

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 70/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 : 22.01.2015

In the matter of:

Approval of transmission tariff for assets associated with Supplementary Transmission System under DVC and Maithon Right Bank project in Northern Region for the period from date 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 for determination.

And

In the matter of:

Power Grid Corporation of India Limited
"Saudamani", Plot No.2,
Sector-29, Gurgaon -122 001 (Haryana).

.....Petitioner

Vs

1. UP Power Corporation Ltd.,
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226 001.
2. Rajasthan Rajya Vidyut Prasaran Nigam Ltd.,
Vidyut Bhawan, Vidyut Marg,
Jaipur- 302 005.
3. Ajmer Vidyut Vitran Nigam Ltd.,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.
4. Jaipur Vidyut Vitran Nigam Ltd.,



- 400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.
5. Jodhpur Vidyut Vitran Nigam Ltd.,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.
 6. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171 004.
 7. Punjab State Electricity Board
The Mall, Patiala-147 001.
 8. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula (Haryana)-134 109.
 9. Power Development Department,
Govt. of Jammu and Kashmir,
Mini Secretariat, Jammu.
 10. Delhi Transco Ltd.,
Shakti Sadan, Kotla Road,
New Delhi-110 002.
 11. BSES Yamuna Power Ltd.,
BSES Bhawan, Nehru Place,
New Delhi.
 12. BSES Rajdhani Power Ltd.,
BSES Bhawan, Nehru Place,
New Delhi.
 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.
 15. Uttarakhand Power Corporation Ltd.,
Urja Bhawan, Kanwali Road,
Dehradun.

16. North Central Railway,
Allahabad.

17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110 002.

....Respondents

For petitioner : Shri M M Mondal, PGCIL
Shri S S Raju, PGCIL
Shri S K Venkatesan, PGCIL
Ms. Seema Gupta, PGCIL
Ms. Sangeeta Edwards, PGCIL

For respondent : None

ORDER

This petition has been filed by Power Grid Corporation of India (PGCIL) seeking approval of transmission tariff for assets associated with Supplementary Transmission System under DVC and Maithon Right Bank project in Northern Region (hereinafter referred to as “transmission assets”) for the period from the respective dates of commercial operation 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 (I.A.) of the project was accorded by the Board of Directors of the petitioner company vide Memorandum dated 29.8.2008 at an estimated cost of ₹236095 lakh including IDC of ₹23593 lakh at 1st quarter, 2008 price level. During the pendency of the petition, the Board of Directors of the petitioner accorded approval for the revised cost estimates of ₹258090 lakh including



IDC of ₹24441 lakh at December, 2012 price level, vide Memorandum dated 24.5.2013 which was submitted vide the petitioner's affidavit dated 14.10. 2014.

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

Transmission Lines:

(a) Specific System for Maithon RB

- Maithon RB TPS-Ranchi (PG) 400 kV D/C :200 Km

(b) Specific System for Bokaro Extn. and Koderma

- Bokaro TPS Extn -Koderma TPS 400 kV D/C :110 Km
- Koderma- Gaya (PG) 400 kV D/C (Quad) :80 Km

(c) Specific System for Mejia Extn.

- Mejia-Maithon (PG) 400 kV D/C :57 Km

(d) Common Transmission System for import of power by NR

- Sasaram- Fatehpur 765 kV S/C line :342 Km
- Fatehpur-Agra 765 kV S/C line :325 Km
- Biharshariff- Sasaram 400 kV D/C (Quad Conductor) line: 195 Km
- LILO of Singrauli-Kanpur 400 kV S/C line at Fatehpur :2.5 Km
- LILO of Allahabad-Kanpur 400 kV S/C line at Fatehpur :1.0 Km
- LILO of Fatehpur (UPPCL)-Kanpur(UPPCL) 220 kV D/C line at Fatehpur (POWERGRID) :9.0 Km
- LILO of Dehri- Bodhgaya 200 kV D/C line at Gaya : 23.2 Km

Sub-stations:

(a) Additional Scope at Fatehpur 765/400 kV sub-station

- 2x315 MVA, 400/220 kV transformer with associated bays
- 4 nos. 400 kV line bays (for LILO of Singrauli- Kanpur 400 kV S/C & LILO of Allahabad- Kanpur 400 kV S/C line)
- 4 nos. 220 kV line bays (for LILO of Fatehpur (UPPCL) – Kanpur (UPPCL) 220 kv D/C line)

(b) Additional scope at Gaya 765/400 kV sub-station

- 2x315 MVA,400/220 kV transformer with associated bays
- 4 nos. 220 kV line bays (for LILO of Dehri- Bodhgaya 220 kv D/C line)

(c) Additional scope at Ranchi 400/220 kV sub-station

- 2. nos. 400 kV line bays (for termination of Maithon RB- Ranchi 400 kV D/C line)

(d) 2 PLCC Equipments for the following:-

- Koderma TPS-Bokaro TPS 400 kV D/C line
- At Dehri and Bodhgaya 220 kV Sub-stations (for LILO of Dehri-Bodhgaya 220kV D/C line at Gaya)

Note: 1) Bays at Maithon RB, Koderma TPS, Bokaro TPS and Mejia TPS are to be covered under the scope of Generation Switchyards.

2) Bay extensions at POWERGRID Sub-station at Sasaram, Agra & Biharshariff for termination of associated lines have been covered under the main DPR for DVC and Maithon RB projects.

4. Through this petition the petitioner has claimed tariff in respect of assets associated with Supplementary Transmission System under DVC and Maithon Right Bank project in Northern Region. As per I.A. dated 29.8.2009, the transmission scheme was scheduled to be commissioned in 48 months progressively from the

date of I.A. Hence, the assets were to be commissioned in progressive manner upto 1.9.2012. Subsequent to the filing of the petition, the petitioner vide affidavit dated 21.6.2013 submitted the actual dates of commissioning of the assets as under:-

Name of the Assets	Actual DOCO
400/220 kV, 315 MVA ICT –I at Fatehpur Extension (hereinafter referred to as “ Asset-1 ”)	1.1.2012
400/220 kV, 315 MVA ICT –II at Fatehpur Extension (hereinafter referred to as “ Asset-2 ”)	1.1.2012
LILO of Singrauli Kanpur at Fatehpur (hereinafter referred to as “ Asset-3 ”)	1.2.2012
LILO of Fatehpur (UPPCL)-Kanpur(UPPCL) 220kV D/C line at Fatehpur (hereinafter referred to as “ Asset-4 ”)	1.1.2012
LILO of Allahabad-Kanpur 400 kV S/C line at Fatehpur (hereinafter referred to as “ Asset-5 ”)	1.1.2012
765 kV Sasaram- Fatehpur S/C Transmission line (hereinafter referred to as “ Asset-6 ”)	1.4.2012
LILO of Ckt- I 220 kV D/C Dehri Bodhgaya at Gaya Sub-station and associated 220 kV line bays (hereinafter referred to as “ Asset-7 ”)	1.2.2012
LILO of Ckt- II 220 kV D/C Dehri Bodhgaya at Gaya Sub-station and associated 220 kV line bays (hereinafter referred to as “ Asset-8 ”)	1.4.2012
315 MVA 400/220 kV ICT-I at Gaya Extension (hereinafter referred to as “ Asset-9 ”)	1.2.2012
315 MVA 400/220 kV ICT-II at Gaya Extension (hereinafter referred to as “ Asset-10 ”)	1.2.2012

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

(₹ in lakh)

Particulars	Asset 1			Asset 2		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Depreciation	26.48	117.82	127.33	26.48	117.82	127.33
Interest on Loan	32.20	136.72	137.04	32.20	136.72	137.04
Return on equity	26.30	117.02	126.47	26.30	117.02	126.47
Interest on Working Capital	2.89	12.47	13.14	2.89	12.47	13.14
O & M Expenses	24.89	105.26	111.28	24.89	105.26	111.28
Total	112.76	489.29	515.26	112.76	489.29	515.26



Particulars	Asset 3			Asset 4		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Depreciation	12.88	129.37	159.23	13.73	72.50	76.80
Interest on Loan	15.27	146.30	168.60	16.55	83.55	81.81
Return on equity	12.74	128.21	157.85	13.56	71.55	75.73
Interest on Working Capital	1.87	14.74	16.75	0.92	4.72	4.87
O & M Expenses	21.93	139.11	147.06	0.86	3.64	3.85
Total	64.69	557.73	649.49	45.62	235.96	243.06
Particulars	Asset 5			Asset 6		
	2011-12	2012-13	2013-14	2012-13	2013-14	
Depreciation	25.35	147.38	156.47	2776.43	2,873.34	
Interest on Loan	31.23	174.03	171.01	3157.76	3,018.04	
Return on equity	25.12	146.07	155.05	2757.66	2,853.91	
Interest on Working Capital	1.76	9.90	10.23	211.88	213.78	
O & M Expenses	2.76	11.69	12.35	213.87	225.99	
Total	86.22	489.07	505.11	9117.60	9185.06	

(₹ in lakh)

Particulars	Asset 7			Asset 8		
	2011-12	2012-13	2013-14	2012-13	2013-14	
Depreciation	9.54	71.82	76.07	74.73	78.99	
Interest on Loan	11.39	82.50	80.89	86.97	85.08	
Return on equity	9.42	70.90	75.06	73.77	77.93	
Interest on Working Capital	1.29	8.85	9.23	10.40	10.84	
O & M Expenses	14.30	90.72	95.91	90.18	95.33	
Total	45.94	324.79	337.16	336.05	348.17	
Particulars	Asset 9			Asset 10		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Depreciation	13.20	86.44	90.24	15.44	95.99	96.94
Interest on Loan	15.50	97.42	94.04	18.93	112.50	104.70
Return on equity	13.11	85.86	89.63	15.34	95.34	96.28
Interest on Working Capital	1.63	10.43	10.81	1.79	11.11	11.28
O & M Expenses	16.60	105.26	111.28	16.60	105.26	111.28
Total	60.04	385.41	396.00	68.10	420.20	420.48

6. The details submitted by the petitioner in support of its claim for Interest on Working Capital are given overleaf:-

(₹ in lakh)

Particulars	Asset 1			Asset 2		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Maintenance Spares	14.93	15.79	16.69	14.93	15.79	16.69
O & M expenses	8.30	8.77	9.27	8.30	8.77	9.27
Receivables	75.17	81.55	85.88	75.17	81.55	85.88
Total	98.40	106.11	111.84	98.40	106.11	111.84
Interest	2.89	12.47	13.14	2.89	12.47	13.14
Rate of Interest	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%

Particulars	Asset 3			Asset 4		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Maintenance Spares	19.74	20.87	22.06	0.52	0.55	0.58
O & M expenses	10.97	11.59	12.26	0.29	0.30	0.32
Receivables	64.69	92.96	108.25	30.41	39.33	40.51
Total	95.40	125.42	142.57	31.22	40.18	41.41
Interest	1.87	14.74	16.75	0.92	4.72	4.87
Rate of Interest	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%

(₹ in lakh)

Particulars	Asset 5			Asset 6	
	2011-12	2012-13	2013-14	2012-13	2013-14
Maintenance Spares	1.66	1.75	1.85	32.08	33.90
O & M expenses	0.92	0.97	1.03	17.82	18.83
Receivables	57.48	81.51	84.19	1519.60	1530.84
Total	60.06	84.23	87.07	1569.50	1583.57
Interest	1.76	9.90	10.23	211.88	213.78
Rate of Interest	11.75%	11.75%	11.75%	13.50%	13.50%

(₹ in lakh)

Particulars	Asset 7			Asset 8	
	2011-12	2012-13	2013-14	2012-13	2013-14
Maintenance Spares	12.87	13.61	14.39	13.53	14.30
O & M expenses	7.15	7.56	7.99	7.52	7.94
Receivables	45.94	54.13	56.19	56.01	58.03
Total	65.96	75.30	78.57	77.06	80.27
Interest	1.29	8.85	9.23	10.40	10.84
Rate of Interest	11.75%	11.75%	11.75%	13.50%	13.50%

Particulars	Asset 9			Asset 10		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Maintenance Spares	14.94	15.79	16.69	14.94	15.79	16.69
O & M expenses	8.30	8.77	9.27	8.30	8.77	9.27
Receivables	60.04	64.24	66.00	68.10	70.03	70.08
Total	83.28	88.80	91.96	91.34	94.59	96.04
Interest	1.63	10.43	10.81	1.79	11.11	11.28
Rate of Interest	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%



7. The details of apportioned approved cost, actual expenditure incurred as on date of commercial operation and details of additional capital expenditure (hereinafter “add cap”) incurred/ projected to be incurred for the assets covered in the petition are summarized below:-

(₹ in lakh)

Particulars	Affidavit reference	Revised apportioned approved cost	Cost incurred up to DOCO*	Projected additional capital expenditure			Total estimated completion cost
				DOCO to 31.3.2012	2012-13	2013-14	
Asset-1	20.6.2013	2506.66	1961.32	89.90	360.32	0.00	2411.54
Asset-2	20.6.2013	2506.66	1961.32	89.90	360.32	0.00	2411.54
Asset-3	27.6.2014	3783.36	679.23	1557.05	416.85	713.84	3366.97
Asset-4	20.6.2013	1604.20	784.29	500.35	159.50	0.00	1444.14
Asset-5	20.6.2013	2958.76	1217.06	1397.27	342.23	0.00	2956.56
Asset-6	27.6.2014	56387.04		52033.49	1100.83	2570.05	55704.37
Asset-7	27.6.2014	1512.26	858.54	437.78	111.41	46.99	1454.72
Asset-8	27.6.2014	1512.26		1351.01	111.42	46.99	1509.42
Asset-9	27.6.2014	2450.52	1379.90	239.41	35.68	108.24	1763.23
Asset-10	27.6.2014	2450.52	1708.82	91.41	35.68	0.00	1835.91

8. No comments have been received from the 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 only by Jodhpur Vidyut Vitran Nigam Ltd (JVNL), Respondent No. 5, vide its affidavit dated 19.3.2012. JVNL had asked for the details of the commissioning of the assets which have since been furnished by the petitioner. JVNL has further requested the Commission to exercise prudence check and to ensure that completion cost is within the approved cost. As stated above, revised cost estimates have since been approved by the Board of Directors of the petitioner company in May, 2014. Other concerns expressed by JVNL regarding higher O&M charges have been taken into consideration while computing tariff and the same are being addressed in the respective paras of this order.

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

Capital cost

10. As regards the capital cost, Regulation 7(1) of the 2009 Tariff Regulations provides as under:

“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.”

11. Initially, the petitioner had submitted in the main petition, the capital cost incurred and capital cost projected to be incurred based on the anticipated date of commercial operation through the auditor certificate. Subsequently, during the pendency of the petition, the assets have been put under commercial operation. Thereupon, the petitioner vide additional affidavits dated 20.6.2013 and 27.6.2014 submitted the capital cost as per actual date of commercial operation based on the Management certificates for all the assets covered in the instant petition.

Cost over-run

12. As per the original approved cost there was cost over-run in case of Asset-3, Asset-4, Asset-5 and Asset-6. The petitioner vide letter 23.8.2013 was directed to submit the Revised Cost Estimates. The same was submitted by the petitioner vide affidavit dated 14.10.2014. As per revised apportioned approved cost there is no cost over-run.

Time over-run

13. As per the I.A., the project was scheduled to be commissioned within 48 months progressively from the date of I.A. i.e. by 1.9.2012. As against this, the assets covered in the instant petition have been put under commercial operation on or prior to 1.4.2012. Hence, there is no time over-run.

Initial spares

14. Regulation 8 of the 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%

15. Details of the initial spares claimed for all the assets and the percentage thereof are summarized in the table below:-

(₹ in lakh)				
Asset	Description	Capital cost	Initial spares	Initial spares as % of capital cost
Asset-1	Transmission Line	Initial spares not claimed		
	Sub-Station	2411.54	22.85	0.95%
Asset-2	Transmission Line	Initial spares not claimed		
	Sub-Station	2411.54	22.85	0.95%
Asset-3	Transmission Line	Initial spares not claimed		
	Sub-Station	2803.48	1.82	0.06%
Asset-4	Transmission Line	Initial spares not claimed		
	Sub-Station	579.18	10.05	1.74%
Asset-5	Transmission Line	Initial spares not claimed		
	Sub-Station	764.89	0.17	0.02%
Asset-6	Transmission Line	Initial spares not claimed		
	Sub-Station			
Asset-7	Transmission Line	760.20	3.75	0.49%
	Sub-Station	694.52	14.75	2.12%
Asset-8	Transmission Line	798.67	3.75	0.47%
	Sub-Station	710.75	14.75	2.08
Asset-9	Transmission Line	Initial spares not claimed		
	Sub-Station	1763.23	17.74	1.00%
Asset-10	Transmission Line	Initial spares not claimed		
	Sub-Station	1835.91	17.74	0.97%

16. It is seen from the above that cost of initial spares claimed falls within the ceiling limit specified under Regulation 8 of the 2009 regulations. Accordingly, the same is being allowed for the purpose of computation of tariff.

17. The capital cost as on the date of commercial operation considered for the purpose of determination of transmission tariff after taking into account the capitalisation of IDC and IEDC and cost of initial spares is as follows:-

(₹ in lakh)

Particulars	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5
Management Certificate reference	12.7.2012	12.7.2012	30.4.2014	12.7.2012	12.7.2012
Freehold Land	0.00	0.00	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	0.00
Building & Other Civil Works	0.00	0.00	0.00	0.00	0.00
Transmission Line	0.00	0.00	221.50	462.71	901.73
Sub-Station Equipments	1961.32	1961.32	430.69	297.55	291.30
PLCC	0.00	0.00	27.04	24.03	24.03
Total	1961.32	1961.32	679.23	784.29	1217.06

(₹ in lakh)

Particulars	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5
Management Certificate reference	30.4.2014	11.12.2013	30.4.2014	11.12.2013	11.12.2013
Freehold Land	0.00	0.00	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	0.00
Building & Other Civil Works	0.00	0.00	0.00	0.00	0.00
Transmission Line	52033.49	358.24	704.64	1379.90	1708.82
Sub-Station Equipments	0.00	477.80	602.70	0.00	0.00
PLCC	0.00	22.50	43.67	0.00	0.00
Total	52033.49	858.54	1351.01	1379.90	1708.82

Additional capital expenditure

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

“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.”

19. Further, the 2009 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 in case 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”.

20. 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 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. 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 Tariff Regulations, 2009 and is adjusted within the apportioned approved cost.

21. Further, petitioner has submitted projected additional capital expenditure pertaining to FY 2014-15 in case of Asset-3. The same will be dealt with under the 2014 Tariff Regulations as and when the petitioner files the tariff petition for the relevant period.

22. 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 under:-

(₹ in lakh)

Particulars	Asset-1			Asset-2		
	2011-12	2012-13	2013-14	2012-13	2012-13	2013-14
Freehold Land	0.00	0.00	0.00	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00
Building & Other Civil Works	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Station Equipments	89.90	360.32	0.00	89.90	360.32	0.00
PLCC	0.00	0.00	0.00	0.00	0.00	0.00
Total	89.90	360.32	0.00	89.90	360.32	0.00

(₹ in lakh)

Particular	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
	Asset-3			Asset-4		
Freehold Land	0.00	0.00	0.00	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00
Building & Other Civil Works	0.00	0.00	0.00	0.00	3.33	0.00
Transmission Line	1514.31	396.43	671.24	402.26	0.00	0.00
Sub-Station Equipments	41.77	20.40	41.33	86.84	132.60	0.00
PLCC	0.97	0.02	1.27	11.25	23.57	0.00
Total	1557.05	416.85	713.84	500.35	159.50	0.00
Particular	2011-12	2012-13	2013-14	2012-13	2013-14	
	Asset-5			Asset-6		
Freehold Land	0.00	0.00	0.00	0.00	0.00	
Leasehold Land	0.00	0.00	0.00	0.00	0.00	
Building & Other Civil Works	0.00	3.33	0.00	0.00	0.00	
Transmission Line	1289.95	0.00	0.00	1100.83	2570.05	
Sub-Station Equipments	107.32	322.24	0.00	0.00	0.00	
PLCC	0.00	16.66	0.00	0.00	0.00	
Total	1397.27	342.23	0.00	1100.83	2570.05	

Particular	2011-12	2012-13	2013-14	2012-13	2013-14
	Asset-7			Asset-8	
Freehold Land	0.00	0.00	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	0.00
Building & Other Civil Works	0.00	0.00	0.00	0.00	0.00
Transmission Line	307.94	60.73	33.29	60.74	33.29
Sub-Station Equipments	111.02	50.68	0.00	50.68	0.00
PLCC	18.82	0.00	13.70	0.00	13.70
Total	437.78	111.41	46.99	111.42	46.99

(₹ in lakh)

Particular	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
	Asset-9			Asset-10		
Freehold Land	0.00	0.00	0.00	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00
Building & Other Civil Works	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Line	239.41	35.68	108.24	91.41	35.68	0.00
Sub-Station Equipments	0.00	0.00	0.00	0.00	0.00	0.00
PLCC	0.00	0.00	0.00	0.00	0.00	0.00
Total	239.41	35.68	108.24	91.41	35.68	0.00

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

(₹ in lakh)

Particular	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5
Freehold land	0.00	0.00	0.00	0.00	0.00
Leasehold land	0.00	0.00	0.00	0.00	0.00
Building and Civil works	0.00	0.00	0.00	3.33	3.33
Transmission Line	0.00	0.00	2803.48	864.97	2191.68
Sub-Station Equipments	2411.54	2411.54	534.19	516.99	720.86
PLCC	0.00	0.00	29.30	58.85	40.69
Total Capital Cost	2411.54	2411.54	3366.97	1444.14	2956.56
Particular	Asset-6	Asset-7	Asset-8	Asset-9	Asset-10
Freehold land	0.00	0.00	0.00	0.00	0.00
Leasehold land	0.00	0.00	0.00	0.00	0.00
Building and Civil works	0.00	0.00	0.00	0.00	0.00
Transmission Line	55704.37	760.20	798.67	1763.23	1835.91
Sub-Station Equipments	0.00	639.50	653.38	0.00	0.00
PLCC	0.00	55.02	57.37	0.00	0.00
Total Capital Cost	55704.37	1454.72	1509.42	1763.23	1835.91



Debt- equity ratio

24. Regulation 12 of the 2009 Tariff regulations provides as follows:-

“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.”

25. 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.

26. The above stated debt-equity ratios have been applied for the purpose of tariff calculation in this order

Return on equity

27. 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”.

28. In this order, Return on Equity has been calculated as per Regulation 15 of the 2009 Tariff Regulations with pre-tax ROE of 17.481% based on the tax rate of 11.330% for the year 2008-09.



29. Details of return on equity calculated are as follows:-

(₹ in lakh)

Particulars	Asset 1			Asset 2		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Opening Equity	588.40	615.37	723.46	588.40	615.37	723.46
Addition due to Additional Capitalisation	26.97	108.10	0.00	26.97	108.10	0.00
Closing Equity	615.37	723.46	723.46	615.37	723.46	723.46
Average Equity	601.88	669.41	723.46	601.88	669.41	723.46
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.330%	11.330%	11.330%	11.330%	11.330%	11.330%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	26.30	117.02	126.47	26.30	117.02	126.47

(₹ in lakh)

Particulars	Asset 3			Asset 4		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Opening Equity	203.77	670.88	795.94	235.29	385.39	433.24
Addition due to Additional Capitalisation	467.12	125.06	214.15	150.11	47.85	0.00
Closing Equity	670.88	795.94	1010.09	385.39	433.24	433.24
Average Equity	437.33	733.41	903.02	310.34	409.32	433.24
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.330%	11.330%	11.330%	11.330%	11.330%	11.330%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	12.74	128.21	157.86	13.56	71.55	75.74

(₹ in lakh)

Particulars	Asset 5			Asset 6	
	2011-12	2012-13	2013-14	2012-13	2013-14
Opening Equity	365.12	784.30	886.97	15610.05	15940.30
Addition due to Additional Capitalisation	419.18	102.67	0.00	330.25	771.02
Closing Equity	784.30	886.97	886.97	15940.30	16711.31
Average Equity	574.71	835.63	886.97	15775.17	16325.80
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.330%	11.330%	11.330%	11.330%	11.330%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	25.12	146.08	155.05	2757.66	2853.91



(₹ in lakh)

Particulars	Asset 7			Asset 8	
	2011-12	2012-13	2013-14	2012-13	2013-14
Opening Equity	257.56	388.89	422.32	405.25	438.68
Addition due to Additional Capitalisation	131.33	33.42	14.10	33.43	14.10
Closing Equity	388.89	422.32	436.41	438.68	452.77
Average Equity	323.23	405.61	429.37	421.96	445.72
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.330%	11.330%	11.330%	11.330%	11.330%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	9.42	70.90	75.06	73.76	77.92

(₹ in lakh)

Particulars	Asset 9			Asset 10		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Opening Equity	413.97	485.79	496.50	512.65	540.07	550.77
Addition due to Additional Capitalisation	71.82	10.70	32.47	27.42	10.70	0.00
Closing Equity	485.79	496.50	528.97	540.07	550.77	550.77
Average Equity	449.88	491.15	512.73	526.36	545.42	550.77
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.330%	11.330%	11.330%	11.330%	11.330%	11.330%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	13.11	85.86	89.63	15.34	95.35	96.28

Interest on loan

30. 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.

(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,.

(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:

(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 re-financing 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.”

31. In these calculations, interest on loan has been worked out as detailed below:-

(a) Gross amount of loan, repayment of instalments 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.

32. Interest on Loan has been calculated on the basis of prevailing rate of actual loan available as on the date of commercial operation. Any change in rate of interest subsequent to date of commercial operation will be considered at the time of truing up. Further, allotment date of Bond XL and Bond XLI is 28.6.2012 and 19.10.2012 respectively i.e. in FY 2012-13 whereas petitioner has considered the same bonds in FY 2011-12 in case of Asset-3 and Asset-7. For the purpose of computation of weighted average rate of interest, both the bonds have been considered in FY 2012-13.

33. Detailed calculation of the weighted average rate of interest has been given in Annexure 1 to 10 of this order.

34. Details of Interest on Loan calculated are as under:-

(₹ in lakh)

Particulars	Asset 1			Asset 2		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Gross Normative Loan	1372.92	1435.85	1688.08	1372.92	1435.85	1688.08
Cumulative Repayment upto Previous Year	0.00	26.48	144.30	0.00	26.48	144.30
Net Loan-Opening	1372.92	1409.37	1543.78	1372.92	1409.37	1543.78
Addition due to Additional Capitalisation	62.93	252.22	0.00	62.93	252.22	0.00
Repayment during the year	26.48	117.82	127.33	26.48	117.82	127.33
Net Loan-Closing	1409.37	1543.78	1416.45	1409.37	1543.78	1416.45
Average Loan	1391.15	1476.57	1480.11	1391.15	1476.57	1480.11
Weighted Average Rate of Interest on Loan	9.2590%	9.2590%	9.2590%	9.2590%	9.2590%	9.2590%
Interest	32.20	136.72	137.04	32.20	136.72	137.04

(₹ in lakh)

Particulars	Asset 3			Asset 4		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Gross Normative Loan	475.46	1565.40	1857.19	549.00	899.25	1010.90
Cumulative Repayment upto Previous Year	0.00	12.88	142.25	0.00	13.73	86.23
Net Loan-Opening	475.46	1552.52	1714.94	549.00	885.52	924.66
Addition due to Additional Capitalisation	1089.94	291.80	499.69	350.25	111.65	0.00
Repayment during the year	12.88	129.37	159.23	13.73	72.50	76.80
Net Loan-Closing	1552.52	1714.94	2055.40	885.52	924.66	847.86
Average Loan	1013.99	1633.73	1885.17	717.26	905.09	886.26
Weighted Average Rate of Interest on Loan	9.2431%	9.0040%	8.9434%	9.2305%	9.2305%	9.2305%
Interest	15.62	147.10	168.60	16.55	83.54	81.81

(₹ in lakh)

Particulars	Asset 5			Asset 6	
	2011-12	2012-13	2013-14	2012-13	2013-14
Gross Normative Loan	851.94	1830.03	2069.59	36423.44	37194.02
Cumulative Repayment upto Previous Year	0.00	25.35	172.73	0.00	2776.43
Net Loan-Opening	851.94	1804.68	1896.86	36423.44	34417.59
Addition due to Additional Capitalisation	978.09	239.56	0.00	770.58	1799.04
Repayment during the year	25.35	147.38	156.47	2776.43	2873.34
Net Loan-Closing	1804.68	1896.86	1740.39	34417.59	33343.29
Average Loan	1328.31	1850.77	1818.63	35420.52	33880.44
Weighted Average Rate of Interest on Loan	9.4029%	9.4029%	9.4029%	8.9151%	8.9079%
Interest	31.22	174.03	171.00	3157.76	3018.02

(₹ in lakh)

Particulars	Asset 7			Asset 8	
	2011-12	2012-13	2013-14	2012-13	2013-14
Gross Normative Loan	600.98	907.43	985.41	945.76	1023.75
Cumulative Repayment upto Previous Year	0.00	9.54	81.36	0.00	74.73
Net Loan-Opening	600.98	897.89	904.05	945.76	949.02
Addition due to Additional Capitalisation	306.45	77.99	32.89	77.99	32.89
Repayment during the year	9.54	71.82	76.07	74.73	78.99
Net Loan-Closing	897.89	904.05	860.87	949.02	902.93
Average Loan	749.43	900.97	882.46	947.39	925.97
Weighted Average Rate of Interest on Loan	9.0748%	9.1294%	9.1661%	9.1801%	9.1882%
Interest	11.34	82.25	80.89	86.97	85.08

(₹ in lakh)

Particulars	Asset 9			Asset 10		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Gross Normative Loan	965.93	1133.52	1158.49	1196.17	1260.16	1285.14
Cumulative Repayment upto Previous Year	0.00	13.20	99.64	0.00	15.44	111.43
Net Loan-Opening	965.93	1120.32	1058.85	1196.17	1244.72	1173.70
Addition due to Additional Capitalisation	167.59	24.98	75.77	63.99	24.98	0.00
Repayment during the year	13.20	86.44	90.24	15.44	95.99	96.94
Net Loan-Closing	1120.32	1058.85	1044.38	1244.72	1173.70	1076.77
Average Loan	1043.13	1089.59	1051.62	1220.45	1209.21	1125.24
Weighted Average Rate of Interest on Loan	8.9136%	8.9408%	8.9422%	9.3048%	9.3035%	9.3048%
Interest	15.50	97.42	94.04	18.93	112.50	104.70



Depreciation

35. 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.”

36. 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 of the 2009 Tariff Regulations.

37. Details of the depreciation worked out are as follows:-

(₹ in lakh)

Particulars	Asset 1			Asset 2		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Opening Gross Block	1961.32	2051.22	2411.54	1961.32	2051.22	2411.54
Addition during 2009-14 due to Projected Additional Capitalisation	89.90	360.32	0.00	89.90	360.32	0.00
Closing Gross Block	2051.22	2411.54	2411.54	2051.22	2411.54	2411.54
Average Gross Block	2006.27	2231.38	2411.54	2006.27	2231.38	2411.54
Rate of Depreciation	5.2800 %	5.2800%	5.2800 %	5.2800%	5.2800%	5.2800 %
Depreciable Value	1805.64	2008.24	2170.39	1805.64	2008.24	2170.39
Remaining Depreciable Value	1805.64	1981.76	2026.09	1805.64	1981.76	2026.09
Depreciation	26.48	117.82	127.33	26.48	117.82	127.33

(₹ in lakh)

Particulars	Asset 3			Asset 4		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Opening Gross Block	679.23	2236.28	2653.13	784.29	1284.64	1444.14
Addition during 2009-14 due to Projected Additional Capitalisation	1557.05	416.85	713.84	500.35	159.50	0.00
Closing Gross Block	2236.28	2653.13	3366.97	1284.64	1444.14	1444.14
Average Gross Block	1457.76	2444.71	3010.05	1034.47	1364.39	1444.14
Rate of Depreciation	5.2998%	5.2920%	5.2900%	5.3101%	5.3139%	5.3183%
Depreciable Value	1311.98	2200.23	2709.05	931.02	1227.95	1299.73
Remaining Depreciable Value	1311.98	2187.36	2566.79	931.02	1214.22	1213.49
Depreciation	12.88	129.37	159.23	13.73	72.50	76.80

(₹ in lakh)

Particulars	Asset 5			Asset 6	
	2011-12	2012-13	2013-14	2012-13	2013-14
Opening Gross Block	1217.06	2614.33	2956.56	52033.49	53134.32
Addition during 2009-14 due to Projected Additional Capitalisation	1397.27	342.23	0.00	1100.83	2570.05
Closing Gross Block	2614.33	2956.56	2956.56	53134.32	55704.37
Average Gross Block	1915.70	2785.45	2956.56	52583.91	54419.35
Rate of Depreciation	5.2932%	5.2910%	5.2923%	5.2800%	5.2800%
Depreciable Value	1724.13	2506.90	2660.90	47325.51	48977.41
Remaining Depreciable Value	1724.13	2481.55	2488.17	47325.51	46200.98
Depreciation	25.35	147.38	156.47	2776.43	2873.34

(₹ in lakh)

Particulars	Asset 7			Asset 8	
	2011-12	2012-13	2013-14	2012-13	2013-14
Opening Gross Block	858.54	1296.32	1407.73	1351.01	1462.43
Addition during 2009-14 due to Projected Additional Capitalisation	437.78	111.41	46.99	111.42	46.99
Closing Gross Block	1296.32	1407.73	1454.72	1462.43	1509.42
Average Gross Block	1077.43	1352.03	1431.23	1406.72	1485.93
Rate of Depreciation	5.3111%	5.3121%	5.3153%	5.3126%	5.3157%
Depreciable Value	969.69	1216.82	1288.10	1266.05	1337.33
Remaining Depreciable Value	969.69	1207.29	1206.74	1266.05	1262.60
Depreciation	9.54	71.82	76.07	74.73	78.99

(₹ in lakh)

Particulars	Asset 9			Asset 10		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Opening Gross Block	1379.90	1619.31	1654.99	1708.82	1800.23	1835.91
Addition during 2009-14 due to Projected Additional Capitalisation	239.41	35.68	108.24	91.41	35.68	0.00
Closing Gross Block	1619.31	1654.99	1763.23	1800.23	1835.91	1835.91
Average Gross Block	1499.61	1637.15	1709.11	1754.53	1818.07	1835.91
Rate of Depreciation	5.2800%	5.2800%	5.2800%	5.2800%	5.2800%	5.2800%
Depreciable Value	1349.64	1473.44	1538.20	1579.07	1636.26	1652.32
Remaining Depreciable Value	1349.64	1460.24	1438.56	1579.07	1620.82	1540.89
Depreciation	13.20	86.44	90.24	15.44	95.99	96.94

Operation & Maintenance Expenses (O&M Expenses)

38. Clause (g) of Regulation 19 of the 2009 Tariff Regulations prescribes the norms for operation and maintenance expenses based on the type of sub-station and line. Norms prescribed in respect of the elements covered in the instant petition are as follows:-

Element	2009-10	2010-11	2011-12	2012-13	2013-14
220 kV, 1 conductor D/C, T/L (₹ lakh/ km)	0.269	0.284	0.301	0.318	0.336
765 kV, 4 conductor S/C, T/L (₹ lakh/ km)	0.537	0.568	0.600	0.635	0.671
765 kV, 4 conductor D/C, T/L (₹ lakh/ km)	0.940	0.994	1.051	1.111	1.174
S/C (Twin & Triple Conductor) (₹ lakh/ km)	0.358	0.378	0.400	0.423	0.447
D/C (Twin & Triple Conductor) (₹ lakh/ km)	0.627	0.663	0.701	0.741	0.783
400 kV bay (₹ lakh/bay)	52.40	55.40	58.57	61.92	65.46
220 kV bay (₹ lakh/bay)	36.68	38.78	41.00	43.34	45.82



39. Accordingly, the following O&M Expenses are allowed in respect of the assets covered in this petition:-

(₹ in lakh)

Element	2011-12 (Pro-rata)	2012-13	2013-14
Asset-1			
1 no. 400 kV Fatehpur ICT-1, bay	14.64	61.92	65.46
1 no. 220 kV Fatehpur ICT-1, bay	10.25	43.34	45.82
Total O&M (Asset-1)	24.89	105.2	111.28
Asset-2			
1 no. 400 kV Fatehpur ICT-2, bay	14.64	61.92	65.46
1 no. 220 kV Fatehpur ICT-2, bay	10.25	43.34	45.82
Total O&M (Asset-2)	24.89	105.2	111.28
Asset-3			
Transmission Line:	(Pro-rata)		
19.817 km, 765 kV twin conductor D/C T/line	2.32	14.68	15.52
1.395 km, 765 kV twin conductor S/C T/Line	0.09	0.59	0.62
1 no 400 kV (Singrauli) bay	9.76	61.92	65.46
1 no 400 kV (Kanpur) bay	9.76	61.92	65.46
Total O&M (Asset-3)	21.93	139.11	147.06
Asset-4 (pro-rata)			
11.45 km LILO of 220 kV Single conductor D/C T/L	0.86	3.64	3.85
Total O&M (Asset-4)	0.86	3.64	3.85
Asset-5			
1.467 km 400 kV S/C twin conductor T/L	0.45	0.62	0.66
14.936 KM 400 kV D/C twin conductor T/L	2.62	11.07	11.69
Total O&M (Asset-5)	2.76	11.69	12.35
Asset-6			
336.8 km, 765 kV Quad conductor, S/C T/L	----	213.8	225.99
Total O&M (Asset-6)	----	213.8	225.99
Asset-7 (pro-rata)			
12.698 km, 220 kV, 1 conductor D/C T/Line	0.64	4.04	4.27
1 no., 220 kV Dehri-1, bay	6.83	43.34	45.82
1 no., 220 kV Bodhgaya-1, bay	6.83	43.34	45.82
Total O&M (Asset-7):	14.30	90.72	95.91
Asset-8			
10.995 km, 220 kV, 1 conductor D/C T/L	----	3.49	3.69
1 no. 220 kV Dehri-2 bay	---	43.34	45.82
1 no. 220 kV Bodhgaya-2 bay	---	43.34	45.82
Total O&M (Asset-8)	----	90.17	95.33

Asset-9	(pro-rata)		
1 no., 400 kV ICT-1 bay	9.76	61.92	65.46
1 no., 220 kV ICT-1 bay	6.83	43.34	45.82
Total O&M (Asset-9)	16.59	105.2	111.28
Asset-10	(pro-rata)		
1 no., 400 kV ICT-2 bay	9.76	61.92	65.46
1 no., 220 kV ICT-2 bay	6.83	43.34	45.82
Total O&M (Asset-10)	16.59	105.2	111.28

40. The petitioner has initially in the petition has claimed O&M Expenses for the associated bays of Assets 4 and 5. However, the petitioner has not claimed the O&M Expenses for these assets in its affidavit dated 21.6.2013. Accordingly, the O&M Expenses for these have not been allowed in this order. The petitioner has claimed the O&M Expenses for these assets vide affidavit dated 7.1.2015 stating that the same has been inadvertently not included in the affidavit dated 21.6.2013 and requested to allow O&M Expenses for these assets. During the hearing on 20.10.2014, the petitioner was directed to file some information and it was clearly mentioned in the "Record of Proceedings" that information filed after the 20.10.2014 shall not be considered for passing the final order. The latest affidavit filed by the petitioner is much after the said order and accordingly the affidavit dated 7.1.2015 is not considered in the said order. As these bays were not included inadvertently by the petitioner in its affidavit dated 21.6.2013, we are of the view that the O&M Expenses are required to be considered for the purpose of tariff calculations. Accordingly, the petitioner is given the liberty to claim the O&M Expenses for the bays of Assets 4 and 5 at the time of truing up.

41. 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 charges 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.

42. The Commission has given effect to impact of pay revision in the 2009 Tariff Regulations by factoring 50% on account of pay revision of the employees of PSUs after extensive stakeholders' consultation. We do not see any reason why the admissible amount is inadequate to meet the requirement of the employee cost.

Interest on Working Capital

43. 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 2009 Tariff Regulations (Second Amendment) Regulations, 2011 dated 21.6.2011, 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 commissioned on 1.2.2012 and 13.50% (SBI Base rate 10% as on 1.4.2012 and 350 basis points) for assets 6 and 8 which were commissioned on 1.4.2012.

44. Necessary computations in support of interest on working capital are as follows:-

(₹ in lakh)

Particulars	Asset 1			Asset 2		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Maintenance Spares	14.93	15.79	16.69	14.93	15.79	16.69
O & M expenses	8.30	8.77	9.27	8.30	8.77	9.27
Receivables	75.18	81.55	85.88	75.18	81.55	85.88
Total	98.41	106.11	111.84	98.41	106.11	111.84
Rate of Interest	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%
Interest	2.89	12.47	13.14	2.89	12.47	13.14
Particulars	Asset 3			Asset 4		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Maintenance Spares	19.74	20.87	22.06	0.52	0.55	0.58
O & M expenses	10.97	11.59	12.26	0.29	0.30	0.32
Receivables	65.04	93.09	108.25	30.42	39.33	40.51
Total	95.75	125.55	142.56	31.22	40.18	41.41
Rate of Interest	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%
Interest	1.88	14.75	16.75	0.92	4.72	4.87

(₹ in lakh)

	Asset 5			Asset 6		
Particulars	2011-12	2012-13	2013-14	2012-13	2013-14	
Maintenance Spares	1.66	1.75	1.85	32.08	33.90	
O & M expenses	0.92	0.97	1.03	17.82	18.83	
Receivables	57.48	81.51	84.18	1519.60	1530.84	
Total	60.05	84.24	87.07	1,569.50	1,583.57	
Rate of Interest	11.75%	11.75%	11.75%	13.50%	13.50%	
Interest	1.76	9.90	10.23	211.88	213.78	
	Asset 7			Asset 8		
Particulars	2011-12	2012-13	2013-14	2012-13	2013-14	
Maintenance Spares	12.87	13.61	14.39	13.53	14.30	
O & M expenses	7.15	7.56	7.99	7.52	7.94	
Receivables	45.88	54.09	56.19	56.01	58.03	
Total	65.90	75.26	78.57	77.05	80.27	
Rate of Interest	11.75%	11.75%	11.75%	13.50%	13.50%	
Interest	1.29	8.84	9.23	10.40	10.84	
	Asset 9			Asset 10		
Particulars	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Maintenance Spares	14.94	15.79	16.69	14.94	15.79	16.69
O & M expenses	8.30	8.77	9.27	8.30	8.77	9.27
Receivables	60.03	64.23	66.00	68.09	70.04	70.08
Total	83.27	88.80	91.96	91.33	94.60	96.05
Rate of Interest	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%
Interest	1.63	10.43	10.81	1.79	11.12	11.29

Transmission charges

45. The transmission charges allowed for the instant transmission assets are summarized below:-

(₹ in lakh)

	Asset 1			Asset 2		
Particulars	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Depreciation	26.48	117.82	127.33	26.48	117.82	127.33
Interest on Loan	32.20	136.72	137.04	32.20	136.72	137.04
Return on equity	26.30	117.02	126.47	26.30	117.02	126.47
Interest on Working Capital	2.89	12.47	13.14	2.89	12.47	13.14
O & M Expenses	24.89	105.26	111.28	24.89	105.26	111.28
Total	112.77	489.28	515.26	112.77	489.28	515.26

(₹ in lakh)

Particulars	Asset 3			Asset 4		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Depreciation	12.88	129.37	159.23	13.73	72.50	76.80
Interest on Loan	15.62	147.10	168.60	16.55	83.54	81.81
Return on equity	12.74	128.21	157.86	13.56	71.55	75.74
Interest on Working Capital	1.88	14.75	16.75	0.92	4.72	4.87
O & M Expenses	21.93	139.11	147.06	0.86	3.64	3.85
Total	65.04	558.55	649.50	45.62	235.96	243.06

(₹ in lakh)

Particulars	Asset 5			Asset 6	
	2011-12	2012-13	2013-14	2012-13	2013-14
Depreciation	25.35	147.38	156.47	2776.43	2873.34
Interest on Loan	31.22	174.03	171.00	3157.76	3018.02
Return on equity	25.12	146.08	155.05	2757.66	2853.91
Interest on Working Capital	1.76	9.90	10.23	211.88	213.78
O & M Expenses	2.76	11.69	12.35	213.87	225.99
Total	86.22	489.07	505.10	9117.60	9185.05

(₹ in lakh)

Particulars	Asset 7			Asset 8	
	2011-12	2012-13	2013-14	2012-13	2013-14
Depreciation	9.54	71.82	76.07	74.73	78.99
Interest on Loan	11.34	82.25	80.89	86.97	85.08
Return on equity	9.42	70.90	75.06	73.76	77.92
Interest on Working Capital	1.29	8.84	9.23	10.40	10.84
O & M Expenses	14.30	90.72	95.91	90.18	95.33
Total	45.88	324.54	337.16	336.05	348.15

Particulars	Asset 9			Asset 10		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Depreciation	13.20	86.44	90.24	15.44	95.99	96.94
Interest on Loan	15.50	97.42	94.04	18.93	112.50	104.70
Return on equity	13.11	85.86	89.63	15.34	95.35	96.28
Interest on Working Capital	1.63	10.43	10.81	1.79	11.12	11.29
O & M Expenses	16.60	105.26	111.28	16.60	105.26	111.28
Total	60.03	385.41	396.00	68.09	420.21	420.48

Filing Fee and the Publication Expenses

46. 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.

Licence Fee

47. 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

Service Tax

48. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if it is subjected to such service tax in future. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

Sharing of Transmission Charges

49. 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.

50. This order disposes of Petition No. 70/TT/2012.

(A.S. Bakshi)
Member

(A. K. Singhal)
Member

(M. Deena Dayalan)
Member

(Gireesh B. Pradhan)
Chairperson



Annexure 1**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN****(₹ in lakh)**

	Details of Loan	2011-12	2012-13	2013-14
1	Bond XXXIII			
	Gross loan opening	180.00	180.00	180.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	180.00	180.00	180.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	180.00	180.00	180.00
	Average Loan	180.00	180.00	180.00
	Rate of Interest	8.64%	8.64%	8.64%
	Interest	15.55	15.55	15.55
	Rep Schedule	12 Annual installments from 8.7.2014		
2	Bond XXXV			
	Gross loan opening	10.00	10.00	10.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	10.00	10.00	10.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	10.00	10.00	10.00
	Average Loan	10.00	10.00	10.00
	Rate of Interest	9.64%	9.64%	9.64%
	Interest	0.96	0.96	0.96
	Rep Schedule	12 Annual installments from 31.5.2015		
3	Bond XXXVI			
	Gross loan opening	1182.92	1182.92	1182.92
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	1182.92	1182.92	1182.92
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	1182.92	1182.92	1182.92
	Average Loan	1182.92	1182.92	1182.92
	Rate of Interest	9.35%	9.35%	9.35%
	Interest	110.60	110.60	110.60
	Rep Schedule	15 Annual installments from 29.8.2016		
	Total Loan			
	Gross loan opening	1372.92	1372.92	1372.92
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	1372.92	1372.92	1372.92
	Additions during the year	0.00	0.00	0.00

Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	1372.92	1372.92	1372.92
Average Loan	1372.92	1372.92	1372.92
Weighted Average Rate of Interest	9.2590%	9.2590%	9.2590%
Interest	127.12	127.12	127.12



Annexure 2

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

		(₹ in lakh)		
	Details of Loan	2011-12	2012-13	2013-14
1	Bond XXXIII			
	Gross loan opening	180.00	180.00	180.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	180.00	180.00	180.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	180.00	180.00	180.00
	Average Loan	180.00	180.00	180.00
	Rate of Interest	8.64%	8.64%	8.64%
	Interest	15.55	15.55	15.55
	Rep Schedule	12 Annual installments from 8.7.2014		
2	Bond XXXV			
	Gross loan opening	10.00	10.00	10.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	10.00	10.00	10.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	10.00	10.00	10.00
	Average Loan	10.00	10.00	10.00
	Rate of Interest	9.64%	9.64%	9.64%
	Interest	0.96	0.96	0.96
	Rep Schedule	12 Annual installments from 31.5.2015		
3	Bond XXXVI			
	Gross loan opening	1182.92	1182.92	1182.92
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	1182.92	1182.92	1182.92
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	1182.92	1182.92	1182.92
	Average Loan	1182.92	1182.92	1182.92
	Rate of Interest	9.35%	9.35%	9.35%
	Interest	110.60	110.60	110.60
	Rep Schedule	15 Annual installments from 29.8.2016		
	Total Loan			
	Gross loan opening	1372.92	1372.92	1372.92
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	1372.92	1372.92	1372.92
	Additions during the year	0.00	0.00	0.00

Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	1372.92	1372.92	1372.92
Average Loan	1372.92	1372.92	1372.92
Weighted Average Rate of Interest	9.2590%	9.2590%	9.2590%
Interest	127.12	127.12	127.12



Annexure 3

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(₹ in lakh)

	Details of Loan	2011-12	2012-13	2013-14
1	Bond XXX			
	Gross loan opening	200.00	200.00	200.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	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	16.67
	Net Loan-Closing	200.00	200.00	183.33
	Average Loan	200.00	200.00	191.67
	Rate of Interest	8.80%	8.80%	8.80%
	Interest	17.60	17.60	16.87
	Rep Schedule	12 Annual installments from 29.9.2013		
2	Bond XXXV			
	Gross loan opening	247.46	247.46	247.46
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	247.46	247.46	247.46
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	247.46	247.46	247.46
	Average Loan	247.46	247.46	247.46
	Rate of Interest	9.64%	9.64%	9.64%
	Interest	23.86	23.86	23.86
	Rep Schedule	12 Annual installments from 31.5.2015		
3	Bond XXXI			
	Gross loan opening	28.00	28.00	28.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	28.00	28.00	28.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	2.33
	Net Loan-Closing	28.00	28.00	25.67
	Average Loan	28.00	28.00	26.83
	Rate of Interest	8.90%	8.90%	8.90%
	Interest	2.49	2.49	2.39
	Rep Schedule	12 Annual installments from 25.2.2014		

4	Bond XLI (ADDCAP for 2011-12 DRAWL on 31.3.2012)			
	Gross loan opening	0.00	0.00	1089.94
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	0.00	0.00	1089.94
	Additions during the year	0.00	1089.94	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	0.00	1089.94	1089.94
	Average Loan	0.00	544.97	1089.94
	Rate of Interest	8.85%	8.85%	8.85%
	Interest	0.00	48.23	96.46
	Rep Schedule	12 Annual installments from 19.10.2016		
5	Bond XLII (ADDCAP for 2012-13 DRAWL on 31.3.2013)			
	Gross loan opening	0.00	0.00	291.80
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	0.00	0.00	291.80
	Additions during the year	0.00	291.80	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	0.00	291.80	291.80
	Average Loan	0.00	145.90	291.80
	Rate of Interest	8.80%	8.80%	8.80%
	Interest	0.00	12.84	25.68
	Rep Schedule	Bullet Payment on 13.3.2023		
	Total Loan			
	Gross loan opening	475.46	475.46	1857.20
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	475.46	475.46	1857.20
	Additions during the year	0.00	1381.74	0.00
	Repayment during the year	0.00	0.00	19.00
	Net Loan-Closing	475.46	1857.20	1838.20
	Average Loan	475.46	1166.33	1847.70
	Weighted Average Rate of Interest	9.2431%	9.0040%	8.9434%
	Interest	43.95	105.02	165.25

Annexure 4**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN**

(₹ in lakh)

	Details of Loan	2011-12	2012-13	2013-14
1	Bond XXXIII			
	Gross loan opening	150.00	150.00	150.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	150.00	150.00	150.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	150.00	150.00	150.00
	Average Loan	150.00	150.00	150.00
	Rate of Interest	8.64%	8.64%	8.64%
	Interest	12.96	12.96	12.96
	Rep Schedule	12 Annual installments from 8.7.2014		
2	Bond XXXV			
	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	0.00
	Net Loan-Closing	250.00	250.00	250.00
	Average Loan	250.00	250.00	250.00
	Rate of Interest	9.64%	9.64%	9.64%
	Interest	24.10	24.10	24.10
	Rep Schedule	12 Annual installments from 31.5.2015		
3	Bond XXXIV			
	Gross loan opening	62.00	62.00	62.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	62.00	62.00	62.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	62.00	62.00	62.00
	Average Loan	62.00	62.00	62.00
	Rate of Interest	8.84%	8.84%	8.84%
	Interest	5.48	5.48	5.48
	Rep Schedule	12 Annual installments from 21.10.2014		
4	Bond XXXVI			
	Gross loan opening	87.01	87.01	87.01
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	87.01	87.01	87.01
	Additions during the year	0.00	0.00	0.00



Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	87.01	87.01	87.01
Average Loan	87.01	87.01	87.01
Rate of Interest	9.35%	9.35%	9.35%
Interest	8.14	8.14	8.14
Rep Schedule	15 Annual installments from 29.8.2016		
Total Loan			
Gross loan opening	549.01	549.01	549.01
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	549.01	549.01	549.01
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	549.01	549.01	549.01
Average Loan	549.01	549.01	549.01
Weighted Average Rate of Interest	9.2305%	9.2305%	9.2305%
Interest	50.68	50.68	50.68

Annexure 5

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

		(₹ in lakh)		
	Details of Loan	2011-12	2012-13	2013-14
1	Bond XXXIII			
	Gross loan opening	150.00	150.00	150.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	150.00	150.00	150.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	150.00	150.00	150.00
	Average Loan	150.00	150.00	150.00
	Rate of Interest	8.64%	8.64%	8.64%
	Interest	12.96	12.96	12.96
	Rep Schedule	12 Annual installments from 8.7.2014		
2	Bond XXXV			
	Gross loan opening	636.96	636.96	636.96
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	636.96	636.96	636.96
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	636.96	636.96	636.96
	Average Loan	636.96	636.96	636.96
	Rate of Interest	9.64%	9.64%	9.64%
	Interest	61.40	61.40	61.40
	Rep Schedule	12 Annual installments from 31.5.2015		
3	Bond XXXIV			
	Gross loan opening	65.00	65.00	65.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	65.00	65.00	65.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	65.00	65.00	65.00
	Average Loan	65.00	65.00	65.00
	Rate of Interest	8.84%	8.84%	8.84%
	Interest	5.75	5.75	5.75
	Rep Schedule	12 Annual installments from 21.10.2014		
	Total Loan			
	Gross loan opening	851.96	851.96	851.96
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	851.96	851.96	851.96
	Additions during the year	0.00	0.00	0.00

Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	851.96	851.96	851.96
Average Loan	851.96	851.96	851.96
Weighted Average Rate of Interest	9.4029%	9.4029%	9.4029%
Interest	80.11	80.11	80.11



CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(₹ in lakh)

	Details of Loan	2012-13	2013-14
1	Bond XXX		
	Gross loan opening	9140.00	9140.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	9140.00	9140.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	761.67
	Net Loan-Closing	9140.00	8378.33
	Average Loan	9140.00	8759.17
	Rate of Interest	8.80%	8.80%
	Interest	804.32	770.81
	Rep Schedule	12 Annual installments from 29.9.2013	
2	Bond XXXV		
	Gross loan opening	100.00	100.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	100.00	100.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	100.00	100.00
	Average Loan	100.00	100.00
	Rate of Interest	9.64%	9.64%
	Interest	9.64	9.64
	Rep Schedule	12 Annual installments from 31.5.2015	
3	Bond XXXI		
	Gross loan opening	8000.00	8000.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	8000.00	8000.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	8000.00	8000.00
	Average Loan	8000.00	8000.00
	Rate of Interest	8.90%	8.90%
	Interest	712.00	712.00
	Rep Schedule	12 Annual installments from 25.2.2014	
4	Bond XXVIII		
	Gross loan opening	1675.00	1675.00
	Cumulative Repayment upto DOCO/previous year	0.00	139.58
	Net Loan-Opening	1675.00	1535.42
	Additions during the year	0.00	0.00

	Repayment during the year	139.58	139.58
	Net Loan-Closing	1535.42	1395.83
	Average Loan	1605.21	1465.63
	Rate of Interest	9.33%	9.33%
	Interest	149.77	136.74
	Rep Schedule	12 Annual installments from 15.12.2012	
5	Bond XLII (ADDCAP for 2012-13 DRAWL on 13.3.2013)		
	Gross loan opening	0.00	770.58
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	0.00	770.58
	Additions during the year	770.58	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	770.58	770.58
	Average Loan	385.29	770.58
	Rate of Interest	8.80%	8.80%
	Interest	33.91	67.81
	Rep Schedule	Bullet Payment on 13.3.2023	
6	Bond XXIX		
	Gross loan opening	1825.00	1825.00
	Cumulative Repayment upto DOCO/previous year	0.00	152.08
	Net Loan-Opening	1825.00	1672.92
	Additions during the year	0.00	0.00
	Repayment during the year	152.08	152.08
	Net Loan-Closing	1672.92	1520.83
	Average Loan	1748.96	1596.88
	Rate of Interest	9.20%	9.20%
	Interest	160.90	146.91
	Rep Schedule	12 annual installment from 12.3.2013	
7	Bond XXXIII		
	Gross loan opening	8200.00	8200.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	8200.00	8200.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	8200.00	8200.00
	Average Loan	8200.00	8200.00
	Rate of Interest	8.64%	8.64%
	Interest	708.48	708.48
	Rep Schedule	12 Annual installments from 8.7.2014	
8	Bond XXXII		
	Gross loan opening	2000.00	2000.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00



	Net Loan-Opening	2000.00	2000.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	166.67
	Net Loan-Closing	2000.00	1833.33
	Average Loan	2000.00	1916.67
	Rate of Interest	8.8400%	8.84%
	Interest	176.80	169.43
	Rep Schedule	12 Annual installments from 27.3.2014	
9	Bond XXXVI		
	Gross loan opening	5483.44	5483.44
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	5483.44	5483.44
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	5483.44	5483.44
	Average Loan	5483.44	5483.44
	Rate of Interest	9.35%	9.35%
	Interest	512.70	512.70
	Rep Schedule	15 Annual installments from 29.8.2016	
10	Bond XLIII (Add Cap for 2013-14 Drawl on 20.5.2013)		
	Gross loan opening	0.00	0.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	0.00	0.00
	Additions during the year	0.00	339.37
	Repayment during the year	0.00	0.00
	Net Loan-Closing	0.00	339.37
	Average Loan	0.00	169.69
	Rate of Interest	7.93%	7.93%
	Interest	0.00	13.46
	Rep Schedule	3 installments on 15.7.2018, 15.7.2023 & 15.7.2028	
	Total Loan		
	Gross loan opening	36423.44	37194.02
	Cumulative Repayment upto DOCO/previous year	0.00	291.67
	Net Loan-Opening	36423.44	36902.35
	Additions during the year	770.58	339.37
	Repayment during the year	291.67	1220.00
	Net Loan-Closing	36902.35	36021.72
	Average Loan	36662.90	36462.04
	Weighted Average Rate of Interest	8.9151%	8.9079%
	Interest	3268.52	3247.98

Annexure 7**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN**

(₹ in lakh)

	Details of Loan	2011-12	2012-13	2013-14
1	Bond XXXIII			
	Gross loan opening	50.00	50.00	50.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	50.00	50.00	50.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	50.00	50.00	50.00
	Average Loan	50.00	50.00	50.00
	Rate of Interest	8.64%	8.64%	8.64%
	Interest	4.32	4.32	4.32
	Rep Schedule	12 Annual installments from 8.7.2014		
2	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 installments from 27.3.2014		
3	Bond XXXIV			
	Gross loan opening	16.00	16.00	16.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	16.00	16.00	16.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	16.00	16.00	16.00
	Average Loan	16.00	16.00	16.00
	Rate of Interest	8.84%	8.84%	8.84%
	Interest	1.41	1.41	1.41
	Rep Schedule	12 Annual installments from 21.10.2014		

4	Bond XXXV			
	Gross loan opening	20.00	20.00	20.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	20.00	20.00	20.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	20.00	20.00	20.00
	Average Loan	20.00	20.00	20.00
	Rate of Interest	9.64%	9.64%	9.64%
	Interest	1.93	1.93	1.93
	Rep Schedule	12 Annual installments from 31.5.2015		
5	Bond XXXVI			
	Gross loan opening	264.98	264.98	264.98
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	264.98	264.98	264.98
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	264.98	264.98	264.98
	Average Loan	264.98	264.98	264.98
	Rate of Interest	9.35%	9.35%	9.35%
	Interest	24.78	24.78	24.78
	Rep Schedule	15 Annual instalments from 29.8.2016		
6	Bond XL (Add Cap for 2011-12 Drawl on 31.3.2012)			
	Gross loan opening	0.00	0.00	306.45
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	0.00	0.00	306.45
	Additions during the year	0.00	306.45	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	0.00	306.45	306.45
	Average Loan	0.00	153.23	306.45
	Rate of Interest	9.30%	9.30%	9.30%
	Interest	0.00	14.25	28.50
	Rep Schedule	12 Annual Installments from 28.6.2016		
7	Bond XL (Add Cap for 2012-13 Drawl on 31.3.2013)			
	Gross loan opening	0.00	0.00	77.99
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	0.00	0.00	77.99
	Additions during the year	0.00	77.99	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	0.00	77.99	77.99
	Average Loan	0.00	39.00	77.99



	Rate of Interest	9.30%	9.30%	9.30%
	Interest	0.00	3.63	7.25
	Rep Schedule	12 Annual installments from 28.6.2016		
	Total Loan			
	Gross loan opening	600.98	600.98	985.42
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	600.98	600.98	985.42
	Additions during the year	0.00	384.44	0.00
	Repayment during the year	0.00	0.00	20.83
	Net Loan-Closing	600.98	985.42	964.59
	Average Loan	600.98	793.20	975.00
	Weighted Average Rate of Interest	9.0748%	9.1294%	9.1661%
	Interest	54.54	72.41	89.37

Annexure 8**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN**

(₹ in lakh)

	Details of Loan	2012-13	2013-14
1	Bond XXXIV		
	Gross loan opening	16.00	16.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	16.00	16.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	16.00	16.00
	Average Loan	16.00	16.00
	Rate of Interest	8.84%	8.84%
	Interest	1.41	1.41
	Rep Schedule	12 Annual installments from 21.10.2014	
2	Bond XXXV		
	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	0.00
	Net Loan-Closing	20.00	20.00
	Average Loan	20.00	20.00
	Rate of Interest	9.64%	9.64%
	Interest	1.93	1.93
	Rep Schedule	12 Annual installments from 31.5.2015	
3	Bond XXXIII		
	Gross loan opening	50.00	50.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	50.00	50.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	50.00	50.00
	Average Loan	50.00	50.00
	Rate of Interest	8.64%	8.64%
	Interest	4.32	4.32
	Rep Schedule	12 Annual installments from 8.7.2014	
4	Bond XXXII		
	Gross loan opening	250.00	250.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	250.00	250.00
	Additions during the year	0.00	0.00

	Repayment during the year	0.00	20.83
	Net Loan-Closing	250.00	229.17
	Average Loan	250.00	239.58
	Rate of Interest	8.8400%	8.84%
	Interest	22.10	21.18
	Rep Schedule	12 Annual installments from 27.3.2014	
5	Bond XXXVI		
	Gross loan opening	609.76	609.76
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	609.76	609.76
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	609.76	609.76
	Average Loan	609.76	609.76
	Rate of Interest	9.35%	9.35%
	Interest	57.01	57.01
	Rep Schedule	15 Annual instalments from 29.8.2016	
6	Bond XL (Add Cap for 2012-13 Drawl on 31.3.2013)		
	Gross loan opening	0.00	77.99
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	0.00	77.99
	Additions during the year	77.99	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	77.99	77.99
	Average Loan	39.00	77.99
	Rate of Interest	9.30%	9.30%
	Interest	3.63	7.25
	Rep Schedule	12 Annual Installment from 28.6.2016	
	Total Loan		
	Gross loan opening	945.76	1023.75
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	945.76	1023.75
	Additions during the year	77.99	0.00
	Repayment during the year	0.00	20.83
	Net Loan-Closing	1023.75	1002.92
	Average Loan	984.76	1013.33
	Weighted Average Rate of Interest	9.1801%	9.1882%
	Interest	90.40	93.11

Annexure 9**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN**

(₹ in lakh)

	Details of Loan	2011-12	2012-13	2013-14
1	Bond XXXIII			
	Gross loan opening	323.00	323.00	323.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	323.00	323.00	323.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	323.00	323.00	323.00
	Average Loan	323.00	323.00	323.00
	Rate of Interest	8.64%	8.64%	8.64%
	Interest	27.91	27.91	27.91
	Rep Schedule	12 Annual installments from 8.7.2014		
2	Bond XXXII			
	Gross loan opening	41.00	41.00	41.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	41.00	41.00	41.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	3.42
	Net Loan-Closing	41.00	41.00	37.58
	Average Loan	41.00	41.00	39.29
	Rate of Interest	8.84%	8.84%	8.84%
	Interest	3.62	3.62	3.47
	Rep Schedule	12 Annual installments from 27.3.2014		
3	Bond XXXIV			
	Gross loan opening	92.00	92.00	92.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	92.00	92.00	92.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	92.00	92.00	92.00
	Average Loan	92.00	92.00	92.00
	Rate of Interest	8.84%	8.84%	8.84%
	Interest	8.13	8.13	8.13
	Rep Schedule	12 Annual installments from 21.10.2014		

4	Bond XXVIII			
	Gross loan opening	71.00	71.00	71.00



	Cumulative Repayment upto DOCO/previous year	0.00	0.00	5.92
	Net Loan-Opening	71.00	71.00	65.08
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	5.92	5.92
	Net Loan-Closing	71.00	65.08	59.17
	Average Loan	71.00	68.04	62.13
	Rate of Interest	9.33%	9.33%	9.33%
	Interest	6.62	6.35	5.80
	Rep Schedule	12 Annual installments from 15.12.2012		
5	Bond XXXVI			
	Gross loan opening	72.93	72.93	72.93
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	72.93	72.93	72.93
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	72.93	72.93	72.93
	Average Loan	72.93	72.93	72.93
	Rate of Interest	9.35%	9.35%	9.35%
	Interest	6.82	6.82	6.82
	Rep Schedule	15 Annual installments from 29.8.2016		
6	Bond XL (Add Cap for 2012-13)			
	Gross loan opening	0.00	0.00	24.98
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	0.00	0.00	24.98
	Additions during the year	0.00	24.98	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	0.00	24.98	24.98
	Average Loan	0.00	12.49	24.98
	Rate of Interest	9.30%	9.30%	9.30%
	Interest	0.00	1.16	2.32
	Rep Schedule	12 Annual Installments from 28.6.2016		

7	Bond XXIX			
	Gross loan opening	70.00	70.00	70.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	5.83
	Net Loan-Opening	70.00	70.00	64.17
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	5.83	5.83
	Net Loan-Closing	70.00	64.17	58.33
	Average Loan	70.00	67.08	61.25
	Rate of Interest	9.20%	9.20%	9.20%
	Interest	6.44	6.17	5.64



	Rep Schedule	12 Annual installments from 12.3.2013		
8	Bond XXX			
	Gross loan opening	74.00	74.00	74.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	74.00	74.00	74.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	6.17
	Net Loan-Closing	74.00	74.00	67.83
	Average Loan	74.00	74.00	70.92
	Rate of Interest	8.8000%	8.80%	8.80%
	Interest	6.51	6.51	6.24
	Rep Schedule	12 Annual installments from 29.9.2013		
9	Bond XXXI			
	Gross loan opening	222.00	222.00	222.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	222.00	222.00	222.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	18.50
	Net Loan-Closing	222.00	222.00	203.50
	Average Loan	222.00	222.00	212.75
	Rate of Interest	8.90%	8.90%	8.90%
	Interest	19.76	19.76	18.93
	Rep Schedule	12 Annual installments from 28.2.2014		

10	Bond XXXVII (Add Cap for 2011-12)			
	Gross loan opening	0.00	167.59	167.59
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	0.00	167.59	167.59
	Additions during the year	167.59	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	167.59	167.59	167.59
	Average Loan	83.80	167.59	167.59
	Rate of Interest	9.25%	9.25%	9.25%
	Interest	7.75	15.50	15.50
	Rep Schedule	12 Annual installments from 26.12.2015		
	Total Loan			
	Gross loan opening	965.93	1133.52	1158.50
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	11.75
	Net Loan-Opening	965.93	1133.52	1146.75
	Additions during the year	167.59	24.98	0.00
	Repayment during the year	0.00	11.75	39.83



Net Loan-Closing	1133.52	1146.75	1106.92
Average Loan	1049.73	1140.14	1126.83
Weighted Average Rate of Interest	8.9136%	8.9408%	8.9422%
Interest	93.57	101.94	100.76



Annexure 10**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN**

(₹ in lakh)

	Details of Loan	2011-12	2012-13	2013-14
1	Bond XXXIII			
	Gross loan opening	5.00	5.00	5.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	5.00	5.00	5.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	5.00	5.00	5.00
	Average Loan	5.00	5.00	5.00
	Rate of Interest	8.64%	8.64%	8.64%
	Interest	0.43	0.43	0.43
	Rep Schedule	12 Annual installments from 8.7.2014		
2	Bond XXXII			
	Gross loan opening	15.00	15.00	15.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	15.00	15.00	15.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	1.25
	Net Loan-Closing	15.00	15.00	13.75
	Average Loan	15.00	15.00	14.38
	Rate of Interest	8.84%	8.84%	8.84%
	Interest	1.33	1.33	1.27
	Rep Schedule	12 Annual installments from 27.3.2014		
3	Bond XXXIV			
	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	0.00
	Net Loan-Closing	7.00	7.00	7.00
	Average Loan	7.00	7.00	7.00
	Rate of Interest	8.84%	8.84%	8.84%
	Interest	0.62	0.62	0.62
	Rep Schedule	12 Annual installments from 21.10.2014		
4	Bond XXVIII			
	Gross loan opening	25.00	25.00	25.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	2.08
	Net Loan-Opening	25.00	25.00	22.92
	Additions during the year	0.00	0.00	0.00



	Repayment during the year	0.00	2.08	2.08
	Net Loan-Closing	25.00	22.92	20.83
	Average Loan	25.00	23.96	21.88
	Rate of Interest	9.33%	9.33%	9.33%
	Interest	2.33	2.24	2.04
	Rep Schedule	12 Annual installments from 15.12.2012		
5	Bond XXXVI			
	Gross loan opening	1054.17	1054.17	1054.17
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	1054.17	1054.17	1054.17
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	1054.17	1054.17	1054.17
	Average Loan	1054.17	1054.17	1054.17
	Rate of Interest	9.35%	9.35%	9.35%
	Interest	98.56	98.56	98.56
	Rep Schedule	15 Annual installments from 29.8.2016		
6	Bond XL (Add Cap for 2012-13)			
	Gross loan opening	0.00	0.00	24.98
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	0.00	0.00	24.98
	Additions during the year	0.00	24.98	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	0.00	24.98	24.98
	Average Loan	0.00	12.49	24.98
	Rate of Interest	9.30%	9.30%	9.30%
	Interest	0.00	1.16	2.32
	Rep Schedule	12 Annual Installments from 28.6.2016		
7	Bond XXIX			
	Gross loan opening	25.00	25.00	25.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	2.08
	Net Loan-Opening	25.00	25.00	22.92
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	2.08	2.08
	Net Loan-Closing	25.00	22.92	20.83
	Average Loan	25.00	23.96	21.88
	Rate of Interest	9.20%	9.20%	9.20%
	Interest	2.30	2.20	2.01
	Rep Schedule	12 Annual installments from 12.3.2013		
8	Bond XXX			
	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	8.8000%	8.80%	8.80%
	Interest	3.52	3.52	3.37
	Rep Schedule	12 Annual installments from 29.9.2013		
9	Bond XXXI			
	Gross loan opening	25.00	25.00	25.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	25.00	25.00	25.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	2.08
	Net Loan-Closing	25.00	25.00	22.92
	Average Loan	25.00	25.00	23.96
	Rate of Interest	8.90%	8.90%	8.90%
	Interest	2.23	2.23	2.13
	Rep Schedule	12 Annual installments from 28.2.2014		
10	Bond XXXVII (Add Cap for 2011-12)			
	Gross loan opening	0.00	63.99	63.99
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	0.00	63.99	63.99
	Additions during the year	63.99	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	63.99	63.99	63.99
	Average Loan	32.00	63.99	63.99
	Rate of Interest	9.25%	9.25%	9.25%
	Interest	2.96	5.92	5.92
	Rep Schedule	12 Annual installments from 26.12.2015		
	Total Loan			
	Gross loan opening	1196.17	1260.16	1285.14
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	4.17
	Net Loan-Opening	1196.17	1260.16	1280.97
	Additions during the year	63.99	24.98	0.00
	Repayment during the year	0.00	4.17	10.83
	Net Loan-Closing	1260.16	1280.97	1270.14
	Average Loan	1228.17	1270.57	1275.56
	Weighted Average Rate of Interest	9.3048%	9.3035%	9.3048%
	Interest	114.28	118.21	118.69