.35	20.45
Receivables	741.87	738.28	1227.28	1238.30
Total	804.22	804.19	1281.46	1295.56
Interest	108.57	108.57	28.83	174.90
Rate of Interest	13.50%	13.50%	13.50%	13.50%

Particulars	A	sset G	Asse		
	2012-13	2013-14	2012-13	2013-14	
Maintenance Spares	13.00	13.75	13.00	13.75	
O & M expenses	7.22	7.64	7.22	7.64	
Receivables	124.80	148.67	137.80	151.77	
Total	145.02	170.06	158.02	173.16	
Interest	16.31	22.96	21.33	23.38	
Rate of Interest	13.50%	13.50%	13.50%	13.50%	

(₹ in lakh)

Particulars	Asset I			Asset J		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Maintenance Spares	8.78	9.29	9.82	8.78	9.29	9.82
O & M expenses	4.88	5.16	5.46	4.88	5.16	5.46
Receivables	45.58	53.14	60.70	43.76	51.76	59.29
Total	59.24	67.59	75.98	57.42	66.21	74.57
Interest	0.58	7.94	8.93	1.12	7.78	8.76
Rate of Interest	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%

- 7. No comments have been received from general public in response to the notices published in news papers by the petitioner under Section 64 of the Electricity Act, 2003. Reply has been filed by Jaipur Vidyut Vitran Nigam Limited (JVVNL) and Uttar Pradesh Power Corporation Limited (UPPCL) vide their affidavits dated 11.5.2012 and 28.3.201 respectively. Both the respondents have objected to the additional capital expenditure claimed by the petitioner on the plea that more specific details of the same ought to have been furnished. In addition, JVVNL has also urged that the petition ought to be filed conforming to the provisions of the Commission's letter dated 23.10.2009. Besides, JVVNL has also objected to the claim of higher O&M charges made by the petitioner. The concerns expressed by the respondents have been taken into consideration while computing tariff and the same are being addressed in the respective paras of this order. The petitioner has filed additional information vide affidavits dated 8.3.2013, 8.4.2013, 22.4.2013, 4.6.2013,17.10.2014 and 26.11.2014 which have been considered for the purpose of tariff calculation.
- 8. Having heard the representatives of the parties and perused the material on records, we proceed to dispose of the petition.

Capital cost

9. As regards the capital cost, Regulation 7(1) of the 2009 Tariff Regulations provides as follows:-

"The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan – (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 fund deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check."

10. The details of apportioned approved cost, actual expenditure incurred as on the date of commercial operation and details of additional capital expenditure incurred/ projected to be incurred for the assets covered in the petition are summarized below:-

(₹ in lakh)

Particulars	Apportione Cost d approved incurred		Projected	Total estimated		
	cost	upto DOCO	2011-12	2012-13	2013-14	completion cost
Asset-A	14596.80	9777.38	0.00	511.99	556.96	10846.33
Asset-B	14596.80	9661.76	0.00	528.31	556.96	10747.03
Asset-C	14596.80	9647.59	0.00	540.95	556.96	10745.50
Asset-D (i)	-	11221.00	492.35	1026.99	683.33	13423.67
Asset-D (ii)	-	27241.11	335.97	2456.81	824.89	30858.78
Asset-E	29607.47	24498.97	0.00	326.38	639.49	25464.84
Asset-F	43891.38	41289.24	0.00	599.04	1397.76	43286.04
Asset-G	6474.11	3115.28	0.00	1576.57	255.45	4947.30
Asset-H	6474.11	3837.32	0.00	903.96	255.45	4996.73
Asset-I	2020.36	1206.18	132.72	402.71	177.42	1919.03
Asset-J	2020.36	1097.38	222.41	343.06	232.53	1895.38

11. In the main petition the petitioner had submitted the capital cost incurred and projected capital cost to be incurred as per anticipated date of

commercial operation through the Auditor Certificates. Subsequently, during the pendency of the petition, the transmission assets have been put in service. Further, as stated above, the petitioner has split up Asset-D into two parts and commissioned Asset-F partly due to delay in forest clearance. The above stated interim arrangement which was resorted to for averting the stretch of forest clearance has been approved by the CEA vide it's letter dated 9.4.2012.

- 12. In view of the revised scenario, the petitioner has submitted revised claim vide additional affidavits dated 8.4.2013 and 22.4.2013 after the commissioning of the assets. The petitioner has also submitted the revised capital cost as per actual date of commercial operation through the Auditor Certificate.
- 13. The petitioner was directed vide Record of Proceedings dated 20.10.2014, to state as to why the expenditure on interim arrangement should not be reimbursed by the beneficiaries as a onetime expenditure and submit the following information:-
 - (a) Expenditure incurred for the new configuration of the lines on account of interim arrangement;
 - (b) Copy of the investment approval for the new configuration by its Board;
 - (c) RPC deliberations/approval, if any, for the configuration arrangements in case of Asset-D and Asset-F;

- (d) Status of forest clearance for Asset-D and Asset-F.
- 14. RPC deliberations/approval, for the contingency arrangements in case of Asset-D and Asset-F, were submitted vide affidavit dated 17.10.2014 Besides, the petitioner vide its affidavit dated 26.11.2014 has submitted as under:
 - (a) That cost amounting to ₹7.36 lakh (approx.) has been incurred for the said interim arrangement on account of extra conductor and other tower accessories (clamps, bolts, labour, etc.) used. This cost has been included in the cost of interim arrangement i.e. Maithon-Koderma 400 kV D/C TL (part of koderma –Gaya 400 kV D/C TL under DVC Supplementary project) commissioned w.e.f. 1.2.2013.
 - (b) The new configuration involves both the lines i.e. Maithon-Gaya TL (under DVC Common Scheme) & Koderma-Gaya TL (under DVC Supplementary). New configuration was approved by the Board of Directors. As an interim arrangement, completed portion of Koderma- Gaya (PG) 400 kV D/C quad including multi-Ckt portion is inter-connected with 400 kV D/C quad Maithon- Gaya under DVC main project to make 400 kV D/C quad Koderma- Maithon line, which was commissioned in January, 2013. However, this interim arrangement shall be withdrawn to restore the line as approved in the SCM on Power System Planning held on 8.2.2012 and 21st meeting of ERPC held on 20th and 21st April, 2012, after completion of construction of lines in forest areas.

15. It is noticed that the petitioner's affidavit dated 26.11.2014 is silent regarding reasons as to why the expenditure on interim arrangement be not treated as a onetime payment. Further, in reply to query (a) petitioner has submitted that the cost amounting to ₹7.36 lakh (approx) has been incurred for the said interim arrangement. This expenditure has not been claimed by the petitioner in the instant petition but in Petition No. 67/TT/2012, it has been allowed as one time reimbursement.

Cost over-run

16. The estimated completion cost is within the approved cost for each individual asset covered in the instant petition. Thus, there is no cost over-run in commissioning of all the assets mentioned in the petition. Accordingly, the capital cost claimed by the petitioner has been allowed for the purpose of computation of tariff, subject to examination of time over-run and cost of initial spares.

Time over-run

17. As per the investment approval, the project was scheduled to be commissioned within 48 months from the date of investment approval. In the instant case, the date of investment approval is 29.8.2008. Accordingly, the Assets ought to have been commissioned before 1.9.2012, against this the details of the dates of commercial operation of the assets are as follows:-

Name of the Asset	Actual DOCO	Delay
Asset-A : 765/400kV, 1500 MVA ICT-I	1.6.2012	Nil
at Gaya S/S along with associated bays		
Asset-B : 765/400kV, 1500 MVA ICT-II	1.4.2012	Nil
at Gaya S/S along with associated		
bays`		
Asset-C : 765/400kV, 1500 MVA ICT-III	1.4.2012	Nil
at Gaya S/S along with associated bays		
Asset-D: 765kV S/C Gaya-Balia	400 kV Biharshariff-Gaya	Nil
Transmission Line along with	on 1.2.2012 and	
associated bays at both ends.	Sasaram–Balia on	
	1.3.2012	
	(As interim arrangement)	
Asset-E: 765kV S/C Gaya-Sasaram	1.4.2012	Nil
Transmission Line along with		
associated bays at Gaya Sub-station.		_
Asset-F:400kV D/C Quad Maithon-	Maithon-Koderma on	5 months
Gaya Transmission Line & associated	1.2.2013 commissioned	
bays at both ends	(as interim arrangement)	
Asset-G:765kV, 3x80 MVAR Bus	1.6.2012	Nil
Reactor-I along with associated bays at		
Gaya Sub-station		
Asset-H: 765kV, 3x80 MVAR Bus	1.4.2012	Nil
Reactor II along with associated bays at		
Gaya sub-station		
Asset-I: 400kV, 1x125 MVAR Bus	1.3.2012	Nil
Reactor-I along with associated bays at		
Gaya sub-station		
Asset-J: 400kV, 1x125 MVAR Bus	1.2.2012	Nil
Reactor-II along with associated bays at		
Gaya sub-station		

- 18. It may be seen from the above that all the assets except Asset F, have been commissioned within the scheduled date of commissioning. Delay in commissioning of Asset-F is five months.
- 19. As stated above, Asset F was planned as an interim measure to overcome the delay caused on account of Forest clearance, The petitioner has made the following submissions vide its affidavit dated 17.10.2014 regarding the delay in respect of Asset F:-

- (a) The total forest involvement for contingency arrangement portion was to the tune of 147 hectare in the Maithon-Gaya line. The preliminary and detailed survey was included in the scope of main transmission line contract which is pre-requisite for preparation of forest proposal. Carrying out survey in the forest areas was quite challenging due to Maoist threat prevailing in the area. However, with utmost caution and care the work of survey of line could be completed.
- In the mean time vide order dated 3.8.2009, Ministry of (b) Environment and Forest (hereinafter MoEF), New Delhi directed all State Governments to ensure compliance of Forest Rights Act, 2006. This inter alia required NOC and written consent from each Gramsabha (in which at least 50% of the members were present) and certification of the same by the respective State Government as prerequisite for submission of forest proposal. Instant forest proposal involved 3 DFOs in the State of Jharkhand and 1 DFO in the State of Bihar. Holding gramsabha in each village was quite a cumbersome and time consuming exercise. Compliance of this condition, which came into force only from 3.8.2009, considerably delayed the submission of forest proposal. However, with extensive mobilization of manpower this exercise could be completed in May-August 2010 and forest proposal was submitted by the petitioner to various DFOs between May to September, 2010. There had been delay in obtaining forest clearance of this line. Final clearance in respect of Bihar was

received on 16.1.2012 and that of Jharkhand on 8.11.2012. i.e. 16 months after submission of proposal in the State of Bihar and 26 months in the State of Jharkhand. Since most of the works associated with Maithan-Gaya line falls in the forest area that too mostly in Jharkhand, the work could be extensively taken up only after final approval of forest clearance i.e. after November, 2012 only.

(c) Details of the various activities undertaken by the petitioner in obtaining Forest clearance are as under:-

Particulars	Jharkhand	Bihar
Submission of Forest proposal #	May/ September 2010	September 2010
Forwarded to MoEF	1.6.2011	5.4.2011
Stage I clearance by MoEF,	22.3.2012	30.8.2011
Stage II clearance by MoEF,	8.8.2012	16.1.2012
Final clearance issued	8.11.2012	16.1.2012
Time taken	26 months	16 months

The proposal was initially submitted to the Nodal officer in September, 2009. Later it was re-submitted after compliance of Forest Rights Act, 2006.

20. We have considered the above mentioned submissions of the petitioner. We appreciate the difficulties involved in organizing Gramsabha meeting with at least 50% of the members at different locations to obtain NOC from Gramsabha. We also appreciate the difficulty faced by the petitioner on account of the fact that the Jharkhand area was Maoist effected. There is no doubt that construction of lines in this area was a challenging task which might have taken more time as compared to other areas. The time taken in the above mentioned process as well as in forest clearance is about 26

months in Jharkhand and 16 months in Bihar. We therefore condone the delay of 5 months involved in the commissioning of Asset F. We also clarify that the above decision to condone 5 months delay has been taken based on information submitted through affidavit. Accordingly, we also direct the petitioner to submit the documents regarding time over-run i.e. submission of proposals for forest clearance, correspondence in the matter, proof of various Gramsabha meetings, etc. at the time of truing up petition.

21. It is observed that the petitioner has filed petition for determination of tariff on 1.3.2012 with anticipated date of commercial operation of Asset-F as 1.3.2012. It is expected that in such cases, while filing the petition, the petitioner has completed almost all the work of the transmission line and is anticipating declaring the commissioning of the line within a short span of time. However, it is observed that the petitioner did not even have forest clearance for 37 km for the line at the time of filing the petition and had to devise an interim arrangement for avoiding such forest area during April, 2012, which could be commissioned only by 1.2.2013. The petitioner has prayed for provisional tariff and was accordingly granted provisional tariff for all the instant assets, including Asset-F on 29.3.2012. We are of the view that the petitioner should have been more careful in claiming the anticipated date of commercial operation and provisional tariff for Asset F. The petitioner is advised not to hasten filing of tariff petition in such cases.

Initial Spares

22. Regulation 8 of 2009 Tariff Regulations provides that Initial spares shall be capitalised as a percentage of the original project cost, subject to following ceiling norms:

Transmission line	0.75%
Transmission Sub-station	2.5%
Series compensation devices	
& HVDC Station	3.5%

23. Initial spares have been claimed based on the auditor's certificate for all the assets covered in the instant petition. Initials spares so claimed falls within the admissible ceiling limit specified under Regulation 8 of the 2009 Tariff Regulations except for the sub-stations in Asset-I and Asset-J. The excess initial spares pertaining to Sub-station, in Asset-I and Asset-J, have been restricted as per the 2009 Tariff Regulations as under:-

(₹ in lakh)

					(
Asset	Cost as on cut-off date	Initial spares claimed	Ceiling Limits as per clause 8 of 2009 Tariff Regulations	Initial spares worked out	Excess initial spares claimed
Asset- I	1919.03	49.48	2.50%	47.94	1.54
Asset-J	1895.38	49.48	2.50%	47.33	2.15

24. Based on the above, the capital cost as on DOCO after taking into account cost variation, the capitalization of IDC, IEDC and cost of initial spares has been considered as below for the purpose of the determination of transmission tariff:-

Particular	Capital Cost
Asset-A	9777.28
Asset-B	9661.76
Asset-C	9647.59
Asset-D (Part-I)	11221.00
Asset-D (Part-II)	27241.11
Asset-E	24498.97
Asset-F	41289.24
Asset-G	3115.28
Asset-H	3837.32
Asset-I	1204.64
Asset-J	1095.23

Additional Capital Expenditure

25. As regards Additional Capital Expenditure clause 9(1) of the 2009 Tariff Regulations provides as under:-

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

- (i) Undischarged liabilities;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital Spares within the original scope of work, subject to the provisions of Regulation 8;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (v) Change in Law:"
- 26. Further, the 2009 Tariff Regulations define cut-off date as

"cut-off date means 31st march of the year closing after 2 years of the year of commercial operation of the project, and incase 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 3 years of the year of commercial operation".

27. It is seen that the petitioner has claimed projected additional capital expenditure mainly on account of balance and retention payments covered under Regulations 9 (1) of the 2009 Tariff Regulations. Thus, the additional

capital expenditure upto 31.3.2014 has been considered to work out the tariff as it falls within the purview of Regulation 9(1) of the 2009 Tariff Regulations and is adjusted within the apportioned approved cost.

28. Based on the above, the details of the additional capital expenditure claimed by the Petitioner and allowed for the purpose of calculation of tariff are as follows:-

(₹ in lakh)

Particulars	Proj	Total		
	2011-12	2012-13	2013-14	
Asset-A	-	511.99	556.96	1068.95
Asset-B	-	528.31	556.96	1085.27
Asset-C	-	540.95	556.96	1097.91
Asset-DI	492.35	1026.99	683.33	2202.67
Asset-DII	335.97	2456.81	824.89	3617.67
Asset-E	-	326.38	639.49	965.87
Asset-F	-	599.04	1397.76	1996.80
Asset-G	-	1576.57	255.45	1832.02
Asset-H	-	903.96	255.45	1159.41
Asset-I	132.72	402.71	177.42	712.85
Asset-J	222.41	343.06	232.53	798.00

29. After allowing the additional capital expenditure from the date of commercial operation to 31.3.2014, capital cost as on 31.4.2014 in respect of the assets covered in the petition are as under:-

(₹ in lakh)

Particular	Capital Cost
Asset-A	10846.23
Asset-B	10747.03
Asset-C	10745.50
Asset-D (Part-i)	13423.67
Asset-D (Part-ii)	30858.78
Asset-E	25464.84
Asset-F	43286.04
Asset-G	4947.30
Asset-H	4996.73
Asset-I	1917.49
Asset-J	1893.23

Debt- equity ratio

- 30. Regulation 12 of the 2009 Tariff Regulations provides as under,-
 - "12. **Debt-Equity Ratio**. (1) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

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

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

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, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

- (2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.
- (3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation."
- 31. The debt-equity ratio claimed by the petitioner in respect of the capital cost as on respective DOCO(s) of the assets as well as in respect of the additional capitalization is 70:30. The same has been allowed being in accordance with the above regulations.
- 32. The above stated debt equity ratios have been applied for the purpose of tariff calculation in this order.



Return on equity

- 33. Regulation 15 of the 2009 Tariff Regulations provides that:-
 - "15. (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.
 - (2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% for thermal generating stations, transmission system and run of the river generating station, and 16.5% for the storage type generating stations including pumped storage hydro generating stations and run of river generating station with pondage and shall be grossed up as per clause (3) of this regulation:

Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in **Appendix-II**:

Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.

- (3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be:
- (4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

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

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

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

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

- 34. The petitioner has claimed additional RoE of 0.5% as the assets covered in the instant petition has been put under commercial operation within the time limit specified for completion of projects under Appendix-II of 2009 Tariff Regulations. However the same is not allowed as all the assets mentioned in the project have not been commissioned within the scheduled time.
- 35. The petitioner's prayer to recover the shortfall or refund the excess Annual Fixed Charges, on account on return on equity due to change in applicable Minimum Alternate Tax/Corporate Income Tax rate as per the Income Tax Act, 1961 of the respective financial year directly without making any application before the Commission shall be dealt under Regulation 15(3) as stated above. Return on Equity has been computed @ 17.481% p.a on average equity as per Regulation 15 of the 2009 Tariff Regulations.
- 36. Details of return on equity calculated are as under:-

Particulars	Asse	et A	Ass	et B	Asset C	
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
Opening Equity	2933.18	3086.78	2898.53	3057.02	2894.28	3056.56
Addition due to Additional	153.60	167.09	158.49	167.09	162.29	167.09
Capitalisation						
Closing Equity	3086.78	3253.87	3057.02	3224.11	3056.56	3223.65
Average Equity	3009.98	3170.33	2977.77	3140.57	2975.42	3140.11
Return on Equity (Base	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
Rate)						
Tax rate for the year	11.330%	11.330%	11.330%	11.330%	11.330%	11.330%
2008-09						
Rate of Return on Equity	17.481%	17.481%	17.481%	17.481%	17.481%	17.481%
(Pre Tax)						
Return on Equity (Pre	438.48	554.20	520.54	549.00	520.13	548.92
Tax)						

Particulars Asset D - (i)			Asset D - (i)			ii)
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Opening Equity	3366.30	3514.01	3822.10	8172.33	8273.12	9010.17
Addition due to Additional	147.71	308.10	205.00	100.79	737.04	247.47
Capitalisation						
Closing Equity	3514.01	3822.10	4027.10	8273.12	9010.17	9257.63
Average Equity	3440.15	3668.05	3924.60	8222.73	8641.65	9133.90
Return on Equity (Base	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
Rate)						
Tax rate for the year	11.330%	11.330	11.330%	11.330%	11.330	11.330%
2008-09		%			%	
Rate of Return on Equity	17.481%	17.481	17.481%	17.481%	17.481	17.481%
(Pre Tax)		%			%	
Return on Equity (Pre	100.23	641.21	686.06	119.78	1510.65	1596.70
Tax)						

Particulars	As	sset E	As	sset F
	2012-13	2013-14	2012-13	2013-14
Opening Equity	7349.67	7447.58	12386.77	12566.48
Addition due to Additional	97.91	191.85	179.71	419.33
Capitalisation				
Closing Equity	7447.58	7639.43	12566.48	12985.81
Average Equity	7398.62	7543.50	12476.63	12776.15
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09	11.330%	11.330%	11.330%	11.330%
(MAT)				
Rate of Return on Equity (Pre	17.481%	17.481%	17.481%	17.481%
Tax)				
Return on Equity (Pre Tax)	1293.35	1318.68	363.51	2233.40
	As	sset G	As	set H
	2012-13	2013-14	2012-13	2013-14
Opening Equity	934.58	1407.56	1151.20	1422.38
Addition due to Additional	472.97	76.64	271.19	76.64
Capitalisation				
Closing Equity	1407.56	1484.19	1422.38	1499.02
Average Equity	1171.07	1445.87	1286.79	1460.70
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09	11.330%	11.330%	11.330%	11.330%
(MAT)				
Rate of Return on Equity (Pre	17.481%	17.481%	17.481%	17.481%
Tax)				
Return on Equity (Pre Tax)	170.60	252.75	224.94	255.35

Particulars		Asset I			Asset J	
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Opening Equity	361.39	401.21	522.02	328.57	395.29	498.21
Addition due to	39.82	120.81	53.23	66.72	102.92	69.76
Additional						
Capitalisation						
Closing Equity	401.21	522.02	575.25	395.29	498.21	567.97
Average Equity	381.30	461.61	548.63	361.93	446.75	533.09
Return on Equity	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
(Base Rate)						
Tax rate for the year	11.330%	11.330%	11.330%	11.330%	11.330%	11.330%
2008-09 (MAT)						
Rate of Return on	17.481%	17.481%	17.481%	17.481%	17.481%	17.481%
Equity (Pre Tax)						
Return on Equity (Pre	5.55	80.69	95.91	10.54	78.10	93.19
Tax)						

Interest on loan

- 37. Regulation 16 of the 2009 Tariff Regulations provides that,-
 - "16. (1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.
 - (2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.
 - (3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year:
 - (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 annual depreciation allowed,.
 - (5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:

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.
- (7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such refinancing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.
- (8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.
- (9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan."

- 38. In these calculations, interest on loan has been worked out as detailed below:-
 - (a) Gross amount of loan, repayment of installments and rate of interest and weighted average rate of interest on actual average loan have been considered as per the petition.
 - (b) The repayment for the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that period.
 - (c) Notwithstanding moratorium period availed by the transmission licensee, the repayment of the loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed



- (d) 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.
- 39. Interest on Loan has been calculated on the basis of prevailing rate of actual loan available as on DOCO. In case of Asset-F, the petitioner has considered the proposed loan for working out interest on loan which is not in line with Regulation 16 (5). Besides, in case of Asset-G, petitioner has considered Bond XL as on DOCO i.e. 1.6.2012 whereas date of allotment of the bond is 28.6.2012. Accordingly, Bond XL has been considered as addition during the year. Any change in rate of interest subsequent to DOCO will be considered at the time of truing up.
- 40. Detailed calculation of the weighted average rate of interest has been given in Annexure 1 to 10 of this order.
- 41. Details of Interest on Loan calculated are as under:-

Particulars	Asset A		Ass	set B	Asset C	
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
Gross Normative Loan	6844.10	7202.49	6763.23	7133.05	6753.31	7131.98
Cumulative Repayment	0.00	430.08	0.00	510.44	0.00	510.02
upto Previous Year						
Net Loan-Opening	6844.10	6772.41	6763.23	6622.61	6753.31	6621.96
Addition due to	358.39	389.87	369.82	389.87	378.67	389.87
Additional Capitalisation						
Repayment during the	430.08	543.06	510.44	537.82	510.02	537.74
year						
Net Loan-Closing	6772.41	6619.23	6622.61	6474.66	6621.96	6474.09
Average Loan	6808.25	6695.82	6692.92	6548.64	6687.63	6548.02
Weighted Average Rate	9.0394%	9.0406%	8.9329%	8.9335%	9.3992%	9.4036%
of Interest on Loan						
Interest	512.85	605.34	597.87	585.02	628.58	615.75

Particulars	Asset D - (i)			Asset D - (ii)			
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	
Gross Normative Loan	7854.70	8199.35	8918.24	19068.78	19303.96	21023.72	
Cumulative	0.00	99.85	738.73	0.00	120.58	1640.58	
Repayment upto							
Previous Year							
Net Loan-Opening	7854.70	8099.49	8179.51	19068.78	19183.38	19383.15	
Addition due to	344.65	718.89	478.33	235.18	1719.77	577.42	
Additional							
Capitalisation							
Repayment during the	99.85	638.87	683.47	120.58	1520.00	1606.00	
year							
Net Loan-Closing	8099.49	8179.51	7974.37	19183.38	19383.15	18354.58	
Average Loan	7977.10	8139.50	8076.94	19126.08	19283.26	18868.86	
Weighted Average	8.8391%	8.8486%	8.8464%	8.8737%	8.8754%	8.8739%	
Rate of Interest on							
Loan							
Interest	117.52	720.23	714.52	141.43	1711.47	1674.40	

(₹ in lakh)

Particulars	As	set E	Asset F		
	2012-13	2013-14	2012-13	2013-14	
Gross Normative Loan	17149.30	17377.77	28902.47	29321.80	
Cumulative Repayment upto Previous	0.00	1296.12	0.00	365.98	
Year					
Net Loan-Opening	17149.30	16081.65	28902.47	28955.81	
Addition due to Additional Capitalisation	228.47	447.64	419.33	978.43	
Repayment during the year	1296.12	1320.92	365.98	2248.60	
Net Loan-Closing	16081.65	15208.38	28955.81	27685.64	
Average Loan	16615.48	15645.01	28929.14	28320.73	
Weighted Average Rate of Interest on	8.9432%	8.9426%	8.9384%	8.9400%	
Loan					
Interest	1485.95	1399.07	430.97	2531.89	

Particulars	Ass	Asset G		set H
	2012-13	2013-14	2012-13	2013-14
Gross Normative Loan	2180.70	3284.30	2686.12	3318.90
Cumulative Repayment upto Previous	0.00	165.80	0.00	218.57
Year				
Net Loan-Opening	2180.70	3118.50	2686.12	3100.32
Addition due to Additional Capitalisation	1103.60	178.82	632.77	178.82
Repayment during the year	165.80	246.58	218.57	248.43
Net Loan-Closing	3118.50	3050.73	3100.32	3030.71
Average Loan	2649.60	3084.61	2893.22	3065.51
Weighted Average Rate of Interest on	9.0144%	9.0159%	9.5154%	9.5194%
Loan				
Interest	199.04	278.11	275.30	291.82



Particulars		Asset I			Asset J	
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Gross Normative Loan	843.25	936.15	1218.05	766.66	922.35	1162.49
Cumulative Repayment	0.00	5.06	79.38	0.00	9.55	81.26
upto Previous Year						
Net Loan-Opening	843.25	931.09	1138.67	766.66	912.79	1081.23
Addition due to	92.90	281.90	124.19	155.69	240.14	162.77
Additional Capitalisation						
Repayment during the	5.06	74.32	88.97	9.55	71.71	86.27
year						
Net Loan-Closing	931.09	1138.67	1173.89	912.79	1081.23	1157.72
Average Loan	887.17	1034.88	1156.28	839.73	997.01	1119.48
W eighted Average Rate	9.0581	9.0578	9.0592%	9.0957	9.0955	9.0965
of Interest on Loan	%	%		%	%	%
Interest	6.70	93.74	104.75	12.73	90.68	101.83

Depreciation

- 42. Regulation 17 of the 2009 Tariff Regulations provides for computation of depreciation in the following manner, namely:-
 - "17. **Depreciation**(1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.
 - (2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

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

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

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

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

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

- (5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.
- (6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis."
- 43. Dates of commercial operation of assets covered in the petition fall in the years 2011-12 and 2012-13. Accordingly these will complete 12 years beyond 2013-14 and thus depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-III.
- 44. Details of the depreciation worked out are as under:-

Particulars	Asset A		lars Asset A Asset B		Ass	set C
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
Opening Gross Block	9777.28	10289.27	9661.76	10190.07	9647.59	10188.54
Addition during 2009-	511.99	556.96	528.31	556.96	540.95	556.96
14 due to Projected						
Additional						
Capitalisation						
Closing Gross Block	10289.27	10846.23	10190.07	10747.03	10188.54	10745.50
Average Gross Block	10033.28	10567.75	9925.92	10468.55	9918.07	10467.02
Rate of Depreciation	5.1438%	5.1388%	5.1425%	5.1375%	5.1424%	5.1375%
Depreciable Value	8813.67	9294.70	8717.04	9205.42	8709.98	9204.04
Remaining	8813.67	8864.62	8717.04	8694.98	8709.98	8694.02
Depreciable Value						
Depreciation	430.08	543.06	510.44	537.82	510.02	537.74

Particulars	Asset D - (i)			Asset D - (ii)			
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	
Opening Gross	11221.00	11713.35	12740.34	27241.11	27577.08	30033.89	
Block							
Addition during	492.35	1026.99	683.33	335.97	2456.81	824.89	
2009-14 due to							
Projected Additional							
Capitalisation							
Closing Gross Block	11713.35	12740.34	13423.67	27577.08	30033.89	30858.78	
Average Gross	11467.18	12226.85	13082.01	27409.10	28805.49	30446.34	
Blcok							
Rate of Depreciation	5.2247%	5.2252%	5.2245%	5.2789%	5.2768%	5.2748%	
Depreciable Value	10207.02	10889.82	11658.57	24668.19	25924.94	27401.70	
Remaining	10207.02	10789.97	10919.84	24668.19	25804.36	25761.13	
Depreciable Value							
Depreciation	99.85	638.87	683.47	120.58	1520.00	1606.00	

(₹ in lakh)

Particulars	Asset E		Asset F	
	2012-13	2013-14	2012-13	2013-14
Opening Gross Block	24498.97	24825.35	41289.24	41888.28
Addition during 2009-14 due to	326.38	639.49	599.04	1397.76
Projected Additional				
Capitalisation				
Closing Gross Block	24825.35	25464.84	41888.28	43286.04
Average Gross Blcok	24662.16	25145.10	41588.76	42587.16
Rate of Depreciation	5.2555%	5.2532%	5.2800%	5.2800%
Depreciable Value	22087.80	22522.44	37429.88	38328.44
Remaining Depreciable Value	22087.80	21226.32	37429.88	37962.46
Depreciation	1296.12	1320.92	365.98	2248.60

Particulars	Asset G		As	sset H
	2012-13	2013-14	2012-13	2013-14
Opening Gross Block	3115.28	4691.85	3837.32	4741.28
Addition during 2009-14 due	1576.57	255.45	903.96	255.45
to Projected Additional				
Capitalisation				
Closing Gross Block	4691.85	4947.30	4741.28	4996.73
Average Gross Block	3903.57	4819.58	4289.30	4869.01
Rate of Depreciation	5.0968%	5.1163%	5.0958%	5.1023%
Depreciable Value	3404.36	4228.06	3738.46	4259.49
Remaining Depreciable	3404.36	4062.26	3738.46	4040.91
Value				
Depreciation	165.80	246.58	218.57	248.43



Particulars	Asset I			Asset J			
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	
Opening Gross Block	1204.64	1337.36	1740.07	1095.23	1317.64	1660.70	
Addition during 2009-	132.72	402.71	177.42	222.41	343.06	232.53	
14 due to Projected							
Additional							
Capitalisation							
Closing Gross Block	1337.36	1740.07	1917.49	1317.64	1660.70	1893.23	
Average Gross Block	1271.00	1538.71	1828.78	1206.44	1489.17	1776.97	
Rate of Depreciation	4.7778%	4.8299%	4.8651%	4.7514%	4.8155%	4.8550%	
Depreciable Value	1035.75	1275.99	1536.34	977.65	1231.61	1489.91	
Remaining Depreciable	1035.75	1270.93	1456.96	977.65	1222.05	1408.65	
Value							
Depreciation	5.06	74.32	88.97	9.55	71.71	86.27	

Operation & Maintenance Expenses (O&M Expenses)

45. Clause (g) of Regulation 19 of the 2009 Tariff Regulations prescribes the norms for O&M Expenses based on the type of sub-station and line. Norms prescribed in respect of the elements covered in the instant petition are as under:-

Element	2009-10	2010-11	2011-12	2012-13	2013-14
400 kV S/C (quad) T/L	0.537	0.568	0.600	0.635	0.671
bay (₹ lakh/km)					
400 kV D/C (quad) T/L	0.940	0.994	1.051	1.111	1.174
bay (₹ lakh /km)					
400 kV Bay	52.40	55.40	58.57	61.92	65.46
(₹ lakh /bay)					
765 kV Bay	73.36	77.56	81.99	86.68	91.64
(₹ lakh /bay)					

46. Accordingly, the following operation and maintenance expenses are allowed in respect of the assets covered in this petition:-

	(₹ in lakh)				
Element	2011-12	2012-13	2013-14		
		(pro-rata)			
Asset-A: (DOCO: 1.6.2012)					
Gaya sub-station:					
765 kV ICT-I bay		72.23	91.64		
400 kV ICT-I bay		51.60	65.46		
Total O&M (Asset-A):		123.83	157.10		
Asset-B: (DOCO:1.4.2012)					
Gaya sub-station:					
1 no. 765 kV bay for ICT-II		86.68	91.64		
1 no. 400 kV bay for ICT-II		61.92	65.46		
Total O&M (Asset-B):		148.60	157.10		
Asset-C: (DOCO:1.4.2012)					
Gaya sub-station:					
1 no. 765 kV bay for ICT-III		86.68	91.64		
1 no. 400 kV bay for ICT-III		61.92	65.46		
Total O&M (Asset-C):		148.60	157.10		
Asset-D(i): (DOCO: 1.2.2012)					
			Length in (km)		
Transmission line:	(pro-rata)		69.3		
69.3 km 400 kV S/C quad conductor, Biharshariff- Gaya T/L	6.93	44.01	46.50		
Gaya sub-station:			No of bay		
I no 400 kV Balia bay	9.76	61.92	-		
Total O&M (Asset-D (i)	16.69				
()					
Asset-D (ii): (DOCO: 1.3.2012)			Length in (km)		
Transmission Line:	(pro-rata)		158.764 km		
158.764 km 400 kV S/C quad conductor,	7.94	100.82	106.53		
Sasaram- Balia T/L					
Balia sub-station:					
1 no 400 kV Gaya bay	4.88	61.92	65.46		
1 no. Switchable Line Reactor bay	4.88				
Total O&M (Asset-D (ii)	17.70	224.66	237.45		
Asset-E: (DOCO: 1.4.2012)					
Transmission Line:					
147.8.07 km, 765 kV quad conductor		93.86	99.18		
Gaya- Sasaram (part of Gaya- Fatehpur) T/L					
Gaya Sub-station:					

1 no. 765 kV Switchable Line reactor bay	 86.68	91.64
Total O&M (Asset-E)	 267.22	282.46
Asset-F:		
Transmission line:	(pro-rata)	
209 km, D/C Quad conductor, 400 kV T/L Maithon- Koderma T/L DOCO:1.2.2013:	 38.70	245.37
Total O&M (Asset-F):	 38.70	245.37

Note: The 400 kV (2 nos. line bays Gaya-I & II, and 400 kV 2 nos., Line reactor (50 MVAR) bays at Maithon sub-station has been considered under petition no. 198/TT/2012 for DVC Common Scheme.

Petitioner vide affidavit dated 26.11.2014, submitted the revised Forms for O&M for bays as under:

400 kV 2x50 MVAR Bus Reactor along with associated bays at Gaya (DOCO: 1.10.2012)

		(Pro-rata)	
2 nos 400 kV bays, at Gaya S/S for 50 MVAR Bus Reactors		61.92	130.92
2 nos 400 kV line bays bays, at Gaya S/S.		61.92	130.92
Total O&M (Asset-F):		162.54	507.21
Asset-G:			
Gaya sub-station: (DOCO:1.6.2012)			
1 no. 765 kV bus reactor bay		72.23	91.64
Total O&M (Asset-G):		72.23	91.64
Asset-H:			
Gaya sub-station: (DOCO:1.4.2012)			
1 no. 765 kV bus reactor-I bay		86.68	91.64
Total O&M (Asset-H):		86.68	91.64
Asset-I:			
Gaya sub-station: (DOCO:1.3.2012)	(pro-rata)		
1 no. 400 kV bus reactor-I bay	4.88	61.92	65.46
Total O&M (Asset-I):	4.88	61.92	65.46
Asset-J:			
Gaya sub-station: (DOCO:1.2.2012)	(pro-rata)		
1 no. 400 kV bus reactor-II bay	9.76	61.92	65.46
Total O&M (Asset-J)	9.76	61.92	65.46

- 47. The petitioner has submitted that O & M Expenses for the period 2009-14 was arrived at on the basis of normalized actual O & M Expenses during the period 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking has also been considered while calculating the O & M Expenses for the tariff period 2009-14. The petitioner has further submitted that it would approach the Commission for additional manpower cost on account of wage revision (if any) during the tariff block 2009-14 for claiming in the tariff.
- 48. In this order, we have allowed O&M Expenses as per the existing norms. We observe that it is premature to examine the issue raised by the petitioner.

Interest on Working Capital

49. As per the 2009 Tariff Regulations the components of the working capital and the interest thereon are discussed hereunder:-

(i) Receivables

As per Regulation 18(1) (c) (i) of the 2009 Tariff Regulations, receivables will be equivalent to two months' average billing calculated on target availability level. The petitioner has claimed the receivables on the basis of 2 months' transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis of 2 months' transmission charges.

(ii) Maintenance spares

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

(iii) O & M expenses

Regulation 18(1) (c) (iii) of the 2009 Tariff Regulations provides for operation and maintenance expenses for one month as a component of working capital. The petitioner has claimed O&M expenses for 1 month of the respective year as claimed in the petition. This has been considered in the working capital.

(iv) Rate of interest on working capital

As per Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2011 dated 21.06.2011, Interest on working capital has been worked out considering interest rate @ 11.75 (SBI Base rate 8.25% as on 1.4.2011 and 350 bps) in respect of Assets D(i), D (ii), I and J which were commissioned during 2011-12 and 13.50% (SBI Base rate 10% as on 1.4.2012 and 350 basis points) in respect of the remaining assets which were commissioned during 2012-13.

50. Necessary computations in support of interest on working capital are appended herein below:-

(₹ in lakh)

Particulars	Ass	Asset A Asset B Asset C		A Asset B		set C
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
Maintenance Spares	22.29	23.57	22.29	23.57	22.29	23.57
O & M expenses	12.38	13.09	12.38	13.09	12.38	13.09
Receivables	308.78	317.93	303.86	312.68	308.95	317.90
Total	343.45	354.59	338.53	349.34	343.63	354.55
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	38.64	47.87	45.70	47.16	46.39	47.86

(₹ in lakh)

Particulars	Asset D - (i)			Asset D - (ii)		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Maintenance Spares	15.02	15.89	16.79	31.86	33.70	35.62
O & M expenses	8.35	8.83	9.33	17.70	18.72	19.79
Receivables	341.43	358.55	373.83	815.94	845.38	870.56
Total	364.80	383.26	399.96	865.50	897.80	925.96
Rate of Interest	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%
Interest	7.14	45.03	47.00	8.47	105.49	108.80

(₹ in lakh)

Particulars	Asset E		Asset F		
	2012-13	2013-14	2012-13	2013-14	
Maintenance Spares	40.08	42.37	34.83	36.81	
O & M expenses	22.27	23.54	19.35	20.45	
Receivables	741.87	738.28	1228.01	1239.04	
Total	804.22	804.19	1,282.19	1,296.30	
Rate of Interest	13.50%	13.50%	13.50%	13.50%	
Interest	108.57	108.57	28.85	175.00	

Particulars	Ass	set G	Asset H		
	2012-13	2013-14	2012-13	2013-14	
Maintenance Spares	13.00	13.75	13.00	13.75	
O & M expenses	7.22	7.64	7.22	7.64	
Receivables	124.80	148.67	137.81	151.77	
Total	145.02	170.06	158.03	173.15	
Rate of Interest	13.50%	13.50%	13.50%	13.50%	
Interest	16.31	22.96	21.33	23.38	

(₹ in lakh)

Particulars	Asset I				Asset J	
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Maintenance Spares	8.78	9.29	9.82	8.78	9.29	9.82
O & M expenses	4.88	5.16	5.46	4.88	5.16	5.46
Receivables	45.54	53.10	60.67	43.71	51.70	59.25
Total	59.21	67.55	75.94	57.38	66.15	74.53
Rate of Interest	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%
Interest	0.58	7.94	8.92	1.12	7.77	8.76

Transmission charges

51. The transmission charges being allowed for the transmission assets are summarized as follows:-

(₹ in lakh)

Particulars	Ass	sset A Ass		et B	Asset C	
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
	(pro-rata)					
Depreciation	430.08	543.06	510.44	537.82	510.02	537.74
Interest on Loan	512.85	605.34	597.87	585.02	628.58	615.75
Return on equity	438.48	554.20	520.54	549.00	520.13	548.92
Interest on Working	38.64	47.87	45.70	47.16	46.39	47.86
Capital						
O & M Expenses	123.83	157.10	148.60	157.10	148.60	157.10
Total	1543.88	1907.57	1823.15	1876.11	1853.73	1907.38

Particulars	Asset D - (i)			Asset D - (ii)		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
	(pro-rata)			(pro-rata)		
Depreciation	99.85	638.87	683.47	120.58	1520.00	1606.00
Interest on Loan	117.52	720.23	714.52	141.43	1711.47	1674.40
Return on equity	100.23	641.21	686.06	119.78	1510.65	1596.70
Interest on Working	7.14	45.03	47.00	8.47	105.49	108.80
Capital						
O & M Expenses	16.69	105.93	111.96	17.70	224.66	237.45
Total	341.43	2151.28	2243.01	407.97	5072.27	5223.34

(₹ in lakh)

Particulars	Ass	set E	Asset F		
	2012-13	2012-13 2013-14 2		2013-14	
			(pro-rata)		
Depreciation	1296.12	1320.92	365.98	2248.60	
Interest on Loan	1485.95	1399.07	430.97	2531.89	
Return on equity	1293.35	1318.68	363.51	2233.40	
Interest on Working	108.57	108.57	28.85	175.00	
Capital					
O & M Expenses	267.22	282.46	38.70	245.37	
Total	4451.21	4429.69	1228.01	7434.26	

(₹ in lakh)

Particulars	Asse	et G	Asset H		
	2012-13 (pro-rata)	2013-14	2012-13	2013-14	
Depreciation	165.80	246 58	218.57	248.43	
Interest on Loan	199.04	278.11	275.30	291.82	
Return on equity	170.60	252.75	224.94	255.35	
Interest on Working Capital	16.31	2 2 i.96	21.33	23.38	
O & M Expenses	72.23	91 n 64	86.68	91.64	
Total	623.98	892.04	826.84	910.61	

(₹ in lakh)

Particulars		Asset I			Asset J		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	
	(pro-rata)			(pro-rata)			
Depreciation	5.06	74.32	88.97	9.55	71.71	86.27	
Interest on Loan	6.70	93.74	104.75	12.73	90.68	101.83	
Return on equity	5.55	80.69	95.91	10.54	78.10	93.19	
Interest on Working	0.58	7.94		1.12	7.77	8.76	
Capital			8.92				
O & M Expenses	4.88	61.92	65.46	9.76	61.92	65.46	
Total	22.77	318.61	364.01	43.71	310.18	355.51	

Filing Fee and the Publication Expenses

52. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on *pro-rata* basis in accordance with Regulation 42A (1) (a) of the 2009 Tariff Regulations.

Service Tax

53. The petitioner has made a specific prayer to be allowed to bill and recover the Service tax on Transmission charges separately from the respondents if the exemption granted to it is withdrawn and transmission of power is made a taxable service. We consider the prayer pre-mature.

Licence Fee

53. The petitioner has submitted that in O&M norms for tariff block 2009-14 the cost associated with license fees had not been captured and the license fee may be allowed to be recovered separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42 A (1) (b) of the 2009 Tariff Regulations.

Sharing of Transmission Charges

- 54. The billing, collection & disbursement of the transmission charges shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 as amended.
- 55. This order disposes of Petition No. 87/TT/2012.

-sd- -sd- -sd-

(A.S. Bakshi) (A. K. Singhal) (M. Deena Dayalan) (Gireesh B. Pradhan) Member Member Chairperson

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

			(₹ in lakh)
	Details of Loan	2012-13	2013-14
1	Bond XXIX		
	Gross loan opening	105.00	105.00
	Cumulative Repayment upto	0.00	8.75
	DOCO/previous year		
	Net Loan-Opening	105.00	96.25
	Additions during the year	0.00	0.00
	Repayment during the year	8.75	8.75
	Net Loan-Closing	96.25	87.50
	Average Loan	100.63	91.88
	Rate of Interest	9.20%	9.20%
	Interest	9.26	8.45
	Rep Schedule	12 Annual installments	from 12.3.2013
2	Bond XXX		
	Gross loan opening	528.00	528.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year	5.55	5.55
	Net Loan-Opening	528.00	528.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	44.00
	Net Loan-Closing	528.00	484.00
	Average Loan	528.00	506.00
	Rate of Interest	8.80%	8.80%
	Interest	46.46	44.53
	Rep Schedule	12 Annual installments	from 29.9.2013
3	Bond XXXIII		
	Gross loan opening	937.00	937.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	937.00	937.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	937.00	937.00
	Average Loan	937.00	937.00
	Rate of Interest	8.64%	8.64%
	Interest	80.96	80.96
	Rep Schedule	12 Annual installments	from 8.7.2014
4	Bond XXXII		
	Gross loan opening	235.00	235.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	235.00	235.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	19.58
	Net Loan-Closing	235.00	215.42

	Average Loan	235.00	225.21
	Rate of Interest	8.84%	8.84%
	Interest	20.77	19.91
	Rep Schedule	12 Annual installments	
5	Bond XXXV		
	Gross loan opening	280.00	280.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		0.00
	Net Loan-Opening	280.00	280.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	280.00	280.00
	Average Loan	280.00	280.00
	Rate of Interest	9.64%	9.64%
	Interest	26.99	26.99
	Rep Schedule	12 Annual installments	
6	Bond XXXVII		
- 0	Gross loan opening	1351.18	1351.18
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year	0.00	0.00
	Net Loan-Opening	1351.18	1351.18
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	1351.18	1351.18
	Average Loan	1351.18	1351.18
	Rate of Interest	9.25%	9.25%
	Interest	124.98	124.98
	Rep Schedule	12 Annual installments f	
7	Bond XL		
	Gross loan opening	90.49	90.49
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	90.49	90.49
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	90.49	90.49
	Average Loan	90.49	90.49
	Rate of Interest	9.30%	9.30%
	Interest	8.42	8.42
	Rep Schedule Bond XXVIII	12 Annual installments	110111 26.6.2016
8		107.00	407.00
	Gross loan opening	107.00	107.00
	Cumulative Repayment upto DOCO/previous year	0.00	8.92
		407.00	00.00
	Net Loan-Opening	107.00	98.08
	Additions during the year	0.00	0.00
	Repayment during the year	8.92	8.92
	Net Loan-Closing	98.08	89.17
	Average Loan	102.54	93.63
	Rate of Interest	9.3300%	9.33%
	Interest	9.57	8.74
	Rep Schedule	12 Annual installments f	rom 15.12.2012

9	BOND XXXI		
	Gross loan opening	873.00	873.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	873.00	873.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	72.75
	Net Loan-Closing	873.00	800.25
	Average Loan	873.00	836.63
	Rate of Interest	8.90%	8.90%
	Interest	77.70	74.46
	Rep Schedule	12 Annual installm	ents from 25.2.2014
10	BOND XXXIV		
	Gross loan opening	1136.00	1136.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	1136.00	1136.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	1136.00	1136.00
	Average Loan	1136.00	1136.00
	Rate of Interest	8.84%	8.84%
	Interest	100.42	100.42
	Rep Schedule	12 Annual installme	ents from 21.10.2014
11	BOND XXXVI		
	Gross loan opening	1201.50	1201.50
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	1201.50	1201.50
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	1201.50	1201.50
	Average Loan	1201.50	1201.50
	Rate of Interest	9.35%	9.35%
	Interest	112.34	112.34
	Rep Schedule	15 Annual installm	ents from 29.8.2016
	Total Loan		
	Gross loan opening	6844.17	6844.17
	Cumulative Repayment upto	0.00	17.67
	DOCO/previous year		
	Net Loan-Opening	6844.17	6826.50
	Additions during the year	0.00	0.00
	Repayment during the year	17.67	154.00
	Net Loan-Closing	6826.50	6672.50
	Average Loan	6835.34	6749.50
	Weighted Average Rate of Interest	9.0394%	9.0406%
	Interest	617.87	610.19

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

			(₹ in lakh)		
	Details of Loan	2012-13	2013-14		
1	Bond XXVIII				
	Gross loan opening	67.00	67.00		
	Cumulative Repayment upto	0.00	5.58		
	DOCO/previous year				
	Net Loan-Opening	67.00	61.42		
	Additions during the year	0.00	0.00		
	Repayment during the year	5.58	5.58		
	Net Loan-Closing	61.42	55.83		
	Average Loan	64.21	58.63		
	Rate of Interest	9.33%	9.33%		
	Interest	5.99	5.47		
	Rep Schedule	12 Annual installments from 1	5.12.2012		
2	Bond XXIX				
	Gross loan opening	100.00	100.00		
	Cumulative Repayment upto	0.00	8.33		
	DOCO/previous year				
	Net Loan-Opening	100.00	91.67		
	Additions during the year	0.00	0.00		
	Repayment during the year	8.33	8.33		
	Net Loan-Closing	91.67	83.33		
	Average Loan	95.83	87.50		
	Rate of Interest	9.20%	9.20%		
	Interest	8.82	8.05		
	Rep Schedule	edule 12 Annual installments from 12.3.2013			
3	Bond XXX				
	Gross loan opening	1109.00	1109.00		
	Cumulative Repayment upto	0.00	0.00		
	DOCO/previous year				
	Net Loan-Opening	1109.00	1109.00		
	Additions during the year	0.00	0.00		
	Repayment during the year	0.00	92.42		
	Net Loan-Closing	1109.00	1016.58		
	Average Loan	1109.00	1062.79		
	Rate of Interest	8.80%	8.80%		
	Interest	97.59	93.53		
	Rep Schedule	12 Annual installments from 2	9.9.2013		
4	Bond XXXI				
	Gross loan opening	1245.00	1245.00		
	Cumulative Repayment upto DOCO/previous year	0.00	0.00		
	Net Loan-Opening	1245.00	1245.00		
	Additions during the year	0.00	0.00		
	Repayment during the year	0.00	103.75		
	Net Loan-Closing	1245.00	1141.25		
	Average Loan	1245.00	1193.13		
	Rate of Interest	8.90%	8.90%		
	Interest	110.81	106.19		

	Rep Schedule	12 Annual installments from 25.2.2014		
5	Bond XXXIII			
	Gross loan opening	1577.00	1577.00	
	Cumulative Repayment upto	0.00	0.00	
	DOCO/previous year			
	Net Loan-Opening	1577.00	1577.00	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	0.00	
	Net Loan-Closing	1577.00	1577.00	
	Average Loan	1577.00	1577.00	
	Rate of Interest	8.64%	8.64%	
	Interest	136.25	136.25	
	Rep Schedule	12 Annual installments from 8	3.7.2014	
6	Bond XXXII			
	Gross loan opening	212.00	212.00	
	Cumulative Repayment upto	0.00	0.00	
	DOCO/previous year			
	Net Loan-Opening	212.00	212.00	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	17.67	
	Net Loan-Closing	212.00	194.33	
	Average Loan	212.00	203.17	
	Rate of Interest	8.84%	8.84%	
	Interest	18.74	17.96	
	Rep Schedule	12 Annual installments from 27	7.3.2014	
7	Bond XXXIV			
-	Gross loan opening	903.00	903.00	
	Cumulative Repayment upto	0.00	0.00	
	DOCO/previous year			
	Net Loan-Opening	903.00	903.00	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	0.00	
	Net Loan-Closing	903.00	903.00	
	Average Loan	903.00	903.00	
	Rate of Interest	8.84%	8.84%	
	Interest	79.83	79.83	
	Rep Schedule	12 Annual installments from 21.10.2014		
8	Bond XXXV			
	Gross loan opening	424.00	424.00	
	Cumulative Repayment upto	0.00	0.00	
	DOCO/previous year		3.00	
	Net Loan-Opening	424.00	424.00	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	0.00	
	Net Loan-Closing	424.00	424.00	
	Average Loan	424.00	424.00	
	Rate of Interest	9.64%	9.64%	
	Interest	40.87	40.87	
	Rep Schedule	12 Annual installments from 3		
10	Bond XXXVI			
		455.00	455.00	
	Gross loan opening	400.00	400.00	

	DOCO/previous year		
	Net Loan-Opening	455.00	455.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	455.00	455.00
	Average Loan	455.00	455.00
	Rate of Interest	9.35%	9.35%
	Interest	42.54	42.54
	Rep Schedule	15 Annual installments fr	rom 29.8.2016
11	Bond XXXVIII		
	Gross loan opening	671.23	671.23
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	671.23	671.23
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	671.23	671.23
	Average Loan	671.23	671.23
	Rate of Interest	9.25%	9.25%
	Interest	62.09	62.09
	Rep Schedule	Bullet payment 9.	.3.2027
	Total Loan		
	Gross loan opening	6763.23	6763.23
	Cumulative Repayment upto DOCO/previous year	0.00	13.92
	Net Loan-Opening	6763.23	6749.31
	Additions during the year	0.00	0.00
	Repayment during the year	13.92	227.75
	Net Loan-Closing	6749.31	6521.56
	Average Loan	6756.27	6635.44
	Weighted Average Rate of Interest	8.9329%	8.9335%
	Interest	603.53	592.78

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

			(₹ in lakh)
	Details of Loan	2012-13	2013-14
1	Bond XXXIII		
	Gross loan opening	737.00	737.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	737.00	737.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	737.00	737.00
	Average Loan	737.00	737.00
	Rate of Interest	8.64%	8.64%
	Interest	63.68	63.68
	Rep Schedule	12 Annual installments from 8	3.7.2014
2	Bond XXXVIII		
	Gross loan opening	500.00	500.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	500.00	500.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	500.00	500.00
	Average Loan	500.00	500.00
	Rate of Interest	9.25%	9.25%
	Interest	46.25	46.25
	Rep Schedule	Bullet payment 9.3.202	7
3	SBI		
	Gross loan opening	1282.31	1282.31
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	1282.31	1282.31
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	1282.31	1282.31
	Average Loan	1282.31	1282.31
	Rate of Interest	10.75%	10.75%
	Interest	137.85	137.85
	Rep Schedule	22 Annual installments from 3	1.8.2016
4	Bond XXIX		
	Gross loan opening	105.00	105.00
	Cumulative Repayment upto	0.00	8.75
	DOCO/previous year		
	Net Loan-Opening	105.00	96.25
	Additions during the year	0.00	0.00
	Repayment during the year	8.75	8.75
	Net Loan-Closing	96.25	87.50
	Average Loan	100.63	91.88
	Rate of Interest	9.20%	9.20%
	Interest	9.26	8.45

	Rep Schedule	12 Annual installments from 12	3.2013
5	Bond XXVIII		
	Gross loan opening	107.00	107.00
	Cumulative Repayment upto	0.00	8.92
	DOCO/previous year		
	Net Loan-Opening	107.00	98.08
	Additions during the year	0.00	0.00
	Repayment during the year	8.92	8.92
	Net Loan-Closing	98.08	89.17
	Average Loan	102.54	93.63
	Rate of Interest	9.33%	9.33%
	Interest	9.57	8.74
	Rep Schedule	12 Annual installments from 15	.12.2012
6	Bond XXXIV		
	Gross loan opening	806.00	806.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	806.00	806.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	806.00	806.00
	Average Loan	806.00	806.00
	Rate of Interest	8.84%	8.84%
	Interest	71.25	71.25
	Rep Schedule	12 Annual installments from 21	.10.2014
7	Bond XXXI		
	Gross loan opening	773.00	773.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	773.00	773.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	64.42
	Net Loan-Closing	773.00	708.58
	Average Loan	773.00	740.79
	Rate of Interest	8.90%	8.90%
	Interest	68.80	65.93
		12 Annual installments from 25	
_	Rep Schedule	12 Annual Installments nom 25	J. L. LU 14
8	BOND XXXVI		—
	Gross loan opening	700.00	700.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	700.00	700.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	700.00	700.00
	Average Loan	700.00	700.00
	Rate of Interest	9.3500%	9.35%
	Interest	65.45	65.45
	Rep Schedule	15 Annual installments from 29	
9	Bond XXXII		
	שטווע אאאוו		
9	Gross loan opening	235.00	235.00

	DOCO/previous year		
	Net Loan-Opening	235.00	235.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	19.58
	Net Loan-Closing	235.00	215.42
	Average Loan	235.00	225.21
	Rate of Interest	8.84%	8.84%
	Interest	20.77	19.91
	Rep Schedule	12 Annual installments from 2	7.3.2014
10	Bond XXXIX		
	Gross loan opening	1000.00	1000.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year	0.00	0.00
	Net Loan-Opening	1000.00	1000.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	1000.00	1000.00
	Average Loan	1000.00	1000.00
	Rate of Interest	9.40%	9.40%
	Interest	94.00	94.00
	Rep Schedule	Bullet Payment on 29.3.2	
11	Bond XXX		
<u> </u>	Gross loan opening	228.00	228.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year	0.00	0.00
	Net Loan-Opening	228.00	228.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	19.00
	Net Loan-Closing	228.00	209.00
	Average Loan	228.00	218.50
	Rate of Interest	8.80%	8.80%
	Interest	20.06	19.23
	Rep Schedule	12 Annual installments from 2	
12	Bond XXXV		
14	Gross loan opening	280.00	280.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year	0.00	0.00
	Net Loan-Opening	280.00	280.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	280.00	280.00
	Average Loan	280.00	280.00
	Rate of Interest	9.64%	9.64%
	Interest	26.99	26.99
	Rep Schedule	12 Annual installments from 3	
	Total Loan	12 / milidal motalimento nom o	
		6752.04	6750.04
	Gross loan opening	6753.31	6753.31
	Cumulative Repayment upto	0.00	17.67
	DOCO/previous year	2750.01	0-0- - :
	Net Loan-Opening	6753.31	6735.64
	Additions during the year	0.00	0.00
	Repayment during the year	17.67	120.67

Net Loan-Closing	6735.64	6614.98
Average Loan	6744.48	6675.31
Weighted Average Rate of	9.3992%	9.4036%
Interest		
Interest	633.93	627.72

Annexure 4(i)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

1 Bond XXVIII Gross loan opening 500.00		- · · · · · · ·			(₹ in lakh)
Gross Ioan opening		Details of Loan	2011-12	2012-13	2013-14
Cumulative Repayment upto DOCO/previous year 0.00 0.00 458	1				
Net Loan-Opening			500.00	500.00	500.00
Additions during the year					41.67
Repayment during the year		-			458.33
Net Loan-Closing		,	0.00		0.00
Average Loan 500.00 479.17 437 Rate of Interest 9.33% 9.33% 9.33% 9.3			0.00		41.67
Rate of Interest 9.33% 9.33% 9.3 Interest 46.65 44.71 40 Rep Schedule 12 Annual installments from 15.12.20 2 BOND XXX S 2900.00 2656 Average Loan 2900.00 2900.00 2900.00 2775 Rate of Interest 8.80% 8.80% 8.8 Interest 255.20 255.20 244 Rep Schedule 12 Annual installments from 29.9.201 29.9.201 <td></td> <td>Net Loan-Closing</td> <td>500.00</td> <td>458.33</td> <td>416.67</td>		Net Loan-Closing	500.00	458.33	416.67
Interest		Average Loan	500.00	479.17	437.50
Rep Schedule		Rate of Interest	9.33%	9.33%	9.33%
BOND XXX Gross loan opening 2900.00 2400.00 24		Interest			40.82
Gross loan opening			12 Annual in	stallments from 1	5.12.2012
Cumulative Repayment upto DOCO/previous year 0.00 0.00 0.00 Net Loan-Opening 2900.00 2900.00 2900.00 Additions during the year 0.00 0.00 0.00 Repayment during the year 0.00 0.00 24° Net Loan-Closing 2900.00 2900.00 2900.00 277° Rate of Interest 8.80% 8.80% 8.8 Interest 255.20 255.20 24° Rep Schedule 12 Annual installments from 29.9.201 3 Bond XXXI 3 1600.00 1600.00 1600.00 Cumulative Repayment upto DOCO/previous year 0.00 0.00 0 Net Loan-Opening 1600.00 1600.00 1600.00 1600.00 Additions during the year 0.00 0.00 0 0 Repayment during the year 0.00 0.00 133 Net Loan-Closing 1600.00 1600.00 1600.00 1600.00 Rate of Interest 8.90% 8.90% 8.90 Interest	2	BOND XXX			
Net Loan-Opening		Gross loan opening	2900.00	2900.00	2900.00
Additions during the year 0.00 0.00 0.00 24° Repayment during the year 0.00 0.00 24° Net Loan-Closing 2900.00 2900.00 2900.00 277° Rate of Interest 8.80% 8.80% 8.80% 8.80° Interest 255.20 255.20 244 Rep Schedule 12 Annual installments from 29.9.201 3 Bond XXXI 1600.00 1600.00 1600.00 Cumulative Repayment upto DOCO/previous year 0.00 0.00 0.00 Net Loan-Opening 1600.00 1600.00 1600.00 Additions during the year 0.00 0.00 0.00 Repayment during the year 0.00 0.00 0.00 Net Loan-Closing 1600.00 1600.00 1460 Average Loan 1600.00 1600.00 1533 Rate of Interest 8.90% 8.90% 8.90 Interest 142.40 142.40 142.40 142.40 Rep Schedule 12 Annual installments from 25.2.201 4 Bond XXXIII 1600.00 1600.00 1600.00		Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Additions during the year 0.00 0.00 0.00 24° Repayment during the year 0.00 0.00 24° Net Loan-Closing 2900.00 2900.00 2900.00 277° Rate of Interest 8.80% 8.80% 8.80% 8.80° Interest 255.20 255.20 244 Rep Schedule 12 Annual installments from 29.9.201 3 Bond XXXI 1600.00 1600.00 1600.00 Cumulative Repayment upto DOCO/previous year 0.00 0.00 0.00 Net Loan-Opening 1600.00 1600.00 1600.00 Additions during the year 0.00 0.00 0.00 Repayment during the year 0.00 0.00 0.00 Net Loan-Closing 1600.00 1600.00 1460 Average Loan 1600.00 1600.00 1533 Rate of Interest 8.90% 8.90 8.90 Interest 142.40 142.40 142.40 142.40 Rep Schedule 12 Annual installments from 25.2.201 4 Bond XXXIII Gross Ioan opening 1600.00 0.00<		Net Loan-Opening	2900.00	2900.00	2900.00
Net Loan-Closing 2900.00 2900.00 2658 Average Loan 2900.00 2900.00 2779 Rate of Interest 8.80% 8.80% 8.8 Interest 255.20 255.20 244 Rep Schedule 12 Annual installments from 29.9.201 3 Bond XXXI		Additions during the year	0.00	0.00	0.00
Average Loan 2900.00 2900.00 2775		Repayment during the year	0.00	0.00	241.67
Rate of Interest 8.80% 8.80% 8.8 Interest 255.20 255.20 244 Rep Schedule 12 Annual installments from 29.9.201 3 Bond XXXI 3 1600.00 1460 Average Loan 1600.00 1600.00 1533 Rate of Interest 8.90% 8.90 8.9 Interest 142.40 142.40 136 Rep Schedule 12 Annual installments from 25.2.201 4 Bond XXXIII Gross loan opening 1600.00		Net Loan-Closing	2900.00	2900.00	2658.33
Interest 255.20 255.20 244 Rep Schedule 12 Annual installments from 29.9.201 3 Bond XXXI		Average Loan	2900.00	2900.00	2779.17
Rep Schedule		Rate of Interest	8.80%	8.80%	8.80%
3 Bond XXXI 1600.00 1600.00 1600.00 1600.00 1600.00 1600.00 1600.00 1600.00 1600.00 1600.00 1600.00 1600.00 1600.00 1600.00 1600.00 1600.00 1600.00 1600.00 1600.00 133 Net Loan-Closing 1600.00 1600.00 1466 Average Loan 1600.00 1600.00 1533 Rate of Interest 8.90% 8.90% 8.9 Interest 142.40 142.40 142.40 136 Rep Schedule 12 Annual installments from 25.2.201 4 Bond XXXIII Gross loan opening 1600.00<		Interest	255.20	255.20	244.57
Gross loan opening 1600.00 1600.00 1600.00 Cumulative Repayment upto DOCO/previous year 0.00 0.00 0.00 Net Loan-Opening 1600.00 1600.00 1600.00 Additions during the year 0.00 0.00 0.00 Repayment during the year 0.00 0.00 133 Net Loan-Closing 1600.00 1600.00 1466 Average Loan 1600.00 1600.00 1533 Rate of Interest 8.90% 8.90% 8.9 Interest 142.40 142.40 136 Rep Schedule 12 Annual installments from 25.2.201 25.2.201 4 Bond XXXIII Gross loan opening 1600.00 1600.00 1600.00 Cumulative Repayment upto DOCO/previous year 0.00 0.00 0.00 0.00		Rep Schedule	12 Annual in	stallments from 2	9.9.2013
Cumulative Repayment upto DOCO/previous year 0.00 0.00 0.00 Net Loan-Opening 1600.00 1600.00 1600.00 Additions during the year 0.00 0.00 0.00 Repayment during the year 0.00 0.00 133 Net Loan-Closing 1600.00 1600.00 1466 Average Loan 1600.00 1600.00 1533 Rate of Interest 8.90% 8.90% 8.9 Interest 142.40 142.40 136 Rep Schedule 12 Annual installments from 25.2.201 4 Bond XXXIII Gross loan opening 1600.00 1600.00 1600.00 Cumulative Repayment upto DOCO/previous year 0.00 0.00 0.00 0.00	3	Bond XXXI			
Net Loan-Opening 1600.00 1600.00 1600.00 Additions during the year 0.00 0.00 0.00 Repayment during the year 0.00 0.00 133 Net Loan-Closing 1600.00 1600.00 1466 Average Loan 1600.00 1600.00 1533 Rate of Interest 8.90% 8.90% 8.5 Interest 142.40 142.40 136 Rep Schedule 12 Annual installments from 25.2.201 4 Bond XXXIII Gross loan opening 1600.00 1600.00 1600.00 Cumulative Repayment upto DOCO/previous year 0.00 0.00 0.00 0.00		Gross loan opening	1600.00	1600.00	1600.00
Additions during the year 0.00 0.00 0.00 0.00 133 Net Loan-Closing 1600.00 1600.00 1466 Average Loan 1600.00 1600.00 1533 Rate of Interest 8.90% 8.90% 8.9 Interest 142.40 142.40 136 Rep Schedule 12 Annual installments from 25.2.201 4 Bond XXXIII Gross loan opening 1600.00 1600.00 1600.00 Cumulative Repayment upto DOCO/previous year 0.00 0.00 0.00 0.00		Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Repayment during the year 0.00 0.00 133 Net Loan-Closing 1600.00 1600.00 1466 Average Loan 1600.00 1600.00 1533 Rate of Interest 8.90% 8.90% 8.90 Interest 142.40 142.40 136 Rep Schedule 12 Annual installments from 25.2.201 Bond XXXIII Gross loan opening 1600.00 1600.00 1600.00 Cumulative Repayment upto DOCO/previous year 0.00 0.00 0.00		Net Loan-Opening	1600.00	1600.00	1600.00
Net Loan-Closing 1600.00 1600.00 1466 Average Loan 1600.00 1600.00 1533 Rate of Interest 8.90% 8.90% 8.9 Interest 142.40 142.40 136 Rep Schedule 12 Annual installments from 25.2.201 4 Bond XXXIII Gross loan opening 1600.00 1600.00 1600.00 Cumulative Repayment upto DOCO/previous year 0.00 0.00 0.00 0.00		Additions during the year	0.00	0.00	0.00
Average Loan 1600.00 1600.00 1533 Rate of Interest 8.90% 8.90% 8.9 Interest 142.40 142.40 136 Rep Schedule 12 Annual installments from 25.2.201 4 Bond XXXIII Tools Ioan opening 1600.00 1600.00 1600.00 Cumulative Repayment upto DOCO/previous year 0.00 0.00 0.00 0.00		Repayment during the year	0.00	0.00	133.33
Average Loan 1600.00 1600.00 1533 Rate of Interest 8.90% 8.90% 8.9 Interest 142.40 142.40 136 Rep Schedule 12 Annual installments from 25.2.201 4 Bond XXXIII Tools Ioan opening 1600.00 1600.00 1600.00 Cumulative Repayment upto DOCO/previous year 0.00 0.00 0.00 0.00			1600.00	1600.00	1466.67
Rate of Interest 8.90% 8.90% 8.90 Interest 142.40 142.40 136 Rep Schedule 12 Annual installments from 25.2.201 4 Bond XXXIII Gross loan opening 1600.00 1600.00 1600.00 Cumulative Repayment upto DOCO/previous year 0.00 0.00 0.00 0.00		_	1600.00	1600.00	1533.33
Rep Schedule 12 Annual installments from 25.2.201 4 Bond XXXIII Gross loan opening 1600.00 1600.00 1600 Cumulative Repayment upto DOCO/previous year 0.00 0.00 0			8.90%	8.90%	8.90%
4 Bond XXXIII Gross loan opening 1600.00 1600.00 1600 Cumulative Repayment upto DOCO/previous year 0.00 0.00 0		Interest	142.40	142.40	136.47
4 Bond XXXIII Gross loan opening 1600.00 1600.00 1600 Cumulative Repayment upto DOCO/previous year 0.00 0.00 0		Rep Schedule	12 Annual in	stallments from 2	5.2.2014
Gross loan opening 1600.00 1600.00 1600.00 1600.00 Cumulative Repayment upto DOCO/previous year 0.00 0.00 0.00	4	•			
Cumulative Repayment upto DOCO/previous year 0.00 0.00 0.00		Gross loan opening	1600.00	1600.00	1600.00
		. •		0.00	0.00
, , , , , , , , , , , , , , , , , , , ,		Net Loan-Opening	1600.00	1600.00	1600.00
		· •			0.00
		•			0.00
1,7		,			1600.00
<u> </u>		<u> </u>			1600.00
<u> </u>		•			8.64%

	Interest	138.24	138.24	138.24
	Rep Schedule		nstallments from	
5	Bond XXXII			
	Gross loan opening	250.00	250.00	250.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	250.00	250.00	250.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	20.83
	Net Loan-Closing	250.00	250.00	229.17
	Average Loan	250.00	250.00	239.58
	Rate of Interest	8.84%	8.84%	8.84%
	Interest	22.10	22.10	21.18
	Rep Schedule	12 Annual ir	nstallments from 2	7.3.2014
6	Bond XXXIV			
	Gross loan opening	1004.72	1004.72	1004.72
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	1004.72	1004.72	1004.72
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	1004.72	1004.72	1004.72
	Average Loan	1004.72	1004.72	1004.72
	Rate of Interest	8.84%	8.84%	8.84%
	Interest	88.82	88.82	88.82
	Rep Schedule	12 Annual ins	stallments from 2	1.10.2014
7	Bond XXXVI (ADDCAP 2011-12)			
	Gross loan opening	0.00	344.65	344.65
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	0.00	344.65	344.65
	Additions during the year	344.65	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	344.65	344.65	344.65
	Average Loan	172.33	344.65	344.65
	Rate of Interest	9.35%	9.35%	9.35%
	Interest	16.11	32.22	32.22
	Rep Schedule	15 Annual in	stallments from 2	29.8.2016
	Total Loan			
	Gross loan opening	7854.72	8199.37	8199.37
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	41.67
	Net Loan-Opening	7854.72	8199.37	8157.70
	Additions during the year	344.65	0.00	0.00
	Repayment during the year	0.00	41.67	437.50
	Net Loan-Closing	8199.37	8157.70	7720.20
	Average Loan	8027.05	8178.54	7938.95
	Weighted Average Rate of Interest	8.8391%	8.8486%	8.8464%
	Interest	709.52	723.69	702.31

Annexure 4(ii)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

				(₹ in lakh)
	Details of Loan	2011-12	2012-13	2013-14
1	Bond XXVIII			
	Gross loan opening	1229.00	1229.00	1229.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	102.42
	Net Loan-Opening	1229.00	1229.00	1126.58
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	102.42	102.42
	Net Loan-Closing	1229.00	1126.58	1024.17
	Average Loan	1229.00	1177.79	1075.38
	Rate of Interest	9.33%	9.33%	9.33%
	Interest	114.67	109.89	100.33
	Rep Schedule	12 Annu	al installments from 1	15.12.2012
2	Bond XXX			
	Gross loan opening	6300.00	6300.00	6300.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	6300.00	6300.00	6300.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	525.00
	Net Loan-Closing	6300.00	6300.00	5775.00
0	Average Loan	6300.00	6300.00	6037.50
	Rate of Interest	8.80%	8.80%	8.80%
	Interest	554.40	554.40	531.30
	Rep Schedule	12 Annu	ual installments from	
3	Bond XXXI			
	Gross loan opening	3300.00	3300.00	3300.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	3300.00	3300.00	3300.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	275.00
	Net Loan-Closing	3300.00	3300.00	3025.00
	Average Loan	3300.00	3300.00	3162.50
	Rate of Interest	8.90%	8.90%	8.90%
	Interest	293.70	293.70	281.46
	Rep Schedule		ual installments from	
4	Bond XXXIII			
-	Gross loan opening	3500.00	3500.00	3500.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	3500.00	3500.00	3500.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	3500.00	3500.00	3500.00
	Average Loan	3500.00	3500.00	3500.00
	Rate of Interest	8.64%	8.64%	8.64%
	Interest	302.40	302.40	302.40

	Rep Schedule	12 Ar	nnual installments from	8.7.2014
5	Bond XXXII			
	Gross loan opening	550.00	550.00	550.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	550.00	550.00	550.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	45.83
	Net Loan-Closing	550.00	550.00	504.17
	Average Loan	550.00	550.00	527.08
	Rate of Interest	8.84%	8.84%	8.84%
	Interest	48.62	48.62	46.59
	Rep Schedule		nual installments from	
6	Bond XXXIV	,		
0	Gross loan opening	2741.00	2741.00	2741.00
	Cumulative Repayment upto	0.00	0.00	0.00
	DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	2741.00	2741.00	2741.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	2741.00	2741.00	2741.00
	Average Loan	2741.00	2741.00	2741.00
	Rate of Interest	8.84%	8.84%	8.84%
	Interest	242.30	242.30	242.30
	Rep Schedule		nual installments from	
7	Bond XXXVI			
-	Gross loan opening	1448.78	1448.78	1448.78
	Cumulative Repayment upto	0.00	0.00	0.00
	DOCO/previous year			
	Net Loan-Opening	1448.78	1448.78	1448.78
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	1448.78	1448.78	1448.78
	Average Loan	1448.78	1448.78	1448.78
	Rate of Interest	9.35%	9.35%	9.35%
	Interest	135.46	135.46	135.46
	Rep Schedule	15 An	nual installments from	29.8.2016
8	Bond XXXVI(ADDCAP 2012-13)			
	Gross loan opening	0.00	235.18	235.18
	Cumulative Repayment upto	0.00	0.00	0.00
	DOCO/previous year			
	Net Loan-Opening	0.00	235.18	235.18
	Additions during the year	235.18	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	235.18	235.18	235.18
	Average Loan	117.59	235.18	235.18
	Rate of Interest	9.35%	9.35%	9.35%
	Interest	10.99	21.99	21.99
	Rep Schedule	15 An	nual installments from	29.8.2016
	Total Loan			
	Gross loan opening	19068.78	19303.96	19303.96

Cumulative Repayment upto	0.00	0.00	102.42
DOCO/previous year			
Net Loan-Opening	19068.78	19303.96	19201.54
Additions during the year	235.18	0.00	0.00
Repayment during the year	0.00	102.42	948.25
Net Loan-Closing	19303.96	19201.54	18253.29
Average Loan	19186.37	19252.75	18727.42
Weighted Average Rate of	8.8737%	8.8754%	8.8739%
Interest			
Interest	1702.55	1708.76	1661.84

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

			(₹ in lakh)
	Details of Loan	2012-13	2013-14
1	Bond XXXVII		
	Gross loan opening	1200.00	1200.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	1200.00	1200.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	1200.00	1200.00
	Average Loan	1200.00	1200.00
	Rate of Interest	9.25%	9.25%
	Interest	111.00	111.00
	Rep Schedule	12 Annual installmen	nts from 26.12.2015
2	Bond XXXVIII		
	Gross loan opening	200.00	200.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	200.00	200.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	200.00	200.00
	Average Loan	200.00	200.00
	Rate of Interest	9.25%	9.25%
	Interest	18.50	18.50
	Rep Schedule	Bullet payme	
3	Bond XXXIX		
	Gross loan opening	400.00	400.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	400.00	400.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	400.00	400.00
	Average Loan	400.00	400.00
	Rate of Interest	9.40%	9.40%
	Interest	37.60	37.60
	Rep Schedule	Bullet Payment	on 29.3.2027
4	SBI		
	Gross loan opening	709.28	709.28
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	709.28	709.28
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	709.28	709.28
	Average Loan	709.28	709.28
	Rate of Interest	10.75%	10.75%

	Interest	76.25	76.25
	Rep Schedule	22 Annual installments	
5	Bond XXVIII		
	Gross loan opening	1020.00	1020.00
	Cumulative Repayment upto	0.00	85.00
	DOCO/previous year		
	Net Loan-Opening	1020.00	935.00
	Additions during the year	0.00	0.00
	Repayment during the year	85.00	85.00
	Net Loan-Closing	935.00	850.00
	Average Loan	977.50	892.50
	Rate of Interest	9.33%	9.33%
	Interest	91.20	83.27
	Rep Schedule	12 Annual installments	from 15.12.2012
6	BOND XXX		
	Gross loan opening	3100.00	3100.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	3100.00	3100.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	258.33
	Net Loan-Closing	3100.00	2841.67
	Average Loan	3100.00	2970.83
	Rate of Interest	8.80%	8.80%
	Interest	272.80	261.43
	Rep Schedule	12 Annual installments	from 29.9.2013
7	BOND XXXI		
	Gross loan opening	1490.00	1490.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	1490.00	1490.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	124.17
	Net Loan-Closing	1490.00	1365.83
	Average Loan	1490.00	1427.92
	Rate of Interest	8.9000%	8.90%
	Interest	132.61	127.08
	Rep Schedule	12 Annual installments	from 25.2.2014
8	Bond XXXIII		
	Gross loan opening	5760.00	5760.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	5760.00	5760.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	5760.00	5760.00
	Average Loan	5760.00	5760.00
	Rate of Interest	8.64%	8.64%
	Interest	497.66	497.66
	Rep Schedule	12 Annual installments	s from 8.7.2014
9	Bond XXXII		

	Gross loan opening	320.00	320.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year Net Loan-Opening	320.00	320.00
	Additions during the year	0.00	0.00
		0.00	26.67
	Repayment during the year		
	Net Loan-Closing	320.00	293.33
	Average Loan	320.00 8.84%	306.67
	Rate of Interest		8.84%
	Interest	28.29	27.11
	Rep Schedule	12 Annuai instalim	ents from 27.3.2014
10	Bond XXXIV		
	Gross loan opening	2550.00	2550.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	2550.00	2550.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	2550.00	2550.00
	Average Loan	2550.00	2550.00
	Rate of Interest	8.84%	8.84%
	Interest	225.42	225.42
	Rep Schedule		ents from 21.10.2014
11	Bond XXXV		
	Gross loan opening	400.00	400.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	400.00	400.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	400.00	400.00
	Average Loan	400.00	400.00
	Rate of Interest	9.64%	9.64%
	Interest	38.56	38.56
	Rep Schedule	12 Annual installm	ents from 31.5.2015
	Total Loan		
	Gross loan opening	17149.28	17149.28
	Cumulative Repayment upto DOCO/previous year	0.00	85.00
	Net Loan-Opening	17149.28	17064.28
	Additions during the year	0.00	0.00
	Repayment during the year	85.00	494.17
	Net Loan-Closing	17064.28	16570.11
	Average Loan	17106.78	16817.20
	Weighted Average Rate of	8.9432%	8.9426%
	Interest		
	Interest	1529.89	1503.89

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

			(₹ in lakh)	
	Details of Loan	2012-13	2013-14	
1	Bond XXVIII			
	Gross loan opening	1100.00	1100.00	
	Cumulative Repayment upto	91.67	91.67	
	DOCO/previous year			
	Net Loan-Opening	1008.33	1008.33	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	91.67	
	Net Loan-Closing	1008.33	916.67	
	Average Loan	1008.33	962.50	
	Rate of Interest	9.33%	9.33%	
	Interest	94.08	89.80	
	Rep Schedule	12 Annual installments fro	om 15.12.2012	
2	Bond XXX			
	Gross loan opening	6100.00	6100.00	
	Cumulative Repayment upto	0.00	0.00	
	DOCO/previous year			
	Net Loan-Opening	6100.00	6100.00	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	508.33	
	Net Loan-Closing	6100.00	5591.67	
	Average Loan	6100.00	5845.83	
	Rate of Interest	8.80%	8.80%	
	Interest	536.80	514.43	
	Rep Schedule	12 Annual installments from 29.9.2013		
3	Bond XXXI			
	Gross loan opening	5000.00	5000.00	
	Cumulative Repayment upto	0.00	0.00	
	DOCO/previous year			
	Net Loan-Opening	5000.00	5000.00	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	416.67	
	Net Loan-Closing	5000.00	4583.33	
	Average Loan	5000.00	4791.67	
	Rate of Interest	8.90%	8.90%	
	Interest	445.00	426.46	
	Rep Schedule	12 Annual installments fr	om 25.2.2014	
4	Bond XXXIII			
	Gross loan opening	3365.00	3365.00	
	Cumulative Repayment upto	0.00	0.00	
	DOCO/previous year			
	Net Loan-Opening	3365.00	3365.00	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	0.00	
	Net Loan-Closing	3365.00	3365.00	
	Average Loan	3365.00	3365.00	
	Rate of Interest	8.64%	8.64%	
	Interest	290.74	290.74	

	Rep Schedule	12 Annual installments f	from 8.7.2014
5	Bond XXXII		
	Gross loan opening	3000.00	3000.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	3000.00	3000.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	250.00
	Net Loan-Closing	3000.00	2750.00
	Average Loan	3000.00	2875.00
	Rate of Interest	8.84%	8.84%
	Interest	265.20	254.15
	Rep Schedule	12 Annual installments f	rom 27.3.2014
6	Bond XXXIV		
	Gross loan opening	2420.00	2420.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	2420.00	2420.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	2420.00	2420.00
	Average Loan	2420.00	2420.00
	Rate of Interest	8.84%	8.84%
	Interest	213.93	213.93
	Rep Schedule	12 Annual installments from	om 21.10.2014
7	Bond XXXV		
	Gross loan opening	3106.96	3106.96
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year	0.400.00	0400.00
	Net Loan-Opening	3106.96	3106.96
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	3106.96	3106.96
	Average Loan	3106.96	3106.96
	Rate of Interest	9.64%	9.64%
	Interest Par Calcadala	299.51	299.51
	Rep Schedule	12 Annual installments f	10HI 31.5.2015
	Total Loan	0.400.4.00	04004.60
	Gross loan opening	24091.96	24091.96
	Cumulative Repayment upto DOCO/previous year	91.67	91.67
	Net Loan-Opening	24000.29	24000.29
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	1266.67
	Net Loan-Closing	24000.29	22733.63
	Average Loan	24000.29	23366.96
	Weighted Average Rate of Interest	8.9384%	8.9400%
	Interest	2145.25	2089.02



CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

			(₹ in lakh)
	Details of Loan	2012-13	2013-14
1	Bond XXVIII		
	Gross loan opening	20.00	20.00
	Cumulative Repayment upto DOCO/previous year	0.00	1.67
	Net Loan-Opening	20.00	18.33
	Additions during the year	0.00	0.00
	Repayment during the year	1.67	1.67
	Net Loan-Closing	18.33	16.67
	Average Loan	19.17	17.50
	Rate of Interest	9.33%	9.33%
	Interest	1.79	1.63
	Rep Schedule		installments from .12.2012
		10	. 12.2012
2	Bond XXIX		
	Gross loan opening	60.00	60.00
	Cumulative Repayment upto DOCO/previous year	0.00	5.00
	Net Loan-Opening	60.00	55.00
	Additions during the year	0.00	0.00
	Repayment during the year	5.00	5.00
	Net Loan-Closing	55.00	50.00
	Average Loan	57.50	52.50
	Rate of Interest	9.20%	9.20%
	Interest	5.29	4.83
	Rep Schedule	12 Annual instal	lments from 12.3.2013
3	Bond XXX		
	Gross loan opening	80.00	80.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	80.00	80.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	6.67
	Net Loan-Closing	80.00	73.33
	Average Loan	80.00	76.67
	Rate of Interest	8.80%	8.80%
	Interest	7.04	6.75
	Rep Schedule		lments from 29.9.2013
4	Bond XXXI		
	Gross loan opening	90.00	90.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	90.00	90.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	7.50
	Net Loan-Closing	90.00	82.50
	Average Loan	90.00	86.25

	Interest	8.01	7.68
	Rep Schedule	12 Annual installn	nents from 25.2.2014
5	Bond XXXII		
	Gross loan opening	40.00	40.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	40.00	40.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	3.33
	Net Loan-Closing	40.00	36.67
	Average Loan	40.00	38.33
	Rate of Interest	8.84%	8.84%
	Interest	3.54	3.39
	Rep Schedule		ments from 27.3.2014
6	Bond XL		
	Gross loan opening	0.00	22.96
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	0.00	22.96
	Additions during the year	22.96	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	22.96	22.96
	Average Loan	11.48	22.96
	Rate of Interest	9.30%	9.30%
	Interest	1.07	2.14
	Rep Schedule		nents from 28.6.2016
7	Bond XXXIII	127	
	Gross loan opening	500.00	500.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	500.00	500.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	500.00	500.00
	Average Loan	500.00	500.00
	Rate of Interest	8.64%	8.64%
	Interest	43.20	43.20
	Rep Schedule		ments from 8.7.2014
0	BOND XXXIV	12 / umaa maan	
8	Gross loan opening	600.00	600.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	600.00	600.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	600.00	
		600.00	600.00
	Average Loan Rate of Interest	8.8400%	
			8.84%
	Interest Per Schodule	53.04	53.04
	Rep Schedule		10.2014
9	Bond XXXV	407.74	407.74
	Gross loan opening	167.74	167.74
		0.00	2.22
	Cumulative Repayment upto DOCO/previous year Net Loan-Opening	0.00 167.74	0.00 167.74

	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	167.74	167.74
	Average Loan	167.74	167.74
	Rate of Interest	9.64%	9.64%
	Interest	16.17	16.17
	Rep Schedule	12 Annual instal	lments from 31.5.2015
10	Bond XXXVI		
	Gross loan opening	600.00	600.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	600.00	600.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	600.00	600.00
	Average Loan	600.00	600.00
	Rate of Interest	9.35%	9.35%
	Interest	56.10	56.10
	Rep Schedule	15 Annual install	ments from 29.8.2016
	Total Loan		
	Gross loan opening	2157.74	2180.70
	Cumulative Repayment upto DOCO/previous year	0.00	6.67
	Net Loan-Opening	2157.74	2174.03
	Additions during the year	22.96	0.00
	Repayment during the year	6.67	24.17
	Net Loan-Closing	2174.03	2149.87
	Average Loan	2165.89	2161.95
	Weighted Average Rate of Interest	9.0144%	9.0159%
	Interest	195.24	194.92

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

			(₹ in lakh)
	Details of Loan	2012-13	2013-14
1	SBI		
	Gross loan opening	736.12	736.12
	Cumulative Repayment upto DOCO/previous	0.00	0.00
	year		
	Net Loan-Opening	736.12	736.12
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	736.12	736.12
	Average Loan	736.12	736.12
	Rate of Interest	10.75%	10.75%
	Interest	79.13	79.13
	Rep Schedule	22 Annual installmen	ts from 31.8.2016
2	Bond XXVIII		
	Gross loan opening	20.00	20.00
	Cumulative Repayment upto DOCO/previous	0.00	1.67
	year		
	Net Loan-Opening	20.00	18.33
	Additions during the year	0.00	0.00
	Repayment during the year	1.67	1.67
	Net Loan-Closing	18.33	16.67
	Average Loan	19.17	17.50
	Rate of Interest	9.33%	9.33%
	Interest	1.79	1.63
	Rep Schedule	12 Annual installment	s from 15.12.2012
3	Bond XXIX		
	Gross loan opening	50.00	50.00
	Cumulative Repayment upto DOCO/previous	0.00	4.17
	year Orania a	50.00	45.00
	Net Loan-Opening	50.00	45.83
	Additions during the year	0.00	0.00
	Repayment during the year	4.17	4.17
	Net Loan-Closing	45.83	41.67
	Average Loan	47.92 9.20%	43.75
	Rate of Interest		9.20%
	Interest Per Sehadula	4.41 12 Annual installmen	4.03
	Rep Schedule	12 Allitual IIIStalliflefi	10111 12.3.2013
4	Bond XXX	450.00	450.00
	Gross loan opening	150.00	150.00
	Cumulative Repayment upto DOCO/previous	0.00	0.00
	year Net Loan-Opening	150.00	150.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	12.50
	Net Loan-Closing	150.00	137.50
	Average Loan	150.00	143.75
	Rate of Interest	8.80%	8.80%
	Interest	13.20	12.65
	IIICICOL	13.20	12.00

	Rep Schedule	12 Annual installments fr	rom 29.9.2013
5	Bond XXXI		
	Gross loan opening	150.00	150.00
	Cumulative Repayment upto DOCO/previous	0.00	0.00
	year Net Loan-Opening	150.00	150.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	12.50
	Net Loan-Closing	150.00	137.50
	Average Loan	150.00	143.75
	Rate of Interest	8.90%	8.90%
	Interest	13.35	12.79
	Rep Schedule	12 Annual installments fro	
6	Bond XXXIII	12 / timedi motalimonto no	20.2.2011
O	Gross loan opening	300.00	300.00
	Cumulative Repayment upto DOCO/previous	0.00	0.00
	year	0.00	0.00
	Net Loan-Opening	300.00	300.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	300.00	300.00
	Average Loan	300.00	300.00
	Rate of Interest	8.64%	8.64%
	Interest	25.92	25.92
	Rep Schedule	12 Annual installments fi	rom 8.7.2014
7	Bond XXXII		
	Gross loan opening	20.00	20.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	20.00	20.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	1.67
	Net Loan-Closing	20.00	18.33
	Average Loan	20.00	19.17
	Rate of Interest	8.84%	8.84%
	Interest	1.77	1.69
	Rep Schedule	12 Annual installments fr	
8	BOND XXXIV		
	Gross loan opening	580.00	580.00
	Cumulative Repayment upto DOCO/previous	0.00	0.00
	year Net Loan-Opening	580.00	580.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	580.00	580.00
	Average Loan	580.00	580.00
	Rate of Interest	8.8400%	8.84%
	Interest	51.27	51.27
	Rep Schedule	12 Annual installments fro	
	Bond XXXV	12 / unidai installinents ild	21.10.2014
9	Gross loan opening	310.00	310.00
	Cumulative Repayment upto DOCO/previous	0.00	0.00
	Cumulative Repayment upto DOCO/previous	0.00	0.00

	year			
	Net Loan-Opening	310.00	310.00	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	0.00	
	Net Loan-Closing	310.00	310.00	
	Average Loan	310.00	310.00	
	Rate of Interest	9.64%	9.64%	
	Interest	29.88	29.88	
	Rep Schedule	12 Annual installr	nents from 31.5.2015	
10	Bond XXXVI			
	Gross loan opening	370.00	370.00	
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	
	Net Loan-Opening	370.00	370.00	
	Additions during the year	0.00	0.00	
	Repayment during the year	0.00	0.00	
	Net Loan-Closing	370.00	370.00	
	Average Loan	370.00	370.00	
	Rate of Interest	9.35%	9.35%	
	Interest	34.60	34.60	
	Rep Schedule	15 Annual installn	ments from 29.8.2016	
	Total Loan			
	Gross loan opening	2686.12	2686.12	
	Cumulative Repayment upto DOCO/previous year	0.00	5.83	
	Net Loan-Opening	2686.12	2680.29	
	Additions during the year	0.00	0.00	
	Repayment during the year	5.83	32.50	
	Net Loan-Closing	2680.29	2647.79	
	Average Loan	2683.20	2664.04	
	Weighted Average Rate of Interest	9.5154%	9.5194%	
	Interest	255.32	253.60	

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

	·			(₹ in lakh)
	Details of Loan	2011-12	2012-13	2013-14
1	Bond XXVIII			
	Gross loan opening	8.00	8.00	8.00
	Cumulative Repayment upto	0.00	0.00	0.67
	DOCO/previous year			
	Net Loan-Opening	8.00	8.00	7.33
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.67	0.67
	Net Loan-Closing	8.00	7.33	6.67
	Average Loan	8.00	7.67	7.00
	Rate of Interest	9.33%	9.33%	9.33%
	Interest	0.75	0.72	0.65
	Rep Schedule	12 Annual in	stallments from 15.12.2	2012
2	Top College			
	Gross loan opening	19.00	19.00	19.00
	Cumulative Repayment upto	0.00	0.00	1.58
	DOCO/previous year			
	Net Loan-Opening	19.00	19.00	17.42
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	1.58	1.58
	Net Loan-Closing	19.00	17.42	15.83
	Average Loan	19.00	18.21	16.63
	Rate of Interest	9.20%	9.20%	9.20%
	Interest	1.75	1.68	1.53
	Rep Schedule		nstallments from 12.3.2	
3	Bond XXX			
	Gross loan opening	105.00	105.00	105.00
	Cumulative Repayment upto	0.00	0.00	0.00
	DOCO/previous year			
	Net Loan-Opening	105.00	105.00	105.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	8.75
	Net Loan-Closing	105.00	105.00	96.25
	Average Loan	105.00	105.00	100.63
	Rate of Interest	8.80%	8.80%	8.80%
	Interest	9.24	9.24	8.86
	Rep Schedule		nstallments from 29.9.2	
4	Bond XXXI			
_	Gross loan opening	58.00	58.00	58.00
	Cumulative Repayment upto	0.00	0.00	0.00
	DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	58.00	58.00	58.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	4.83
	Net Loan-Closing	58.00	58.00	53.17
	Average Loan	58.00	58.00	55.58
	Rate of Interest	8.90%	8.90%	8.90%
	Interest	5.16	5.16	4.95

	Rep Schedule	12 Annual in:	stallments from 25.2.20	014
5	Bond XXXIII			
Э	Gross loan opening	117.00	117.00	117.00
	Cumulative Repayment upto	0.00	0.00	0.00
	DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	117.00	117.00	117.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	117.00	117.00	117.00
	Average Loan	117.00	117.00	117.00
	Rate of Interest	8.64%	8.64%	8.64%
	Interest	10.11	10.11	10.11
	Rep Schedule	12 Annual ir	nstallments from 8.7.20	14
6	Bond XXXIV			
	Gross loan opening	200.00	200.00	200.00
	Cumulative Repayment upto	0.00	0.00	0.00
	DOCO/previous year	222.22	222.22	222.22
	Net Loan-Opening	200.00	200.00	200.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	200.00	200.00	200.00
	Average Loan	200.00	200.00	200.00
	Rate of Interest	8.84%	8.84%	8.84%
	Interest	17.68	17.68	17.68
	Rep Schedule Bullet Payment as on 21.10.2014			
7	Bond XXXV	400.00	100.00	400.00
	Gross loan opening	100.00	100.00	100.00
	Cumulative Repayment upto	0.00	0.00	0.00
	DOCO/previous year	400.00	400.00	400.00
	Net Loan-Opening	100.00	100.00	100.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	100.00	100.00	100.00
	Average Loan	100.00	100.00	100.00
	Rate of Interest	9.64%	9.64%	9.64%
	Interest	9.64	9.64	9.64
	Rep Schedule	12 Annual installments from 31.5.2015		
8	BOND XXXVI			
	Gross loan opening	230.33	230.33	230.33
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	230.33	230.33	230.33
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	230.33	230.33	230.33
	Average Loan	230.33	230.33	230.33
	Rate of Interest	9.3500%	9.35%	9.35%
	Interest	21.54	21.54	21.54
			21.54 stallments from 29.8.20	
_	Rep Schedule	10 / timida installinents from 29.0.2010		J10
9	Bond XXXII	7.00	7.00	7.00
	Gross loan opening	7.00	7.00	7.00

Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	7.00	7.00	7.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.58
Net Loan-Closing	7.00	7.00	6.42
Average Loan	7.00	7.00	6.71
Rate of Interest	8.84%	8.84%	8.84%
Interest	0.62	0.62	0.59
Rep Schedule	12 Annual installments from 27.3.2014		
Total Loan			
Gross loan opening	844.33	844.33	844.33
Cumulative Repayment upto DOCO/previous year	0.00	0.00	2.25
Net Loan-Opening	844.33	844.33	842.08
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	2.25	16.42
Net Loan-Closing	844.33	842.08	825.66
Average Loan	844.33	843.21	833.87
Weighted Average Rate of Interest	9.0581%	9.0578%	9.0592%
Interest	76.48	76.38	75.54

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

				(₹ in lakh)
	Details of Loan	2011-12	2012-13	2013-14
1	Bond XXVIII			
	Gross loan opening	8.00	8.00	8.00
	Cumulative Repayment upto	0.00	0.00	0.67
	DOCO/previous year			
	Net Loan-Opening	8.00	8.00	7.33
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.67	0.67
	Net Loan-Closing	8.00	7.33	6.67
	Average Loan	8.00	7.67	7.00
	Rate of Interest	9.33%	9.33%	9.33%
	Interest	0.75	0.72	0.65
	Rep Schedule	12 Annual insta	allments from 15.12.20	12
2	Bond XXIX			
	Gross loan opening	19.00	19.00	19.00
	Cumulative Repayment upto	0.00	0.00	1.58
	DOCO/previous year			
	Net Loan-Opening	19.00	19.00	17.42
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	1.58	1.58
	Net Loan-Closing	19.00	17.42	15.83
	Average Loan	19.00	18.21	16.63
	Rate of Interest	9.20%	9.20%	9.20%
	Interest	1.75	1.68	1.53
	Rep Schedule	12 Annual inst	allments from 12.3.201	3
3	Bond XXX			
	Gross loan opening	55.00	55.00	55.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	55.00	55.00	55.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	4.58
	Net Loan-Closing	55.00	55.00	50.42
	Average Loan	55.00	55.00	52.71
	Rate of Interest	8.80%	8.80%	8.80%
	Interest	4.84	4.84	4.64
	Rep Schedule	12 Annual inst	allments from 29.9.201	3
4	Bond XXXI			
	Gross loan opening	40.00	40.00	40.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	40.00	40.00	40.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	3.33
	Net Loan-Closing	40.00	40.00	36.67
	Average Loan	40.00	40.00	38.33

Rate of Interest Interest Rep Schedule Bond XXXIII Gross Ioan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan	117.00 0.00 117.00 0.00 0.00	8.90% 3.56 allments from 25.2.2014 117.00 0.00 117.00 0.00	117.00
Rep Schedule Bond XXXIII Gross loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan	12 Annual insta 117.00 0.00 117.00 0.00 0.00	117.00 0.00	117.00 0.00
Bond XXXIII Gross loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan	117.00 0.00 117.00 0.00 0.00	117.00 0.00 117.00	117.00
Gross loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan	0.00 117.00 0.00 0.00	0.00 117.00	0.00
Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan	0.00 117.00 0.00 0.00	0.00 117.00	0.00
DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan	117.00 0.00 0.00	117.00	
Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan	0.00 0.00		
Additions during the year Repayment during the year Net Loan-Closing Average Loan	0.00 0.00		117.00
Repayment during the year Net Loan-Closing Average Loan	0.00	0.00	0.00
Net Loan-Closing Average Loan		0.00	0.00
Average Loan	117.00	117.00	117.00
•	117.00	117.00	117.00
Rate of Interest	8.64%	8.64%	8.64%
Interest	10.11	10.11	10.11
Rep Schedule		allments from 8.7.2014	
	127111100111100		
	7.00	7.00	7.00
. •			0.00
DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	7.00	7.00	7.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.58
Net Loan-Closing	7.00	7.00	6.42
Average Loan	7.00	7.00	6.71
Rate of Interest	8.84%	8.84%	8.84%
Interest	0.62	0.62	0.59
Rep Schedule	12 Annual insta	allments from 27.3.201	4
Bond XXXIV			
Gross loan opening	200.00	200.00	200.00
Cumulative Repayment upto	0.00	0.00	0.00
DOCO/previous year			
	200.00	200.00	200.00
	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	200.00	200.00	200.00
Average Loan	200.00	200.00	200.00
Rate of Interest	8.84%	8.84%	8.84%
Interest	17.68	17.68	17.68
Rep Schedule	12 Annual insta	llments from 21.10.201	4
Bond XXXV			
Gross loan opening	161.00	161.00	161.00
Cumulative Repayment upto	0.00	0.00	0.00
DOCO/previous year			
			161.00
		0.00	0.00
	0.00		0.00
•			161.00
			161.00
			9.64%
			15.52
Trop deficació	, unidai inote		-
	Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XXXIV Gross loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule Bond XXXV Gross loan opening Cumulative Repayment upto	Gross loan opening	Gross loan opening

9	Bond XXXVI			
	Gross loan opening	140.00	140.00	140.00
	Cumulative Repayment upto	0.00	0.00	0.00
	DOCO/previous year			
	Net Loan-Opening	140.00	140.00	140.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	140.00	140.00	140.00
	Average Loan	140.00	140.00	140.00
	Rate of Interest	9.35%	9.35%	9.35%
	Interest	13.09	13.09	13.09
	Rep Schedule	15 Annual ins	tallments from 29.8.2016	
10	Bond XXXVII			
	Gross loan opening	21.17	21.17	21.17
	Cumulative Repayment upto	0.00	0.00	0.00
	DOCO/previous year			
	Net Loan-Opening	21.17	21.17	21.17
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	21.17	21.17	21.17
	Average Loan	21.17	21.17	21.17
	Rate of Interest	9.25%	9.25%	9.25%
	Interest	1.96	1.96	1.96
	Rep Schedule	12 Annual inst	allments from 26.12.2015	T
	Total Loan			
	Gross loan opening	768.17	768.17	768.17
	Cumulative Repayment upto	0.00	0.00	2.25
	DOCO/previous year			
	Net Loan-Opening	768.17	768.17	765.92
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	2.25	10.75
	Net Loan-Closing	768.17	765.92	755.17
	Average Loan	768.17	767.05	760.55
	Weighted Average Rate of	9.0957%	9.0955%	9.0965%
	Interest			
	Interest	69.87	69.77	69.18