

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 30/TT/2015**

**Coram:**

**Shri A.S. Bakshi, Member  
Dr. M.K. Iyer, Member**

**Date of Hearing : 08.02.2016  
Date of Order : 21.03.2016**

**In the matter of:**

Truing up of transmission tariff for 2009-14 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 and determination of transmission tariff for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for Combined assets of **Asset-1:-** LILO of 400 kV S/C Meramundali-Jeypore line at Bolangir and associated bays alongwith 2 nos. 50 MVAR Shunt reactors and 1 nos. 315 MVA ICT (ICT-II) & associated bays and 2 nos. of 220 kV line bays, **Asset-2:** Installation of 1 no 80 MVAR Bus reactor and associated bays at Bolangir, **Asset-3:-** 1 no. 315 MVA ICT-I and associated bays and 2 nos. 220 kV line bays at Bolangir, **Asset 4:-** LILO of 400 kV S/C Baripada-Rengali line at Keonjhar and associated bays at Keonjhar, **Asset 5:-** Installation of 1 no. of 400/220 kV, 315 MVA (1st) ICT alongwith associated bays and 2 nos. 220 kV line bays at Keonjhar Sub-station, **Asset 6:-**Installation of 1 no. of 400/220 kV, 315 MVA (2nd) ICT alongwith associated bays and 2 nos. 220 kV line bays at Keonjhar Sub-station, **Asset 7:-**Installation of 1 no. 80 MVAR, 420 kV Bus Reactor and associated bays at Keonjhar Sub-station, **Asset 8:-**LILO of Kahalgaon-Biharshariff 400 kV D/C transmission line (2nd line) along with associated bays at Banka, 400/132 kV, 200 MVA ICT-I with associated bays at Banka Sub-station and 2nos. of 132 kV line bays at Banka Sub-station, **Asset-9:-** 400/132 kV, 200 MVA ICT-II with associated bays at Banka Sub-station, **Asset-10:-**2 x 50 MVAR switchable line reactor at Banka Sub-station and 400 kV, 1 x 80 MVAR Bus Reactor with associated bays at Banka Sub-station for the period from 1.9.2012 to 31.3.2014 under ERSS-III in Eastern Region under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.



**And in the matter of:**

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

.....**Petitioner**

**Versus**

1. North Bihar Power Distribution Company Limited, Vidyut Bhawan,  
Bailey Road, Patna-800001
2. South Bihar Power Distribution Company Limited, Vidyut Bhawan,  
Bailey Road, Patna-800001
3. West Bengal State Electricity Distribution Company  
Bidyut Bhawan, Bidhan Nagar, Block DJ, Sector-II,  
Salt Lake City, Calcutta-700091
4. Grid Corporation of Orissa Ltd., Shahid Nagar,  
Bhubaneswar-751007
5. Damodar Valley Corporation, DVC Tower, Maniktala  
Civic Centre, VIPO Road, Calcutta-700054
6. Power Department, Govt. of Sikkim,  
Gangtok-737101
7. Jharkhand State Electricity Board,  
In front of Main Secretariat,  
Doranda, Ranchi-834002

.....**Respondents**

The following were present:-

For Petitioner:                      Shri S.K Venkatesan, PGCIL  
   Shri M.M Mondal, PGCIL  
   Shri Jasbir Singh, PGCIL  
   Shri S. S. Raju  
   Shri Rakesh Prasad, PGCIL  
   Shri Subhash C Taneja, PGCIL

For Respondent:                      None



## ORDER

The present petition has been filed by Power Grid Corporation of India Ltd. ("the petitioner") for truing up of capital expenditure and tariff for Combined assets of LILO of 400 kV S/C Meramundali-Jeypore line at Bolangir and associated bays alongwith 2 nos. 50 MVAR Shunt reactors and 1 nos. 315 MVA ICT (ICT-II) & associated bays and 2 nos. of 220 kV line bays (referred as "**Asset-1**"), Installation of 1 no. 80 MVAR Bus reactor and associated bays at Bolangir (referred as "**Asset-2**"), 1 no. 315 MVA ICT-I and associated bays and 2 nos. 220 kV line bays at Bolangir (referred as "**Asset-3**"), LILO of 400 kV S/C Baripada-Rengali line at Keonjhar and associated bays at Keonjhar (referred as "**Asset 4**"), Installation of 1 no. of 400/220 kV, 315 MVA (1st) ICT alongwith associated bays and 2 nos. 220 kV line bays at Keonjhar Sub-station (referred as "**Asset 5**"), Installation of 1 no. of 400/220 kV, 315 MVA (2nd) ICT alongwith associated bays and 2 nos. 220 kV line bays at Keonjhar Sub-station (referred as "**Asset 6**"), Installation of 1 no. 80 MVAR, 420 kV Bus Reactor and associated bays at Keonjhar Sub-station (referred as "**Asset 7**"), LILO of Kahalgaon-Biharshariff 400 kV D/C transmission line (2nd line) along with associated bays at Banka, 400/132 kV, 200 MVA ICT-I with associated bays at Banka Sub-station and 2 nos. of 132 kV line bays at Banka Sub-station (referred as "**Asset 8**"), 400/132 kV, 200 MVA ICT-II with associated bays at Banka Sub-station (referred as "**Asset-9**"), 2 x 50 MVAR switchable line reactor at Banka Sub-station and 400 kV, 1 x 80 MVAR Bus Reactor with associated bays at Banka Sub-station (referred as "**Asset-10**") for the period from 1.9.2012 to 31.3.2014 under ERSS-

---



III in Eastern Region (hereinafter referred as “transmission asset”) under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 Tariff Regulations”) based on actual capital expenditure for the period from COD of respective assets to 31.3.2014 and for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) for the period from 1.4.2014 to 31.3.2019 for Combined Assets.

2. The respondents are distribution licensees and power departments, who are procuring transmission service from the petitioner, mainly beneficiaries of Eastern Region and North Eastern Region.

3. The petitioner has served the petition to the respondents and notice of this application has been published in the newspapers in accordance with Section 64 of Electricity Act, 2003 (“the Act”). No comments have been received from the public in response to the notices published by the petitioner under Section 64 of the Act. The hearing in this matter was held on 8.2.2016. None of the respondents have filed any reply to the petition. The petitioner was directed to file certain information vide letter dated 8.2.2016. In response, the petitioner has submitted the information vide affidavit dated 15.3.2016. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.



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

(a) The investment approval for the project was accorded by Board of Directors of the petitioner company vide letter no. C/CP/ERSS-III dated 7.7.2010 at an estimated cost of ₹127280 lakh which included IDC of ₹8152 lakh. The petitioner has developed the transmission asset in the Eastern Region. The details of the assets along with COD and approved apporportioned cost are as under:-

<b>Assets name</b>	<b>Date of commercial operation</b>	<b>Approved apporportioned cost (₹ in lakh)</b>
LILO of 400 kV S/C Meramuundali-Jeypore line at Bolangir and associated bays alongwith 2 nos 50 MVAR Shunt reactors and 1 nos 315 MVA ICT (ICT-II) & associated bays and 2 nos of 220 kV line bays (referred as " <b>Asset-1</b> ")	1.9.2012	9220.68
Installation of 1 no 80 MVAR Bus reactor and associated bays at Bolangir (referred as " <b>Asset-2</b> ")	1.10.2012	1252.71
1 no 315 MVA ICT-I and associated bays and 2 nos 220 kV line bays at Bolangir (referred as " <b>Asset-3</b> ")	1.11.2012	3067.95
LILO of 400 kV S/C Baripada-Rengali line at Keonjhar and associated bays at Keonjhar (referred as " <b>Asset-4</b> ")	1.2.2013	3247.15
Installation of 1 no of 400/220 kV, 315 MVA (1st) ICT alongwith associated bays and 2 nos. 220 kV line bays at Keonjhar Sub-station (referred as " <b>Asset-5</b> ")	1.2.2013	3509.73
Installation of 1 no of 400/220 kV, 315 MVA (2nd) ICT alongwith associated bays and 2 nos. 220 kV line bays at Keonjhar Sub-station (" <b>Asset-6</b> ")	1.3.2013	3509.73
Installation of 1 no 80 MVAR, 420 kV Bus Reactor and associated bays at Keonjhar Sub-station (" <b>Asset-7</b> ")	1.2.2013	1762.59
LILO of Kahalgaon-Biharshariff 400 kV D/C transmission line (2nd line) along with associated bays at Banka, 400/132 kV, 200 MVA ICT-I with associated bays at Banka Sub-station and 2nos. of 132 kV	1.12.2012	8512.89



Assets name	Date of commercial operation	Approved apportioned cost (₹ in lakh)
line bays at Banka Sub-station (“Asset-8”)		
400/132 kV, 200 MVA ICT-II with associated bays at Banka Sub-station (“Asset-9”)	1.1.2013	3410.00
2 x 50 MVAR switchable line reactor at Banka Sub-station and 400 kV, 1 x 80 MVAR Bus Reactor with associated bays at Banka Sub-station (“Asset-10”)	1.2.2013	3365.11
<b>Total</b>		<b>40858.54</b>

(b) The tariff from respective COD to 31.3.2014 was determined vide order dated 10.10.2013 in Petition No. 92/TT/2012 for Assets-1, 2 and 3, order dated 22.2.2014 in Petition No. 213/TT/2012 for Assets-4, 5, 6 and 7 and order dated 21.2.2014 in Petition No. 202/TT/2012 for Assets-8, 9 and 10 in accordance with the 2009 Tariff Regulations. The tariff allowed for the 2009-14 tariff period is as under:-

(₹ in lakh)

Particulars	Asset-1		Asset-2		Asset-3	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Depreciation	230.58	453.28	17.83	42.00	35.10	99.79
Interest on Loan	280.89	527.04	21.66	49.22	42.51	117.13
Return on Equity	236.93	469.31	18.05	43.15	35.26	102.02
Interest on WC	32.42	60.90	3.03	6.71	7.02	18.55
O&M Expenses	275.04	498.44	30.96	65.46	79.98	202.92
<b>Total</b>	<b>1055.87</b>	<b>2008.97</b>	<b>91.54</b>	<b>206.53</b>	<b>199.87</b>	<b>540.41</b>

(₹ in lakh)

	Asset-4		Asset-5		Asset-6		Asset-7	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Depreciation	14.10	103.29	10.06	91.62	4.64	85.57	6.94	56.26
Interest on Loan	20.07	141.06	16.36	131.51	7.74	125.53	10.73	79.31
Return on Equity	16.28	119.00	13.30	110.85	6.26	104.84	8.71	66.77
Interest on WC	2.36	15.99	2.68	18.90	1.31	18.48	1.18	8.27
O&M Expenses	21.78	138.15	31.99	202.92	16.00	202.92	10.32	65.46
<b>Total</b>	<b>74.59</b>	<b>517.49</b>	<b>74.38</b>	<b>555.79</b>	<b>35.96</b>	<b>537.35</b>	<b>37.88</b>	<b>276.07</b>



(₹ in lakh)

Particulars	Asset-8 (Part-A of Asset 1+Asset-2)*		Asset-9 (Asset-3)*		Asset-10 (Part-B of Asset 1+Asset-4)*	
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
Depreciation	86.48	357.08	18.62	101.70	19.14	138.80
Interest on Loan	110.19	430.84	25.45	131.02	24.89	172.54
Return on Equity	91.20	373.12	21.04	112.65	20.29	146.66
Interest on WC	14.43	51.46	3.64	16.99	3.19	21.39
O&M Expenses	141.17	447.73	38.70	163.65	30.96	196.38
<b>Total</b>	<b>443.47</b>	<b>1660.23</b>	<b>107.45</b>	<b>526.01</b>	<b>98.47</b>	<b>675.77</b>

\* order dated 21.2.2014 in Petition No. 202/TT/2012

- (c) The capital cost of ₹6933.43 lakh for Asset-1, ₹603.20 lakh for Asset-2 and ₹1513.64 lakh for Asset-3 was considered as on COD for determination of tariff in order dated 10.10.2013 in Petition No. 92/TT/2012.
- (d) The capital cost of ₹1777.03 lakh for Asset-4, ₹1432.77 lakh for Asset-5, ₹1433.09 lakh for Asset-6 and ₹947.40 lakh for Asset-7 was considered as on COD for determination of tariff in order dated 22.2.2014 in Petition No. 213/TT/2012.
- (e) The capital cost of ₹4137.61 lakh for Asset-8, ₹1459.54 lakh for Asset-9 and ₹2274.09 lakh for Asset-10 was considered as on COD for determination of tariff in order dated 21.2.2014 in Petition No. 202/TT/2012.
- (f) The MAT rate applicable as on 2008-09 was considered to arrive at rate of return on equity for the tariff period 2009-14, which is required to be adjusted as per the actual MAT rate applicable for the respective year at the time of truing up of tariff for 2009-14 tariff period.



## **TRUING UP OF ANNUAL FIXED CHARGES FOR TARIFF PERIOD 2009-14**

5. The truing up of tariff for the 2009-14 tariff period for the assets has been determined as discussed below.

### **Capital Cost**

6. The petitioner has claimed the capital cost as on COD as considered by the Commission in its order dated 10.10.2013 in Petition No. 92/TT/2012 (w.r.t. Assets-1, 2 and 3), order dated 22.2.2014 in Petition No. 213/TT/2012 (w.r.t. Assets-4, 5 and 6) and 21.2.2014 in Petition No. 202/TT/2012 (w.r.t. Asset-9).. The petitioner has claimed the capital cost of ₹4139.20 lakh and ₹2274.51 lakh as on COD 1.12.2012 and 1.2.2013 for Asset- 8 and Asset-10 respectively.

7. Clause (1) of Regulation 7 of the 2009 Tariff Regulations provides that:-

“(1) Capital cost for a project shall include:

(a) 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 funds deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;

(b) capitalised initial spares subject to the ceiling rates specified in regulation 8; and

(c) additional capital expenditure determined under regulation 9:

Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost.”





8. The petitioner has submitted the Auditor's Certificate certifying the capital cost as on COD and additional capitalization claimed thereafter. Thus, the capital cost (including excess initial spares) has been considered as ₹6933.43 lakh for Asset-1, ₹603.20 lakh for Asset-2, ₹1513.64 lakh for Asset-3, ₹1777.03 lakh for Asset-4, ₹1432.77 lakh for Asset-5, ₹1433.09 lakh for Asset-6, ₹947.40 lakh for Asset-7, ₹4139.20 lakh for Asset-8, ₹1459.54 lakh for Asset-9 and ₹2274.51 lakh for Asset-10, respectively, as on COD.

### **Initial Spares**

9. The petitioner has claimed initial spares of ₹93.77 lakh, ₹20.42 lakh, ₹26.95 lakh, ₹12.95 lakh, ₹51.93 lakh, ₹51.93 lakh, ₹23.86 lakh, ₹70.00 lakh, ₹48.40 lakh and ₹55.60 lakh pertaining to the sub-station for Asset-1, Asset-2, Asset-3, Asset-4, Asset-5, Asset-6, Asset-7, Asset-8, Asset-9 and Asset-10, respectively, and ₹22.60 lakh for Asset-8 pertaining to transmission line. In this regard, the petitioner has submitted that since the project is complete, the initial spares may be considered for the whole project as a whole. The cost of initial spares is 2.34%, which is within the ceiling limit specified in the 2009 Tariff Regulations. In order dated 10.10.2013 in Petition No. 92/TT/2012 and 22.2.2014 in Petition No. 213/TT/2012, the initial spares were allowed as the same was within the ceiling limit specified in the 2009 Tariff Regulations. However, in order dated 21.2.2014 in Petition No. 202/TT/2012, the Commission had disallowed the excess initial spares of ₹1.59 lakh and ₹0.42 lakh for Asset-8 and Asset-10 pertaining to the sub-station considering the capital cost as on COD and additional capital expenditure upto the end of the tariff period 31.3.2014 and the



initial spares was to be reviewed at the time of true up considering the additional capital expenditure during the 2014-19 period.

10. The petitioner has submitted actual capital expenditure for true up of tariff during 2009-14 tariff period as per the 2009 Tariff Regulations and also submitted the estimated capital expenditure for determination of tariff during 2014-19 tariff period in accordance with the 2014 Tariff Regulations. The initial spares have been worked out by considering the additional capital expenditure upto cut-off by considering the additional capitalization beyond 31.3.2014. The petitioner has claimed the additional capitalization for 2014-19 tariff period in the instant petition and as the cut-off date falls beyond the 31.3.2014, we have considered the additional capitalization as considered in subsequent Paragraph to work out the capital cost upto cut-off date.

11. 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:

- (iv) Transmission system
  - (a) Transmission line - 0.75%
  - (b) Transmission Sub-station - 2.5%
  - (c) Series Compensation devices and HVDC Station - 3.5%.....”

12. The details of the initial spares claimed and allowed for the assets covered in the instant petition are in the table given below:-

(₹ in lakh)					
Description	Capital cost as on cut-off date	Initial spares claimed	Ceiling limits as per Regulation 8 of the 2009 Tariff Regulation	Initial spares worked out and allowed	Excess initial spares claimed
	(a)	(b)	(c)	$(d) = ((a - b) * c) / (100 - c)\%$	$(e) = (d) - (b)$



<b>Sub-station (including PLCC)</b>					
Asset-1	4873.50	93.77	2.50%	122.56	0.00
Asset-2	780.87	20.42	2.50%	19.50	0.92
Asset-3	2379.72	26.95	2.50%	60.33	0.00
Asset-4	1396.89	12.95	2.50%	35.49	0.00
Asset-5	2097.68	51.93	2.50%	52.46	0.00
Asset-6	1920.71	51.93	2.50%	47.92	4.01
Asset-7	1212.62	23.86	2.50%	30.48	0.00
Asset-8	3420.68	70.00	2.50%	85.91	0.00
Asset-9	2308.85	48.40	2.50%	57.96	0.00
Asset-10	2785.58	55.60	2.50%	70.00	0.00
<b>Transmission Line</b>					
Asset-8	3068.09	22.60	0.75%	23.01	0.00

13. The capital cost as on COD has been worked out by adjusting excess initial spares as under:-

(₹ in lakh)

Particulars	Capital cost claimed as on DOCO	Excess initial spares	Capital cost of individual assets considered as on COD
Asset-1	6933.43	0.00	6933.43
Asset-2	603.20	-0.92	602.28
Asset-3	1513.64	0.00	1513.64
Asset-4	1777.03	0.00	1777.03
Asset-5	1432.77	0.00	1432.77
Asset-6	1433.09	-4.01	1429.08
Asset-7	947.40	0.00	947.40
Asset-8	4139.20	0.00	4139.20
Asset-9	1459.54	0.00	1459.54
Asset-10	2274.51	0.00	2274.51

### **Additional Capital Expenditure**

14. The petitioner has claimed additional capitalization of ₹1551.82 lakh, ₹122.67 lakh, ₹761.08 lakh, ₹273.56 lakh, ₹343.91 lakh, ₹166.62 lakh, ₹181.22 lakh, ₹1848.03 lakh, ₹411.20 lakh and ₹256.35 lakh for Asset-1, Asset-2, Asset-3, Asset-4, Asset-5, Asset-6, Asset-7, Asset-8, Asset-9 and Asset-10,



respectively, on account of balance and retention payment within cut-off date under Regulation 9(1) of the 2009 Tariff Regulations.

15. Clause (1), sub-clause(i) of Regulation 9 of the 2009 Tariff Regulations provides that:-

**“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...;”

16. The total capital cost of ₹8485.25 lakh, ₹724.95 lakh, ₹2274.72 lakh, ₹2050.59 lakh, ₹1776.68 lakh, ₹1595.70 lakh, ₹1128.62 lakh, ₹5987.23 lakh, ₹1870.74 lakh and ₹2530.86 lakh for Asset-1, Asset-2, Asset-3, Asset-4, Asset-5, Asset-6, Asset-7, Asset-8, Asset-9 and Asset-10, respectively, including actual additional capitalization claimed by the petitioner is within the overall approved cost of the assets. The claim of additional capitalization falls within the meaning of Regulation 9(1) of the 2009 Tariff Regulations and hence, we have allowed additional capitalization under Regulation 9(1)(i) of the 2009 Tariff Regulations as shown in the table below:-

Name of the asset	Particulars	Approved apportioned cost	Capital cost as on COD	Additional Capital Expenditure (2009-14)			Capital cost as on 31.3.2014
				2012-13	2013-14	Total	
				(₹ in lakh)			
Asset-1	Approved in order dated 10.10.2013	9220.68	6933.43	1623.24	784.51	2407.75	9341.18
	Allowed in this order		6933.43	952.70	599.12	1551.82	8485.25



Name of the asset	Particulars	Approved apportioned cost	Capital cost as on COD	Additional Capital Expenditure (2009-14)			Capital cost as on 31.3.2014
				2012-13	2013-14	Total	
Asset-2	Approved in order dated 10.10.2013	1252.71	603.20	170.00	99.10	269.1	872.30
	Allowed in this order		602.28	50.15	72.52	122.67	724.95
Asset-3	Approved in order dated 10.10.2013	3067.95	1513.64	200.00	463.27	663.27	2176.91
	Allowed in this order		1513.64	561.64	199.44	761.08	2274.72
Asset-4	Approved in order dated 22.2.2014	3247.15	1777.03	171.99	640.21	812.2	2589.23
	Allowed		1777.03	171.99	101.57	273.56	2050.59
Asset-5	Approved in order dated 22.2.2014	3509.73	1432.77	177.23	1007.23	1184.46	2617.29
	Allowed in this order		1432.77	177.29	166.62	343.91	1776.68
Asset-6	Approved in order dated 22.2.2014	3509.73	1433.09	0.00	1132.23	1132.23	2565.32
	Allowed in this order		1429.08	0.00	166.62	166.62	1595.70
Asset-7	Approved in order dated 22.2.2014	1762.59	947.40	97.22	456.97	554.19	1501.59
	Allowed in this order		947.40	97.22	84.00	181.22	1128.62
Asset-8	Approved in order dated 21.2.2014	8512.89	4137.61	2159.47	1635.39	3794.86	7932.47
	Allowed in this order		4139.20	1464.15	383.88	1848.03	5987.23
Asset-9	Approved in order dated 21.2.2014	3410.00	1459.54	291.06	794.96	1086.02	2545.56
	Allowed in this order		1459.54	291.06	120.14	411.20	1870.74
Asset-10	Approved in order dated	3365.11	2274.09	95.91	853.00	948.91	3223.00



Name of the asset	Particulars	Approved apportioned cost	Capital cost as on COD	Additional Capital Expenditure (2009-14)			Capital cost as on 31.3.2014
				2012-13	2013-14	Total	
	21.2.2014						
	Allowed in this order		2274.51	95.91	160.44	256.35	2530.86

### **Debt: Equity**

17. Clause 1 & 3 of Regulation 12 of the 2009 Tariff Regulations provide as follows:-

“(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.

.....

(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.”

18. The petitioner has claimed trued up Annual Fixed Charge based on debt-equity ratio of 70:30 admitted as on COD in order dated order dated 10.10.2013 in Petition No. 92/TT/2012, 22.2.2014 in Petition No. 213/TT/2012 and 21.2.2014 in Petition No. 202/TT/2012 for the assets. The debt:equity ratio of 70:30 as on COD for the Assets is in accordance with the 2009 Tariff Regulations and is considered for the purpose of truing up of the approved tariff of tariff period 2009-14, as given under:-

(₹ in lakh)			
Particulars	Asset-1	Asset-2	Asset-3



	Amount	(%)	Amount	(%)	Amount	(%)
Debt	4853.40	70.00	421.60	70.00	1059.55	70.00
Equity	2080.03	30.00	180.68	30.00	454.09	30.00
<b>Total</b>	<b>6933.43</b>	<b>100.00</b>	<b>602.28</b>	<b>100.00</b>	<b>1513.64</b>	<b>100.00</b>

(₹ in lakh)

Particulars	Asset-4		Asset-5		Asset-6		Asset-7	
	Amount	(%)	Amount	(%)	Amount	(%)	Amount	(%)
Debt	1243.92	70.00	1002.94	70.00	1000.35	70.00	663.18	70.00
Equity	533.11	30.00	429.83	30.00	428.72	30.00	284.22	30.00
<b>Total</b>	<b>1777.03</b>	<b>100.00</b>	<b>1432.77</b>	<b>100.00</b>	<b>1429.08</b>	<b>100.00</b>	<b>947.40</b>	<b>100.00</b>

(₹ in lakh)

Particulars	Asset-8		Asset-9		Asset-10	
	Amount	(%)	Amount	(%)	Amount	(%)
Debt	2897.44	70.00	1021.68	70.00	1592.16	70.00
Equity	1241.76	30.00	437.86	30.00	682.35	30.00
<b>Total</b>	<b>4139.20</b>	<b>100.00</b>	<b>1459.54</b>	<b>100.00</b>	<b>2274.51</b>	<b>100.00</b>

19. With respect to additional capitalization during 2009-14 tariff period, the petitioner has claimed the debt:equity ratio of 70:30 as on COD for the instant assets. The petitioner was directed to confirm that the actual equity infused for additional capitalization during the 2009-14 tariff period is not less than 30%. In response, the petitioner vide affidavit dated 15.3.2016, has submitted that debt to equity ratio for Asset-1 to Asset-10 for the tariff period 2009-14 is 70:30 in accordance with Regulation 12(3) of the 2009 Tariff Regulations and claimed as per Form-13 and 1A of the petition.

20. The overall debt equity ratio as on 31.3.2014 for the Asset including additional capitalization is as under:-

(₹ in lakh)

Particulars	Asset-1		Asset-2		Asset-3	
	Amount	(%)	Amount	(%)	Amount	(%)
Debt	5939.68	70.00	507.47	70.00	1592.30	70.00
Equity	2545.58	30.00	217.48	30.00	682.42	30.00
<b>Total</b>	<b>8485.25</b>	<b>100.00</b>	<b>724.95</b>	<b>100.00</b>	<b>2274.72</b>	<b>100.00</b>



(₹ in lakh)

Particulars	Asset-4		Asset-5		Asset-6		Asset-7	
	Amount	(%)	Amount	(%)	Amount	(%)	Amount	(%)
Debt	1435.41	70.00	1243.68	70.00	1116.99	70.00	790.03	70.00
Equity	615.18	30.00	533.00	30.00	478.71	30.00	338.59	30.00
<b>Total</b>	<b>2050.59</b>	<b>100.00</b>	<b>1776.68</b>	<b>100.00</b>	<b>1595.70</b>	<b>100.00</b>	<b>1128.62</b>	<b>100.00</b>

(₹ in lakh)

Particulars	Asset-8		Asset-9		Asset-10	
	Amount	(%)	Amount	(%)	Amount	(%)
Debt	4191.07	70.00	1309.52	70.00	1771.60	70.00
Equity	1796.16	30.00	561.22	30.00	759.26	30.00
<b>Total</b>	<b>5987.23</b>	<b>100.00</b>	<b>1870.74</b>	<b>100.00</b>	<b>2530.86</b>	<b>100.00</b>

### **Interest on Loan (“IOL”)**

21. Regulation 16 of the 2009 Tariff Regulations provides the methodology for working out weighted average rate of interest on loan.

22. The petitioner has submitted the weighted average rate of interest on loan based on its actual loan portfolio and rate of interest. We have considered the submissions of the petitioner and accordingly calculated the IOL based on actual interest rate submitted by the petitioner, in accordance with Regulation 16 of the 2009 Tariff Regulations. The details of weighted average rate of interest are placed at **Annexure-I** and the IOL has been worked out and allowed as follows:-

(₹ in lakh)

Particulars	Asset-1		Asset-2		Asset-3	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved vide order dated 10.10.2013, 22.2.2014 and 21.2.2014	280.89	527.04	21.66	49.22	42.51	117.13
As claimed by the petitioner	270.15	481.69	19.79	40.94	47.18	129.73





Particulars	Asset-1		Asset-2		Asset-3	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Allowed after trued up	270.16	481.69	19.76	40.88	47.18	129.73

(₹ in lakh)

Particulars	Asset-4		Asset-5		Asset-6		Asset-7	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved vide order dated 10.10.2013, 22.2.2014 and 21.2.2014	20.07	141.06	16.36	131.51	7.74	125.53	10.73	79.31
As claimed by the petitioner	20.07	123.94	16.36	105.05	7.74	95.01	10.73	67.51
Allowed after trued up	20.07	123.94	16.36	105.05	7.72	94.76	10.73	67.51

(₹ in lakh)

Particulars	Asset-8		Asset-9		Asset-10	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved vide order dated 10.10.2013, 22.2.2014 and 21.2.2014	110.19	430.84	25.45	131.02	24.89	172.54
As claimed by the petitioner	101.94	345.51	25.02	107.98	24.87	150.37
Allowed after trued up	101.94	345.51	25.02	107.98	24.87	150.36

The variation in interest on loan is due to variation in capital cost as on COD and variation in actual additional capitalization during 2012-14 tariff period.

### **Return on Equity (“ROE”)**

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

“(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as



per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.

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

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

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

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

24. The petitioner has submitted that MAT rate of 11.330% applicable for 2008-09 was considered in the order dated 10.10.2013 in Petition No. 92/TT/2012 for Asset-1 to 3, 22.2.2014 in Petition No. 213/TT/2012 for Asset-4 to 7 and 21.2.2014 in Petition No. 202/TT/2012 for Asset-8 to 10. However, for truing up purpose, the computation of RoE for the tariff period 2009-14 has been done on the basis of actual MAT rate applicable during 2009-14. The petitioner has submitted the variation in the MAT rate during 2009-14 as per the Finance Act of the relevant year for the purpose of grossing up of ROE, as below:-

Particulars	MAT Rate (t) %	Grossed up ROE (Base rate/(1-t)) %
2012-13	20.008	19.377
2013-14	20.961	19.610



25. We have considered the submissions of the petitioner and have approved ROE in accordance with the provisions of the 2009-14 Tariff Regulations. Accordingly, the ROE as trued up in accordance with the 2009 Tariff Regulations is shown in the table below:-

(₹ in lakh)

Particulars	Asset-1		Asset-2		Asset-3	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved vide order dated 10.10.2013, 22.2.2014 and 21.2.2014	236.93	469.31	18.05	43.15	35.26	102.02
As claimed by the petitioner	251.26	481.56	18.26	40.57	43.46	127.96
Allowed after trued up	251.26	481.56	18.23	40.51	43.46	127.96

(₹ in lakh)

Particulars	Asset-4		Asset-5		Asset-6		Asset-7	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved vide order dated 10.10.2013, 22.2.2014 and 21.2.2014	16.28	119.00	13.30	110.85	6.26	104.84	8.71	66.77
As claimed by the petitioner	18.05	117.65	14.74	99.62	6.94	89.21	9.65	63.93
Allowed after trued up	18.05	117.65	14.74	99.62	6.92	88.97	9.65	63.93

(₹ in lakh)

Particulars	Asset-8		Asset-9		Asset-10	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved vide order dated 10.10.2013, 22.2.2014 and 21.2.2014	91.20	373.12	21.04	112.65	20.29	146.66
As claimed by the petitioner	94.39	340.94	23.33	106.52	22.50	144.17
Allowed after trued up	94.39	340.94	23.33	106.52	22.50	144.17



The variation in return on equity is on account of increase in the applicable MAT rate for the purpose of grossing up of base rate of return on equity, variation in capital cost and actual additional capitalization.

### **Depreciation**

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

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

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

27. Clause (4) of Regulation 17 of the 2009 Tariff Regulations provides as follows:-

**"17. Depreciation:**

...  
(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.”

28. Depreciation was worked out in order dated 10.10.2013 in Petition No. 92/TT/2012 for Asset-1 to 3, 22.2.2014 in Petition No. 213/TT/2012 for Asset-4 to 7 and 21.2.2014 in Petition No. 202/TT/2012 for Asset-8 to 10 in accordance with Regulation 17 of the 2009 Tariff Regulations.



29. The weighted average useful life of the transmission asset has been considered as per Regulations 3(42) and 17(4) of the 2009 Tariff Regulations. For the purpose of calculation, the weighted average useful life of the asset as on COD has been considered as 30 years for Asset-1, 25 years for Asset-2 to 3, 31 years for Asset-4, 25 years for Asset-5 to 7, 30 years for Asset- 8 and 25 years for Asset-9 to 10. The depreciation for the tariff period 2009-14 has been worked out in accordance with Regulation 17 of the 2009 Tariff Regulations based on admitted capital expenditure as under.

(₹ in lakh)

Particulars	Asset-1		Asset-2		Asset-3	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved vide order dated 10.10.2013, 22.2.2014 and 21.2.2014	230.58	453.28	17.83	42.00	35.10	99.79
As claimed by the petitioner	222.18	421.47	16.49	36.14	39.26	114.14
Allowed after trued up	222.18	421.47	16.46	36.09	39.26	114.14

(₹ in lakh)

Particulars	Asset-4		Asset-5		Asset-6		Asset-7	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved vide order dated 10.10.2013, 22.2.2014 and 21.2.2014	14.10	103.29	10.06	91.62	4.64	85.57	6.94	56.26
As claimed by the petitioner	14.09	91.80	10.06	69.43	4.64	60.08	6.94	46.41
Allowed after trued up	14.10	91.80	10.06	69.43	4.62	59.87	6.94	46.41

(₹ in lakh)

Particulars	Asset-8		Asset-9		Asset-10	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved vide order dated 10.10.2013, 22.2.2014 and 21.2.2014	86.48	357.08	18.62	101.70	19.14	138.80
As claimed by the petitioner	80.93	291.58	18.62	85.25	19.15	121.50



Particulars	Asset-8		Asset-9		Asset-10	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Allowed after trued up	80.94	291.58	18.62	85.25	19.14	121.50

The variation in depreciation is on account of variation in capital cost as on COD and variation in additional capitalization vis-à-vis that approved in the Order.

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

30. The petitioner has computed O&M Expenses for the assets mentioned in the petition and in accordance with the O&M norms for lines and bays specified in Regulation 19(g) of the 2009 Tariff Regulations. The O&M Expenses claimed by the petitioner for tariff period 2009-14 are same as that approved in the tariff order dated 10.10.2013 in Petition No. 92/TT/2012 for Asset-1 to 3, 22.2.2014 in Petition No. 213/TT/2012 for Asset-4 to 7 and 21.2.2014 in Petition No. 202/TT/2012 for Asset-8 to 10.

31. The O&M Expenses claimed by the petitioner, allowed and trued up are the same, and are as follows:-

(₹ in lakh)

Particulars	Asset-1		Asset-2		Asset-3	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved vide order dated 10.10.2013, 22.2.2014 and 21.2.2014	275.04	498.44	30.96	65.46	79.98	202.92
As claimed by the petitioner	275.04	498.45	30.96	65.46	79.97	202.92
Allowed after trued up	275.04	498.45	30.96	65.46	79.98	202.92

(₹ in lakh)

Particulars	Asset-4	Asset-5	Asset-6	Asset-7



	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved vide order dated 10.10.2013, 22.2.2014 and 21.2.2014	21.78	138.15	31.99	202.92	16.00	202.92	10.32	65.46
As claimed by the petitioner	21.78	138.15	31.99	202.92	16.00	202.92	10.32	65.46
Allowed after trued up	21.78	138.15	31.99	202.92	16.00	202.92	10.32	65.46

(₹ in lakh)

Particulars	Asset-8		Asset-9		Asset-10	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved vide order dated 10.10.2013, 22.2.2014 and 21.2.2014	141.17	447.73	38.70	163.65	30.96	196.38
As claimed by the petitioner	141.17	447.73	38.70	163.65	30.96	196.38
Allowed after trued up	141.17	447.73	38.70	163.65	30.96	196.38

### **Interest on working capital("IWC")**

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

33. The petitioner submitted the rate of interest on working capital as 13.50% for Asset- 1to 10 for the period from COD to 31.3.2014 as per Clause (3) of Regulation 18 of the 2009 Tariff Regulations and the components of working capital are also considered in accordance with Sub-clause (c) of clause (1) of Regulation 18 of the 2009 Tariff Regulations.

34. Rate of interest in working capital is considered on normative basis in accordance with Clause (3) of Regulation 18 of the 2009 Tariff Regulations. It is



calculated based on the State Bank of India Base Rate as on 1.4.2012 plus 350 basis points. State Bank of India Base Rate on 1.4.2012 was 10.00%. Therefore, interest rate of 13.50% (10.00% plus 350 basis points) has been considered to work out the interest on working capital in the instant case.

35. The IWC tried up is as under:-

(₹ in lakh)

Particulars	Asset-1		Asset-2		Asset-3	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Maintenance Spares	41.26	74.77	4.64	9.82	12.00	30.44
O & M expenses	22.92	41.54	2.58	5.46	6.66	16.91
Receivables	175.16	323.76	14.73	31.54	36.21	99.09
Total	239.34	440.07	21.95	46.82	54.87	146.43
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50	13.50
<b>Interest</b>	<b>32.31</b>	<b>59.41</b>	<b>2.96</b>	<b>6.32</b>	<b>7.41</b>	<b>19.77</b>

(₹ in lakh)

Particulars	Asset-4		Asset-5		Asset-6		Asset-7	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Maintenance Spares	3.27	20.72	4.80	30.44	2.40	30.44	1.55	9.82
O & M expenses	1.82	11.51	2.67	16.91	1.33	16.91	0.86	5.46
Receivables	12.73	81.14	12.64	82.42	6.10	77.22	6.47	41.84
Total	17.82	113.38	20.11	129.77	9.83	124.57	8.88	57.11
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50
<b>Interest</b>	<b>2.41</b>	<b>15.31</b>	<b>2.71</b>	<b>17.52</b>	<b>1.33</b>	<b>16.82</b>	<b>1.20</b>	<b>7.71</b>

(₹ in lakh)

Particulars	Asset-8		Asset-9		Asset-10	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Maintenance Spares	21.18	67.16	5.81	24.55	4.64	29.46
O & M expenses	11.76	37.31	3.23	13.64	2.58	16.37
Receivables	72.10	245.50	18.22	79.89	16.79	105.47
Total	105.04	349.97	27.25	118.07	24.01	151.29





Particulars	Asset-8		Asset-9		Asset-10	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50	13.50
<b>Interest</b>	<b>14.18</b>	<b>47.25</b>	<b>3.68</b>	<b>15.94</b>	<b>3.24</b>	<b>20.42</b>

36. The IWC approved, claimed and trued up in this order is as given below:-

(₹ in lakh)

Particulars	Asset-1		Asset-2		Asset-3	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved vide order dated 10.10.2013, 22.2.2014 and 21.2.2014	32.42	60.90	3.03	6.71	7.02	18.55
As claimed by the petitioner	32.31	59.41	2.97	6.33	7.41	19.77
Allowed after trued up	32.31	59.41	2.96	6.32	7.41	19.77

(₹ in lakh)

Particulars	Asset-4		Asset-5		Asset-6		Asset-7	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved vide order dated 10.10.2013, 22.2.2014 and 21.2.2014	2.36	15.99	2.68	18.90	1.31	18.48	1.18	8.27
As claimed by the petitioner	2.41	15.31	2.72	17.52	1.33	16.83	1.20	7.71
Allowed after trued up	2.41	15.31	2.71	17.52	1.33	16.82	1.20	7.71

(₹ in lakh)

Particulars	Asset-8		Asset-9		Asset-10	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved vide order dated 10.10.2013, 22.2.2014 and 21.2.2014	14.43	51.46	3.64	16.99	3.19	21.39
As claimed by the petitioner	14.18	47.25	3.68	15.94	3.24	20.43
Allowed after trued up	14.18	47.25	3.68	15.94	3.24	20.42



37. The variation in IWC is on account of variation in IOL, depreciation and ROE due to variation in capital cost, actual additional capitalization and further increase in ROE on account of applicable MAT rate during 2009-14 tariff period.

### **ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD**

38. The detailed computation of the various components of the trued up annual fixed charges for the Asset for the tariff period 2009-14 is summarised below:-

Particulars	Asset-1		Asset-2		Asset-3	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
(₹ in lakh)						
<b>Gross Block</b>						
Opening Gross Block	6933.43	7886.13	602.28	652.43	1513.64	2075.28
Additional Capitalization	952.70	599.12	50.15	72.52	561.64	199.44
Closing Gross block	7886.13	8485.25	652.43	724.95	2075.28	2274.72
Average Gross block	7409.78	8185.69	627.35	688.69	1794.46	2175.00
Average Gross block excluding freehold land	7389.30	8165.21	627.35	688.69	1794.46	2175.00
<b>Depreciation</b>						
Rate of Depreciation (%)	5.140	5.149	5.247	5.240	5.251	5.248
Depreciable Value	6650.37	7348.69	564.62	619.82	1615.01	1957.50
Elapsed Life of the assets at beginning of the year	0	1	0	1	0	1
Weighted Balance Useful life of the assets	30	29	25	24	25	24
Remaining Depreciable Value	6650.37	7126.51	564.62	603.36	1615.01	1918.24
Depreciation	222.18	421.47	16.46	36.09	39.26	114.14
<b>Interest on Loan</b>						
Gross Normative Loan	4853.40	5520.29	421.60	456.71	1059.55	1452.70
Cumulative Repayment upto Previous Year	0.00	222.18	0.00	16.46	0.00	39.26
Net Loan-Opening	4853.40	5298.11	421.60	440.25	1059.55	1413.44
Additions	666.89	419.38	35.11	50.76	393.15	139.61
Repayment during the year	222.18	421.47	16.46	36.09	39.26	114.14
Net Loan-Closing	5298.11	5296.02	440.25	454.92	1413.44	1438.90
Average Loan	5075.76	5297.07	430.92	447.58	1236.49	1426.17
Weighted Average Rate of Interest on Loan (%)	9.1242	9.0935	9.1707	9.1343	9.1568	9.0963
Interest	270.16	481.69	19.76	40.88	47.18	129.73



Particulars	Asset-1		Asset-2		Asset-3	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
<b>Return on Equity</b>						
Opening Equity	2080.03	2365.84	180.68	195.72	454.09	622.58
Additions	285.81	179.74	15.04	21.76	168.49	59.83
Closing Equity	2365.84	2545.58	195.72	217.48	622.58	682.42
Average Equity	2222.93	2455.71	188.20	206.60	538.34	652.50
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50	15.50
MAT rate for the respective year (%)	20.008	20.961	20.008	20.961	20.008	20.961
Rate of Return on Equity (Pre Tax) (%)	19.377	19.610	19.377	19.610	19.377	19.610
Return on Equity (Pre Tax)	251.26	481.56	18.23	40.51	43.46	127.96
<b>Interest on Working Capital</b>						
Maintenance Spares	41.26	74.77	4.64	9.82	12.00	30.44
O & M Expenses	22.92	41.54	2.58	5.46	6.66	16.91
Receivables	175.16	323.76	14.73	31.54	36.21	99.09
Total	239.34	440.07	21.95	46.82	54.87	146.43
Interest	32.31	59.41	2.96	6.32	7.41	19.77
<b>Annual Transmission Charges</b>						
Depreciation	222.18	421.47	16.46	36.09	39.26	114.14
Interest on Loan	270.16	481.69	19.76	40.88	47.18	129.73
Return on Equity	251.26	481.56	18.23	40.51	43.46	127.96
Interest on Working Capital	32.31	59.41	2.96	6.32	7.41	19.77
O & M Expenses	275.04	498.45	30.96	65.46	79.98	202.92
<b>Total</b>	<b>1050.95</b>	<b>1942.58</b>	<b>88.38</b>	<b>189.27</b>	<b>217.28</b>	<b>594.51</b>

(₹ in lakh)

Particulars	Asset-4		Asset-5		Asset-6		Asset-7	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
<b>Gross Block</b>								
Opening Gross Block	1777.03	1949.02	1432.77	1610.06	1429.08	1429.08	947.40	1044.62
Additional Capitalization	171.99	101.57	177.29	166.62	0.00	166.62	97.22	84.00
Closing Gross block	1949.02	2050.59	1610.06	1776.68	1429.08	1595.70	1044.62	1128.62
Average Gross block	1863.03	1999.81	1521.42	1693.37	1429.08	1512.39	996.01	1086.62
Average Gross block excluding freehold land	1606.63	1743.41	1142.92	1314.87	1050.58	1133.89	788.44	879.05
<b>Depreciation</b>								



Particulars	Asset-4		Asset-5		Asset-6		Asset-7	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Rate of Depreciation (%)	4.540	4.591	3.966	4.100	3.882	3.959	4.180	4.271
Depreciable Value	1445.96	1569.06	1028.62	1183.38	945.52	1020.50	709.60	791.15
Elapsed Life of the assets at beginning of the year	0	0	0	1	0	1	0	1
Weighted Balance Useful life of the assets	31	31	25	24	25	24	25	24
Remaining Depreciable Value	1445.96	1554.97	1028.62	1173.33	945.52	1015.88	709.60	784.21
Depreciation	14.10	91.80	10.06	69.43	4.62	59.87	6.94	46.41
<b>Interest on Loan</b>								
Gross Normative Loan	1243.92	1364.31	1002.94	1127.04	1000.35	1000.35	663.18	731.23
Cumulative Repayment upto Previous Year	0.00	14.10	0.00	10.06	0.00	4.62	0.00	6.94
Net Loan-Opening	1243.92	1350.22	1002.94	1116.98	1000.35	995.73	663.18	724.30
Additions	120.39	71.10	124.10	116.63	0.00	116.63	68.05	58.80
Repayment during the year	14.10	91.80	10.06	69.43	4.62	59.87	6.94	46.41
Net Loan-Closing	1350.22	1329.51	1116.98	1164.19	995.73	1052.50	724.30	736.68
Average Loan	1297.07	1339.87	1059.96	1140.59	998.04	1024.11	693.74	730.49
Weighted Average Rate of Interest on Loan (%)	9.2829	9.2499	9.2590	9.2106	9.2843	9.2528	9.2835	9.2418
Interest	20.07	123.94	16.36	105.05	7.72	94.76	10.73	67.51
<b>Return on Equity</b>								
Opening Equity	533.11	584.71	429.83	483.02	428.72	428.72	284.22	313.39
Additions	51.60	30.47	53.19	49.99	0.00	49.99	29.17	25.20
Closing Equity	584.71	615.18	483.02	533.00	428.72	478.71	313.39	338.59
Average Equity	558.91	599.94	456.42	508.01	428.72	453.72	298.80	325.99
Return on Equity (Base Rate) (%)	15.50	15.50	15.500	15.500	15.500	15.500	15.500	15.500
MAT rate for the respective year (%)	20.008	20.961	20.008	20.961	20.008	20.961	20.008	20.961
Rate of Return on Equity (Pre Tax) (%)	19.377	19.610	19.377	19.610	19.377	19.610	19.377	19.610
Return on Equity (Pre Tax)	18.05	117.65	14.74	99.62	6.92	88.97	9.65	63.93
<b>Interest on Working Capital</b>								
Maintenance Spares	3.27	20.72	4.80	30.44	2.40	30.44	1.55	9.82
O & M Expenses	1.82	11.51	2.67	16.91	1.33	16.91	0.86	5.46
Receivables	12.73	81.14	12.64	82.42	6.10	77.22	6.47	41.84
Total	17.82	113.38	20.11	129.77	9.83	124.57	8.88	57.11
Interest	2.41	15.31	2.71	17.52	1.33	16.82	1.20	7.71
<b>Annual Transmission Charges</b>								



Particulars	Asset-4		Asset-5		Asset-6		Asset-7	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Depreciation	14.10	91.80	10.06	69.43	4.62	59.87	6.94	46.41
Interest on Loan	20.07	123.94	16.36	105.05	7.72	94.76	10.73	67.51
Return on Equity	18.05	117.65	14.74	99.62	6.92	88.97	9.65	63.93
Interest on Working Capital	2.41	15.31	2.71	17.52	1.33	16.82	1.20	7.71
O & M Expenses	21.78	138.15	31.99	202.92	16.00	202.92	10.32	65.46
<b>Total</b>	<b>76.40</b>	<b>486.84</b>	<b>75.86</b>	<b>494.54</b>	<b>36.59</b>	<b>463.34</b>	<b>38.84</b>	<b>251.02</b>

(₹ in lakh)

Particulars	Asset-8		Asset-9		Asset-10	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
<b>Gross Block</b>						
Opening Gross Block	4139.20	5603.35	1459.54	1750.60	2274.51	2370.42
Additional Capitalization	1464.15	383.88	291.06	120.14	95.91	160.44
Closing Gross block	5603.35	5987.23	1750.60	1870.74	2370.42	2530.86
Average Gross block	4871.28	5795.29	1605.07	1810.67	2322.47	2450.64
Average Gross block excluding freehold land	4584.21	5506.36	1413.41	1617.15	2178.93	2304.77
<b>Depreciation</b>						
Rate of Depreciation (%)	4.985	5.031	4.641	4.708	4.945	4.958
Depreciable Value	4125.78	4955.72	1272.07	1455.43	1961.03	2074.29
Elapsed Life of the assets at beginning of the year	0	1	0	1	0	1
Weighted Balance Useful life of the assets	30	29	25	24	25	24
Remaining Depreciable Value	4125.78	4874.78	1272.07	1436.81	1961.03	2055.15
Depreciation	80.94	291.58	18.62	85.25	19.14	121.50
<b>Interest on Loan</b>						
Gross Normative Loan	2897.44	3922.35	1021.68	1225.42	1592.16	1659.29
Cumulative Repayment upto Previous Year	0.00	80.94	0.00	18.62	0.00	19.14
Net Loan-Opening	2897.44	3841.41	1021.68	1206.80	1592.16	1640.15
Additions	1024.91	268.72	203.74	84.10	67.14	112.31
Repayment during the year	80.94	291.58	18.62	85.25	19.14	121.50
Net Loan-Closing	3841.41	3818.55	1206.80	1205.65	1640.15	1630.96
Average Loan	3369.43	3829.98	1114.24	1206.22	1616.15	1635.56
Weighted Average Rate of Interest on Loan (%)	9.0763	9.0213	8.9817	8.9519	9.2341	9.1933
Interest	101.94	345.51	25.02	107.98	24.87	150.36
<b>Return on Equity</b>						
Opening Equity	1241.76	1681.00	437.86	525.18	682.35	711.13



Particulars	Asset-8		Asset-9		Asset-10	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Additions	439.24	115.16	87.32	36.04	28.77	48.13
Closing Equity	1681.00	1796.16	525.18	561.22	711.13	759.26
Average Equity	1461.38	1738.582	481.52	543.20	696.74	735.19
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500	15.500
MAT rate for the respective year (%)	20.008	20.961	20.008	20.961	20.008	20.961
Rate of Return on Equity (Pre Tax) (%)	19.377	19.610	19.377	19.610	19.377	19.610
Return on Equity (Pre Tax)	<b>94.39</b>	<b>340.94</b>	23.33	106.52	22.50	144.17
<b>Interest on Working Capital</b>						
Maintenance Spares	21.18	67.16	5.81	24.55	4.64	29.46
O & M Expenses	11.76	37.31	3.23	13.64	2.58	16.37
Receivables	72.10	245.50	18.22	79.89	16.79	105.47
Total	105.04	349.97	27.25	118.07	24.01	151.29
Interest	14.18	47.25	3.68	15.94	3.24	20.42
<b>Annual Transmission Charges</b>						
Depreciation	80.94	291.58	18.62	85.25	19.14	121.50
Interest on Loan	101.94	345.51	25.02	107.98	24.87	150.36
Return on Equity	94.39	340.94	23.33	106.52	22.50	144.17
Interest on Working Capital	14.18	47.25	3.68	15.94	3.24	20.42
O & M Expenses	141.17	447.73	38.70	163.65	30.96	196.38
<b>Total</b>	<b>432.62</b>	<b>1473.00</b>	<b>109.35</b>	<b>479.34</b>	<b>100.72</b>	<b>632.83</b>

### **DETERMINATION OF ANNUAL TRANSMISSION CHARGES FOR 2014-19**

39. The petitioner has claimed the transmission charges for Combined Asset for the 2014-19 tariff period as under:-

	(₹ in lakh)				
Combined Assets	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1455.34	1535.85	1552.31	1552.31	1552.31
Interest on Loan	1666.20	1633.97	1514.28	1373.19	1232.92
Return on equity	1748.93	1844.15	1863.01	1863.01	1863.01
Interest on Working Capital	223.19	230.18	232.05	232.74	233.57
O & M Expenses	2010.74	2077.48	2146.47	2217.72	2291.28
<b>Total</b>	<b>7104.40</b>	<b>7321.63</b>	<b>7308.12</b>	<b>7238.97</b>	<b>7173.09</b>



40. The details submitted by the petitioner in support of its claim for interest on working capital are given hereunder:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	301.61	311.62	321.97	332.66	343.69
O & M expenses	167.56	173.12	178.87	184.81	190.94
Receivables	1184.07	1220.27	1218.02	1206.50	1195.52
<b>Total</b>	<b>1653.24</b>	<b>1705.01</b>	<b>1718.86</b>	<b>1723.97</b>	<b>1730.15</b>
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest</b>	<b>223.19</b>	<b>230.18</b>	<b>232.05</b>	<b>232.74</b>	<b>233.57</b>

### **Capital Cost**

41. Clause (1) & (3) of Regulation 9 of the 2014 Tariff Regulations specify as follows:-

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

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

- (a) the capital cost admitted by the Commission prior to 1.4.2014 duly tried up by excluding liability, if any, as on 1.4.2014;
- (b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and
- (c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15.”

42. The petitioner has claimed capital cost of ₹8485.25 lakh, ₹725.87 lakh, ₹2274.72 lakh, ₹2050.59 lakh, ₹1776.68 lakh, ₹1599.71 lakh, ₹1128.62 lakh, ₹5987.23 lakh, ₹1870.74 lakh and ₹2530.86 lakh as on 31.3.2014 and additional capitalization of ₹639.00 lakh, ₹55.00 lakh, ₹172.00 lakh, ₹466.00 lakh, ₹321.00



lakh, ₹321.00 lakh, ₹84.00 lakh, ₹486.54 lakh, ₹438.11 lakh and ₹254.72 lakh for Assets-1, 2, 3, 4, 5, 6, 7, 8, 9 and 10, respectively for the 2014-19 tariff period.

43. The trued up capital cost of ₹8485.25 lakh, ₹724.95 lakh, ₹2274.72 lakh, ₹2050.59 lakh, ₹1776.68 lakh, ₹1595.70 lakh, ₹1128.62 lakh, ₹5987.23 lakh, ₹1870.74 lakh and ₹2530.86 lakh for Assets-1, 2, 3, 4, 5, 6, 7, 8, 9 and 10, respectively, as on 31.3.2014 is considered to work out tariff for 2014-19 tariff period.

#### **Additional Capital Expenditure**

44. The petitioner has proposed additional capitalization of ₹639.00 lakh, ₹55.00 lakh, ₹172.00 lakh, ₹466.00 lakh, ₹321.00 lakh, ₹321.00 lakh, ₹84.00 lakh, ₹486.54 lakh, ₹438.11 lakh and ₹254.72 lakh for Assets-1, 2, 3, 4, 5, 6, 7, 8, 9 and 10, respectively, towards balance and retention payments under Clause 1 of Regulation 14 of the 2014 Tariff Regulations.

45. Clause 1, sub-clause (i) of Regulation 14 of the 2014 Tariff Regulations provides as follows:

“(3) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:

.....

(i) Undischarged liabilities recognized to be payable at a future date;

46. The petitioner was directed, vide letter dated 8.2.2016, to submit the amount of balance and retention payment yet to be made along with the details of contract for which the payment has been retained. In response, the petitioner,





vide affidavit dated 15.3.2016, has submitted that the details of additional capital expenditure of ₹2596.36 lakh and ₹641.00 projected in 2014-15 and 2015-16 lakh, respectively.

47. The total capital cost of the transmission asset including additional capitalization incurred during the 2014-19 tariff period works out to ₹9124.25 lakh, ₹779.95 lakh, ₹2446.72 lakh, ₹2516.59 lakh, ₹2097.68 lakh, ₹1916.70 lakh, ₹1212.62 lakh, ₹6473.77 lakh, ₹2308.85 lakh and ₹2785.58 lakh for Assets-1, 2, 3, 4, 5, 6, 7, 8, 9 and 10, respectively, totalling to ₹31662.71 lakh for combined asset, which is within the approved apportioned cost of the asset. It is observed that the additional capitalization proposed is mainly towards balance and retention payments due to undischarged liabilities for works executed within cut-off date. Accordingly, the capital cost claimed by the petitioner is allowed in accordance with Clause 1, sub-clause(i) of Regulation 14 of the 2014 Tariff Regulations. The additional capitalisation for tariff period 2014-19 shall be finally approved after the detailed scrutiny of additional capitalisation while carrying out the true up for 2014-19 tariff.

48. The total capital cost of the transmission asset including additional capitalization projected to be incurred during 2014-19 is shown below:-

Particulars	Approved Apportioned Cost	Admitted capital cost as on 31.3.2014	Additional capitalization			Total capital cost including additional capitalization
			2014-15	2015-16	Total	
Asset-1	9220.68	8485.25	490.00	149.00	639.00	9124.25
Asset-2	1252.71	724.95	55.00	0.00	55.00	779.95
Asset-3	3067.95	2274.72	105.00	67.00	172.00	2446.72



Asset-4	3247.15	2050.59	365.00	101.00	466.00	2516.59
Asset-5	3509.73	1776.68	159.00	162.00	321.00	2097.68
Asset-6	3509.73	1595.70	159.00	162.00	321.00	1916.70
Asset-7	1762.59	1128.62	84.00	0.00	84.00	1212.62
Asset-8	8512.89	5987.23	486.54	0.00	486.54	6473.77
Asset-9	3410.00	1870.74	438.11	0.00	438.11	2308.85
Asset-10	3365.11	2530.86	254.72	0.00	254.72	2785.58
Combined Asset	40858.54	28425.34	2596.36	641.00	3237.37	31662.71

### **Debt:Equity Ratio**

49. Clause 3 of Regulation 19 of the 2014 Tariff Regulations specifies as under:-

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

50. The petitioner has considered debt:equity ratio as 70:30 as on 31.3.2014. The admitted debt:equity ratio of 70:30 after true-up for the tariff period ending 31.3.2014 has been considered as opening debt:equity ratio as on 1.4.2014. The details of the debt:equity as on 1.4.2014 considered for the purpose of tariff for the 2014-19 tariff period is as follows:-

(₹ in lakh)		
Particulars	Amount	(%)
Debt	19897.75	70.00
Equity	8527.59	30.00
<b>Total</b>	<b>28425.34</b>	<b>100.00</b>

51. For additional capitalization, the petitioner has proposed normative debt:equity ratio of 70:30 and the same has been considered. The details of the debt:equity including additional capitalization as on 31.3.2019 is as follows:-

(₹ in lakh)



Funding	Amount	(%)
Debt	22163.90	70.00
Equity	9498.80	30.00
<b>Total</b>	<b>31662.71</b>	<b>100.00</b>

### **Interest on Loan (“IOL”)**

52. Clause (5) & (6) of Regulation 26 of the 2014 Tariff Regulations are reproduced as under:-

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

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

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

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

53. We have considered the weighted average rate of IOL on the basis of rate prevailing as on 1.4.2014. The IOL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of weighted average rate of interest are placed at **Annexure-II** and the IOL has been worked out and allowed as follows:-

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross loan opening	19897.75	21715.20	22163.90	22163.90	22163.90
Cumulative Repayment up to previous year	1769.85	3224.93	4760.51	6312.57	7864.62



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Net Loan-Opening	18127.89	18490.27	17403.38	15851.33	14299.28
Additions during the year	1817.45	448.70	0.00	0.00	0.00
Repayment during the year	1455.07	1535.59	1552.05	1552.05	1552.05
Net Loan-Closing	18490.27	17403.38	15851.33	14299.28	12747.23
Average Loan	18309.08	17946.83	16627.36	15075.31	13523.25
Rate of Interest (%)	9.0989	9.1031	9.1058	9.1075	9.1157
<b>Interest</b>	<b>1665.93</b>	<b>1633.73</b>	<b>1514.06</b>	<b>1372.99</b>	<b>1232.74</b>

### **Return on Equity("ROE")**

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

**"24. Return on Equity:** (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.  
(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system"

**"25. Tax on Return on Equity:**

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

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

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

55. The petitioner has submitted ROE at the rate of 19.610% after grossing up the ROE of 15.50% with MAT rate as per the above regulation. The petitioner has further submitted that the grossed up ROE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted for any



refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial year. Any under-recovery or over-recovery of grossed up ROE after truing up shall be recovered or refunded to the beneficiaries on year to year basis.

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

57. We have considered the submissions made by the petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the ROE allowed is given below:-

<b>(₹ in lakh)</b>					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	8527.59	9306.50	9498.80	9498.80	9498.80



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Additional Capitalization	778.91	192.30	0.00	0.00	0.00
Closing Equity	9306.50	9498.80	9498.80	9498.80	9498.80
Average Equity	8917.04	9402.65	9498.80	9498.80	9498.80
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT rate for the year (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610	19.610
<b>Return on Equity (Pre Tax)</b>	<b>1748.63</b>	<b>1843.86</b>	<b>1862.71</b>	<b>1862.71</b>	<b>1862.71</b>

### **Depreciation**

58. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations provide as follows:-

**"27. Depreciation:**

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

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

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

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

59. The petitioner has computed depreciation considering capital expenditure of ₹28425.34lakh as on 31.3.2014 with additional capitalization of ₹2596.36 lakh



and ₹641.00 lakh for 2014-15 and 2015-16, respectively, during the 2014-19 tariff period. The effective date of commercial operation (December, 2012) and weighted average useful life of 28 years has been considered in accordance to Regulation 26 of the 2014 Tariff Regulations considering actual COD and capital cost of all the elements of the transmission system for working out the depreciation for Combined Asset.

60. We have considered the submissions of the petitioner. The depreciation is allowed considering capital expenditure of ₹28425.34 lakh as on 31.3.2014 under Regulation 27 of the 2014 Tariff Regulations. The details of the depreciation allowed are given hereunder:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross block	28425.34	31021.71	31662.71	31662.71	31662.71
Additional Capitalization	2596.36	641.00	0.00	0.00	0.00
Gross block at the end of the year	31021.71	31662.71	31662.71	31662.71	31662.71
Average gross block	29723.52	31342.21	31662.71	31662.71	31662.71
Rate of Depreciation (%)	4.90%	4.90%	4.90%	4.90%	4.90%
Depreciable Value	25040.70	26470.80	26754.75	26754.75	26754.75
Elapsed Life of the assets at beginning of the year	2	3	4	5	6
Weighted Balance Useful life of the assets	26	25	24	23	22
Remaining Depreciable Value	23270.85	23245.87	21994.23	20442.18	18890.13
<b>Depreciation</b>	<b>1455.07</b>	<b>1535.59</b>	<b>1552.05</b>	<b>1552.05</b>	<b>1552.05</b>

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



61. The petitioner has computed normative O&M Expenses as per sub-clause (a) of clause (3) of Regulation 29 of the 2014 Tariff Regulations. Accordingly, the petitioner's entitlement to O&M Expenses has been worked out as given hereunder:-

		(₹ in lakh)				
Particulars		2014-15	2015-16	2016-17	2017-18	2018-19
Actual	Single Circuit (Twin & Triple Conductor) (km)	0.693	0.693	0.693	0.693	0.693
	Double Circuit (Twin & Triple Conductor) (km)	80.26	80.26	80.26	80.26	80.26
	400 kV Bays (Nos.)	21	21	21	21	21
	220 kV Bays (Nos.)	12	12	12	12	12
	132 kV & below Bays (No.)	6	6	6	6	6
Norms as per Regulation	Single Circuit (Twin & Triple Conductor) (₹lakh/km)	0.404	0.418	0.432	0.446	0.461
	Double Circuit (Twin & Triple Conductor) (₹lakh/km)	0.707	0.731	0.755	0.78	0.806
	400 kV Bays (₹lakh/bay)	60.30	62.30	64.37	66.51	68.71
	220 kV Bays (₹lakh/bay)	42.21	43.61	45.06	46.55	48.10
	132 kV & below Bays ((₹lakh/bay)	30.15	31.15	32.18	33.25	34.36
<b>Total (₹ in lakh)</b>		<b>2010.74</b>	<b>2077.48</b>	<b>2146.47</b>	<b>2217.72</b>	<b>2291.28</b>

62. The petitioner has submitted that norms for O&M Expenses for the tariff period 2014-19 have been arrived on the basis of normalized actual O&M Expenses during the period 2008-13. The petitioner has further submitted that the wage revision of the employees of the petitioner is due during the 2014-19 tariff period and actual impact of wage hike, which will be effective at a future date, has not been factored in fixation of the normative O&M rate specified for





the tariff period 2014-19. The petitioner has prayed to be allowed to approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase.

63. We have considered the submissions made by the petitioner. The O&M Expenses have been worked out as per the norms of O&M Expenses specified in the 2014 Tariff Regulations. As regards impact of wage revision, we would like to clarify that any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.

64. The details of O&M Expenses allowed for the instant assets are given hereunder:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>O&amp;M Expenses Allowed</b>	<b>2010.74</b>	<b>2077.48</b>	<b>2146.47</b>	<b>2217.72</b>	<b>2291.28</b>

### **Interest on Working Capital (“IWC”)**

65. Clause 1 (c) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specify as follows:-

#### **“28. Interest on Working Capital**

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

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

(iii) Operation and maintenance expenses for one month”

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



66. The petitioner has submitted that it has computed Interest on working capital for the tariff period 2014-19 considering the SBI Base Rate as on 1.4.2014 plus 350 basis points. The rate of interest on working capital considered is 13.50%.

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

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	301.61	311.62	321.97	332.66	343.69
O & M Expenses	167.56	173.12	178.87	184.81	190.94
Receivables	1183.93	1220.14	1217.89	1206.37	1195.39
Total	1653.10	1704.88	1718.73	1723.83	1730.02
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest</b>	<b>223.17</b>	<b>230.16</b>	<b>232.03</b>	<b>232.72</b>	<b>233.55</b>

### Annual Transmission Charges

68. The detailed computation of the various components of the annual fixed charges for the transmission asset for the tariff period 2014-19 is summarised below:-

(₹ in lakh)					
Combined Asset					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Gross Block</b>					
Opening Gross Block	28425.34	31021.71	31662.71	31662.71	31662.71
Additional Capitalisation	2596.36	641.00	0.00	0.00	0.00
Closing Gross Block	31021.71	31662.71	31662.71	31662.71	31662.71
Average Gross Block	29723.52	31342.21	31662.71	31662.71	31662.71



Combined Asset					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Depreciation</b>					
Rate of Depreciation	4.895	4.899	4.902	4.902	4.902
Depreciable Value	25040.70	26470.80	26754.75	26754.75	26754.75
Elapsed Life of the assets at beginning of the year	2	3	4	5	6
Weighted Balance Useful life of the assets	26	25	24	23	22
Remaining Depreciable Value	23270.85	23245.87	21994.23	20442.18	18890.13
Depreciation	1455.07	1535.59	1552.05	1552.05	1552.05
<b>Interest on Loan</b>					
Gross Normative Loan	19897.75	21715.20	22163.90	22163.90	22163.90
Cumulative Repayment upto Previous Year	1769.85	3224.93	4760.51	6312.57	7864.62
Net Loan-Opening	18127.89	18490.27	17403.38	15851.33	14299.28
Additions	1817.45	448.70	0.00	0.00	0.00
Repayment during the year	1455.07	1535.59	1552.05	1552.05	1552.05
Net Loan-Closing	18490.27	17403.38	15851.33	14299.28	12747.23
Average Loan	18309.08	17946.83	16627.36	15075.31	13523.25
Weighted Average Rate of Interest on Loan (%)	9.0989	9.1031	9.1058	9.1075	9.1157
Interest	1665.93	1633.73	1514.06	1372.99	1232.74
<b>Return on Equity</b>					
Opening Equity	8527.59	9306.50	9498.80	9498.80	9498.80
Additions	778.91	192.30	0.00	0.00	0.00
Closing Equity	9306.50	9498.80	9498.80	9498.80	9498.80
Average Equity	8917.04	9402.65	9498.80	9498.80	9498.80
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for the year 2013-14 (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity (Pre Tax)	1748.63	1843.86	1862.71	1862.71	1862.71



Combined Asset					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Interest on Working Capital</b>					
Maintenance Spares	301.61	311.62	321.97	332.66	343.69
O & M expenses	167.56	173.12	178.87	184.81	190.94
Receivables	1183.93	1220.14	1217.89	1206.37	1195.39
Total	1653.10	1704.88	1718.73	1723.83	1730.02
Interest	223.17	230.16	232.03	232.72	233.55
<b>Annual Transmission Charges</b>					
Depreciation	1455.07	1535.59	1552.05	1552.05	1552.05
Interest on Loan	1665.93	1633.73	1514.06	1372.99	1232.74
Return on Equity	1748.63	1843.86	1862.71	1862.71	1862.71
Interest on Working Capital	223.17	230.16	232.03	232.72	233.55
O & M Expenses	2010.74	2077.48	2146.47	2217.72	2291.28
<b>Total</b>	<b>7103.55</b>	<b>7320.81</b>	<b>7307.32</b>	<b>7238.19</b>	<b>7172.34</b>

### **Filing Fee and Publication Expenses**

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

### **Licence Fee and RLDC Fees and Charges**



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

### **Service Tax**

71. The petitioner has sought to recover Service Tax on transmission charges separately from the respondents, if at any time service tax on transmission is withdrawn from negative list in future. We are of the view that the petitioner's prayer is premature.

### **Sharing of Transmission Charges**

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

73. This order disposes of Petition No. 30/TT/2015.

Sd/-  
**(Dr. M. K. Iyer)**  
**Member**

Sd/-  
**(A.S. Bakshi)**  
**Member**



**ANNEXURE-I****DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO 2009-14**

(₹ in lakh)

2009-14 Particulars	Asset-3				Asset-4			
	Intere st Rate (%)	Loan deployed as on COD (1.11.201 2)	Additions during the tariff period	Total	Intere st Rate (%)	Loan deployed as on COD (1.2.2013)	Additions during the tariff period	Total
BOND XXXI-1.loan1-	8.90	0.00	0.00	0.00	8.90	40.00	0.00	40.00
BOND XXXIII-11.loan2-	8.64	0.00	0.00	0.00	8.64	40.00	0.00	40.00
BOND-XXXIV-12.loan3-	8.84	0.00	0.00	0.00	8.84	40.00	0.00	40.00
BOND-XXXIV-63.DOCO DRAWL ON 01-NOV- 2012-	8.84	200.00	0.00	200.00	8.84	0.00	0.00	0.00
BOND-XXXV-13.loan4-	9.64	0.00	0.00	0.00	9.64	40.00	0.00	40.00
BOND XXXVI-14.loan5-	9.35	0.00	0.00	0.00	9.35	40.00	0.00	40.00
BOND XXXVI-64.DOCO DRAWL ON 01-NOV- 2012-	9.35	270.00	0.00	270.00	9.35	0.00	0.00	0.00
BOND XXXVII-15.loan6-	9.25	0.00	0.00	0.00	9.25	81.00	0.00	81.00
BOND XXXVII-24.loan5-	9.25	0.00	0.00	0.00	9.25	0.00	0.00	0.00
BOND XXXVIII-65.DOCO DRAWL ON 01-NOV- 2012-	9.25	257.22	0.00	257.22	9.25	0.00	0.00	0.00
BOND XXXIX-16.loan7-	9.40	0.00	0.00	0.00	9.40	540.00	0.00	540.00
BOND XL-17.loan8-	9.30	0.00	0.00	0.00	9.30	422.92	0.00	422.92
BOND XL-DOCO XL-	9.30	332.33	0.00	332.33	9.30	0.00	0.00	0.00
BOND - XLI-18.ADDCAP FOR 2012-2013 loan9-	8.85	0.00	0.00	0.00	8.85	0.00	120.39	120.39
BOND - XLI-67.ADDCAP FOR 2012-2013 Addcap loan1-	8.85	0.00	393.15	393.15	8.85	0.00	0.00	0.00
BOND - XLIV-19.ADDCAP FOR 2013-2014 loan10-	8.70	0.00	0.00	0.00	8.70	0.00	71.10	71.10
BOND - XLIV-68.ADDCAP FOR 2013-2014 Addcap loan2-	8.70	0.00	139.61	139.61	8.70	0.00	0.00	0.00
<b>Total</b>		<b>1059.55</b>	<b>532.76</b>	<b>1592.31</b>		<b>1243.92</b>	<b>191.49</b>	<b>1435.41</b>



**ANNEXURE-I**

**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO 2009-14**

(₹ in lakh)

2009-14 Particulars	Asset-1				Asset-2				Asset-3				Asset-4			
	Interest Rate (%)	Loan deployed as on COD (1.9.2012)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.10.2012)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.11.2012)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.2.2013)	Additions during the tariff period	Total
BOND XXXI-1.loan1-	8.90	0.00	0.00	0.00	8.90	0.00	0.00	0.00	8.90	0.00	0.00	0.00	8.90	40.00	0.00	40.00
BOND XXXI-46.loan1-	8.90	531.00	0.00	531.00	8.90	0.00	0.00	0.00	8.90	0.00	0.00	0.00	8.90	0.00	0.00	0.00
BOND XXXIII-11.loan2-	8.64	0.00	0.00	0.00	8.64	0.00	0.00	0.00	8.64	0.00	0.00	0.00	8.64	40.00	0.00	40.00
BOND XXXIII-47.loan2-	8.64	313.00	0.00	313.00	8.64	0.00	0.00	0.00	8.64	0.00	0.00	0.00	8.64	0.00	0.00	0.00
BOND-XXXIV-12.loan3-	8.84	0.00	0.00	0.00	8.84	0.00	0.00	0.00	8.84	0.00	0.00	0.00	8.84	40.00	0.00	40.00
BOND-XXXIV-48.loan3-	8.84	652.00	0.00	652.00	8.84	0.00	0.00	0.00	8.84	0.00	0.00	0.00	8.84	0.00	0.00	0.00
BOND-XXXIV-56.DOCO DRAWL ON 01-OCT-2012-	8.84	0.00	0.00	0.00	8.84	100.00	0.00	100.00	8.84	0.00	0.00	0.00	8.84	0.00	0.00	0.00
BOND-XXXIV-63.DOCO DRAWL ON 01-NOV-2012-	8.84	0.00	0.00	0.00	8.84	0.00	0.00	0.00	8.84	200.00	0.00	200.00	8.84	0.00	0.00	0.00
BOND-XXXV-13.loan4-	9.64	0.00	0.00	0.00	9.64	0.00	0.00	0.00	9.64	0.00	0.00	0.00	9.64	40.00	0.00	40.00
BOND-XXXV-49.loan4-	9.64	7.00	0.00	7.00	9.64	0.00	0.00	0.00	9.64	0.00	0.00	0.00	9.64	0.00	0.00	0.00
BOND XXXVI-14.loan5-	9.35	0.00	0.00	0.00	9.35	0.00	0.00	0.00	9.35	0.00	0.00	0.00	9.35	40.00	0.00	40.00
BOND XXXVI-50.loan5-	9.35	488.00	0.00	488.00	9.35	0.00	0.00	0.00	9.35	0.00	0.00	0.00	9.35	0.00	0.00	0.00
BOND XXXVI-57.DOCO DRAWL ON 01-OCT-2012-	9.35	0.00	0.00	0.00	9.35	100.00	0.00	100.00	9.35	0.00	0.00	0.00	9.35	0.00	0.00	0.00
BOND XXXVI-64.DOCO DRAWL ON 01-NOV-	9.35	0.00	0.00	0.00	9.35	0.00	0.00	0.00	9.35	270.00	0.00	270.00	9.35	0.00	0.00	0.00



2009-14	Asset-1				Asset-2				Asset-3				Asset-4				
	Particulars	Interest Rate (%)	Loan deployed as on COD (1.9.2012)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.10.2012)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.11.2012)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.2.2013)	Additions during the tariff period	Total
2012-																	
BOND XXXVII-15.loan6-	9.25	0.00	0.00	0.00	9.25	0.00	0.00	0.00	9.25	0.00	0.00	0.00	9.25	81.00	0.00	81.00	
BOND XXXVII-51.loan6-	9.25	1138.00	0.00	1138.00	9.25	0.00	0.00	0.00	9.25	0.00	0.00	0.00	9.25	0.00	0.00	0.00	
BOND XXXVII-58.DOCO DRAWL ON 01-OCT-2012-	9.25	0.00	0.00	0.00	9.25	1.00	0.00	1.00	9.25	0.00	0.00	0.00	9.25	0.00	0.00	0.00	
BOND XXXVIII-52.loan7-	9.25	253.08	0.00	253.08	9.25	0.00	0.00	0.00	9.25	0.00	0.00	0.00	9.25	0.00	0.00	0.00	
BOND XXXVIII-59.DOCO DRAWL ON 01-OCT-2012-	9.25	0.00	0.00	0.00	9.25	158.62	0.00	158.62	9.25	0.00	0.00	0.00	9.25	0.00	0.00	0.00	
BOND XXXVIII-65.DOCO DRAWL ON 01-NOV-2012-	9.25	0.00	0.00	0.00	9.25	0.00	0.00	0.00	9.25	257.22	0.00	257.22	9.25	0.00	0.00	0.00	
BOND XXXIX-16.loan7-	9.40	0.00	0.00	0.00	9.40	0.00	0.00	0.00	9.40	0.00	0.00	0.00	9.40	540.00	0.00	540.00	
BOND XL-17.loan8-	9.30	0.00	0.00	0.00	9.30	0.00	0.00	0.00	9.30	0.00	0.00	0.00	9.30	422.92	0.00	422.92	
BOND XL-53.loan8-	9.30	1471.32	0.00	1471.32	9.30	0.00	0.00	0.00	9.30	0.00	0.00	0.00	9.30	0.00	0.00	0.00	
BOND XL-DOCO-	9.30	0.00	0.00	0.00	9.30	62.62	0.00	62.62	9.30	0.00	0.00	0.00	9.30	0.00	0.00	0.00	
BOND XL-DOCO XL-	9.30	0.00	0.00	0.00	9.30	0.00	0.00	0.00	9.30	332.33	0.00	332.33	9.30	0.00	0.00	0.00	
BOND - XLI-18.ADDCAP FOR 2012-2013 loan9-	8.85	0.00	0.00	0.00	8.85	0.00	0.00	0.00	8.85	0.00	0.00	0.00	8.85	0.00	120.39	120.39	
BOND - XLI-54.ADDCAP FOR 2012-2013 loan9-	8.85	0.00	666.89	666.89	8.85	0.00	0.00	0.00	8.85	0.00	0.00	0.00	8.85	0.00	0.00	0.00	
BOND - XLI-61.ADDCAP FOR 2012-	8.85	0.00	0.00	0.00	8.85	0.00	35.11	35.11	8.85	0.00	0.00	0.00	8.85	0.00	0.00	0.00	





2009-14	Asset-1				Asset-2				Asset-3				Asset-4				
	Particulars	Interest Rate (%)	Loan deployed as on COD (1.9.2012)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.10.2012)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.11.2012)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.2.2013)	Additions during the tariff period	Total
2013 Addcap loan1-																	
BOND - XLI-67.ADDCAP FOR 2012-2013 Addcap loan1-	8.85	0.00	0.00	0.00	8.85	0.00	0.00	0.00	8.85	0.00	393.15	393.15	8.85	0.00	0.00	0.00	
BOND - XLIV-19.ADDCAP FOR 2013-2014 loan10-	8.70	0.00	0.00	0.00	8.70	0.00	0.00	0.00	8.70	0.00	0.00	0.00	8.70	0.00	71.10	71.10	
BOND - XLIV-55.ADDCAP FOR 2013-2014 loan10-	8.70	0.00	419.38	419.38	8.70	0.00	0.00	0.00	8.70	0.00	0.00	0.00	8.70	0.00	0.00	0.00	
BOND - XLIV-62.ADDCAP FOR 2013-2014 Addcap loan2-	8.70	0.00	0.00	0.00	8.70	0.00	50.76	50.76	8.70	0.00	0.00	0.00	8.70	0.00	0.00	0.00	
BOND - XLIV-68.ADDCAP FOR 2013-2014 Addcap loan2-	8.70	0.00	0.00	0.00	8.70	0.00	0.00	0.00	8.70	0.00	139.61	139.61	8.70	0.00	0.00	0.00	
<b>Total</b>		<b>4853.40</b>	<b>1086.27</b>	<b>5939.67</b>		<b>422.24</b>	<b>85.87</b>	<b>508.11</b>		<b>1059.55</b>	<b>532.76</b>	<b>1592.31</b>		<b>1243.92</b>	<b>191.49</b>	<b>1435.41</b>	

(₹ in lakh)

2009-14	Asset-5				Asset-6				Asset-7			
	Particulars	Interest Rate (%)	Loan deployed as on COD (1.2.2013)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.3.2013)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.2.2013)	Additions during the tariff period
BOND XXXI-10.loan1-	8.90	40.00	0.00	40.00	8.90	0.00	0.00	0.00	8.90	0.00	0.00	0.00
BOND XXXI-20.loan1-	8.90	0.00	0.00	0.00	8.90	0.00	0.00	0.00	8.90	15.00	0.00	15.00
BOND XXXI-29.loan1-	8.90	0.00	0.00	0.00	8.90	40.00	0.00	40.00	8.90	0.00	0.00	0.00



2009-14	Asset-5				Asset-6				Asset-7			
	Particulars	Interest Rate (%)	Loan deployed as on COD (1.2.2013)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.3.2013)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.2.2013)	Additions during the tariff period
BOND XXXIII-2.loan2-	8.64	40.00	0.00	40.00	8.64	0.00	0.00	0.00	8.64	0.00	0.00	0.00
BOND XXXIII-21.loan2-	8.64	0.00	0.00	0.00	8.64	0.00	0.00	0.00	8.64	10.00	0.00	10.00
BOND XXXIII-30.loan2-	8.64	0.00	0.00	0.00	8.64	40.00	0.00	40.00	8.64	0.00	0.00	0.00
BOND-XXXIV-22.loan3-	8.84	0.00	0.00	0.00	8.84	0.00	0.00	0.00	8.84	30.00	0.00	30.00
BOND-XXXIV-3.loan3-	8.84	50.00	0.00	50.00	8.84	0.00	0.00	0.00	8.84	0.00	0.00	0.00
BOND-XXXIV-31.loan3-	8.84	0.00	0.00	0.00	8.84	50.00	0.00	50.00	8.84	0.00	0.00	0.00
BOND-XXXV-23.loan4-	9.64	0.00	0.00	0.00	9.64	0.00	0.00	0.00	9.64	10.00	0.00	10.00
BOND XXXVI-32.loan4-	9.35	40.00	0.00	40.00	9.35	0.00	0.00	0.00	9.35	0.00	0.00	0.00
BOND XXXVI-4.loan4-	9.35	0.00	0.00	0.00	9.35	40.00	0.00	40.00	9.35	0.00	0.00	0.00
BOND XXXVII-24.loan5-	9.25	10.00	0.00	10.00	9.25	0.00	0.00	0.00	9.25	0.00	0.00	0.00
BOND XXXVII-33.loan5-	9.25	0.00	0.00	0.00	9.25	10.00	0.00	10.00	9.25	0.00	0.00	0.00
BOND XXXVII-5.loan5-	9.25	0.00	0.00	0.00	9.25	0.00	0.00	0.00	9.25	10.00	0.00	10.00
BOND XXXIX-25.loan6-	9.40	0.00	0.00	0.00	9.40	0.00	0.00	0.00	9.40	273.00	0.00	273.00
BOND XXXIX-34.loan6-	9.40	482.00	0.00	482.00	9.40	0.00	0.00	0.00	9.40	0.00	0.00	0.00
BOND XXXIX-6.loan6-	9.40	0.00	0.00	0.00	9.40	482.00	0.00	482.00	9.40	0.00	0.00	0.00
BOND XL-26.loan7-	9.30	0.00	0.00	0.00	9.30	0.00	0.00	0.00	9.30	315.17	0.00	315.17
BOND XL-35.loan7-	9.30	0.00	0.00	0.00	9.30	341.16	0.00	341.16	9.30	0.00	0.00	0.00
BOND XL-7.loan7-	9.30	340.94	0.00	340.94	9.30	0.00	0.00	0.00	9.30	0.00	0.00	0.00
BOND - XLI-27.ADDCAP FOR 2012-2013 loan8-	8.85	0.00	0.00	0.00	8.85	0.00	0.00	0.00	8.85	0.00	68.05	68.05
BOND - XLI-8.ADDCAP FOR 2012-2013 loan8-	8.85	0.00	124.10	124.10	8.85	0.00	0.00	0.00	8.85	0.00	0.00	0.00
BOND - XLIV-28.ADDCAP FOR 2013-2014 loan9-	8.70	0.00	0.00	0.00	8.70	0.00	0.00	0.00	8.70	0.00	58.80	58.80



2009-14	Asset-5				Asset-6				Asset-7			
	Particulars	Interest Rate (%)	Loan deployed as on COD (1.2.2013)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.3.2013)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.2.2013)	Additions during the tariff period
BOND - XLIV-36.ADDCAP FOR 2013-2014 loan8-	8.70	0.00	0.00	0.00	8.70	0.00	116.63	116.63	8.70	0.00	0.00	0.00
BOND - XLIV-9.ADDCAP FOR 2013-2014 loan9-	8.70	0.00	116.63	116.63	8.70	0.00	0.00	0.00	8.70	0.00	0.00	0.00
<b>Total</b>		<b>1002.94</b>	<b>240.73</b>	<b>1243.67</b>		<b>1003.16</b>	<b>116.63</b>	<b>1119.79</b>		<b>663.17</b>	<b>126.85</b>	<b>790.02</b>

(₹ in lakh)

2009-14	Asset-8				Asset-9				Asset-10			
	Particulars	Interest Rate (%)	Loan deployed as on COD (1.12.2012)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.1.2013)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.2.2013)	Additions during the tariff period
BOND XXXI-37.DOCO DRAWL ON 01-JAN-2013-	8.90	0.00	0.00	0.00	8.90	20.00	0.00	20.00	8.90	0.00	0.00	0.00
BOND XXXI-69.loan1-	8.90	68.00	0.00	68.00	8.90	0.00	0.00	0.00	8.90	0.00	0.00	0.00
BOND XXXI-79.loan1-	8.90	0.00	0.00	0.00	8.90	0.00	0.00	0.00	8.90	37.00	0.00	37.00
BOND XXXIII-38.DOCO DRAWL ON 01-JAN-2013-	8.64	0.00	0.00	0.00	8.64	24.00	0.00	24.00	8.64	0.00	0.00	0.00
BOND XXXIII-70.loan2-	8.64	72.00	0.00	72.00	8.64	0.00	0.00	0.00	8.64	0.00	0.00	0.00
BOND XXXIII-80.loan2-	8.64	0.00	0.00	0.00	8.64	0.00	0.00	0.00	8.64	37.00	0.00	37.00
BOND-XXXIV-39.DOCO DRAWL ON 01-JAN-2013-	8.84	0.00	0.00	0.00	8.84	217.00	0.00	217.00	8.84	0.00	0.00	0.00
BOND-XXXIV-71.loan3-	8.84	798.00	0.00	798.00	8.84	0.00	0.00	0.00	8.84	0.00	0.00	0.00
BOND-XXXIV-81.loan3-	8.84	0.00	0.00	0.00	8.84	0.00	0.00	0.00	8.84	429.00	0.00	429.00
BOND XXXVI-40.DOCO DRAWL ON 01-JAN-2013-	9.35	0.00	0.00	0.00	9.35	20.00	0.00	20.00	9.35	0.00	0.00	0.00



2009-14	Asset-8				Asset-9				Asset-10			
	Particulars	Interest Rate (%)	Loan deployed as on COD (1.12.2012)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.1.2013)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.2.2013)	Additions during the tariff period
BOND XXXVI-72.loan4-	9.35	85.00	0.00	85.00	9.35	0.00	0.00	0.00	9.35	0.00	0.00	0.00
BOND XXXVI-82.loan4-	9.35	0.00	0.00	0.00	9.35	0.00	0.00	0.00	9.35	45.00	0.00	45.00
BOND XXXIX-41.DOCO DRAWL ON 01-JAN-2013-	9.40	0.00	0.00	0.00	9.40	56.00	0.00	56.00	9.40	0.00	0.00	0.00
BOND XXXIX-73.loan5-	9.40	218.00	0.00	218.00	9.40	0.00	0.00	0.00	9.40	0.00	0.00	0.00
BOND XXXIX-83.loan5-	9.40	0.00	0.00	0.00	9.40	0.00	0.00	0.00	9.40	113.00	0.00	113.00
SBI (21.03.2012)-42.DOCO DRAWL ON 01-JAN-2013 DRAWL ON 01-JAN-2013-	0.00	0.00	0.00	0.00	0.00	70.00	0.00	70.00	0.00	0.00	0.00	0.00
SBI (21.03.2012)-74.loan6-	10.47%	303.00	0.00	303.00	10.47% for 2012-13 & 10.29% for 2013-14	0.00	0.00	0.00	10.47% for 2012-13 & 10.29% for 2013-14	0.00	0.00	0.00
SBI (21.03.2012)-84.loan6-		0.00	0.00	0.00		0.00	0.00	0.00		172.00	0.00	172.00
BOND XL-75.loan7-	9.30	300.00	0.00	300.00	9.30	0.00	0.00	0.00	9.30	0.00	0.00	0.00
BOND XL-85.loan7-	9.30	0.00	0.00	0.00	9.30	0.00	0.00	0.00	9.30	610.49	0.00	610.49
BOND - XLI-43.Loan7-	8.85	0.00	0.00	0.00	8.85	614.68	0.00	614.68	8.85	0.00	0.00	0.00
BOND - XLI-44.ADDCAP FOR 2012-2013 Loan8-	8.85	0.00	0.00	0.00	8.85	0.00	203.74	203.74	8.85	0.00	0.00	0.00
BOND - XLI-76.loan8-	8.85	1053.44	0.00	1053.44	8.85	0.00	0.00	0.00	8.85	0.00	0.00	0.00
BOND - XLI-77.ADDCAP FOR 2012-2013 loan9-	8.85	0.00	1024.91	1024.91	8.85	0.00	0.00	0.00	8.85	0.00	0.00	0.00
BOND - XLI-86.loan8-	8.85	0.00	0.00	0.00	8.85	0.00	0.00	0.00	8.85	148.66	0.00	148.66
BOND - XLI-87.ADDCAP FOR 2012-2013 loan9-	8.85	0.00	0.00	0.00	8.85	0.00	0.00	0.00	8.85	0.00	67.14	67.14
BOND - XLIV-45.ADDCAP FOR 2013-2014 Loan9-	8.70	0.00	0.00	0.00	8.70	0.00	84.10	84.10	8.70	0.00	0.00	0.00



2009-14	Asset-8				Asset-9				Asset-10			
Particulars	Interest Rate (%)	Loan deployed as on COD (1.12.2012)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.1.2013)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.2.2013)	Additions during the tariff period	Total
BOND - XLIV-78.ADDCAP FOR 2013-2014 loan10-	8.70	0.00	268.72	268.72	8.70	0.00	0.00	0.00	8.70	0.00	0.00	0.00
BOND - XLIV-88.ADDCAP FOR 2013-2014 loan10-	8.70	0.00	0.00	0.00	8.70	0.00	0.00	0.00	8.70	0.00	112.31	112.31
<b>Total</b>		<b>2897.44</b>	<b>1293.63</b>	<b>4191.07</b>		<b>1021.68</b>	<b>287.84</b>	<b>1309.52</b>		<b>1592.15</b>	<b>179.45</b>	<b>1771.60</b>

### CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN FOR TARIFF PERIOD 2009-14

(₹ in lakh)

2009-14	Asset-1		Asset-2		Asset-3		Asset-4		Asset-5	
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
Gross Opening Loan	4853.40	5520.29	422.24	457.35	1059.55	1452.70	1243.92	1364.31	1002.94	1127.04
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Loans Opening	4853.40	5520.29	422.24	457.35	1059.55	1452.70	1243.92	1364.31	1002.94	1127.04
Add: Drawl(s) during the year	666.89	419.38	35.11	50.76	393.15	139.61	120.39	71.10	124.10	116.63
Less: Repayment(s) of Loan during the year	0.00	44.25	0.00	0.00	0.00	0.00	0.00	3.33	0.00	3.33
Net Closing Loan	5520.29	5895.42	457.35	508.11	1452.70	1592.31	1364.31	1432.08	1127.04	1240.34
Average Net Loan	5186.85	5707.86	439.80	482.73	1256.13	1522.51	1304.12	1398.20	1064.99	1183.69
Interest on Loan	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Rate of Interest on Loan (%)	473.26	519.04	40.33	44.09	115.02	138.49	121.06	129.33	98.61	109.02



(₹ in lakh)

2009-14	Asset-6		Asset-7		Asset-8		Asset-9		Asset-10	
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
Gross Opening Loan	1003.16	1003.16	663.17	731.22	2897.44	3922.35	1021.68	1225.42	1592.15	1659.29
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Loans Opening	1003.16	1003.16	663.17	731.22	2897.44	3922.35	1021.68	1225.42	1592.15	1659.29
Add: Drawl(s) during the year	0.00	116.63	68.05	58.80	1024.91	268.72	203.74	84.10	67.14	112.31
Less: Repayment(s) of Loan during the year	0.00	3.33	0.00	1.25	0.00	5.67	0.00	1.67	0.00	3.08
Net Closing Loan	1003.16	1116.46	731.22	788.77	3922.35	4185.40	1225.42	1307.85	1659.29	1768.52
Average Net Loan	1003.16	1059.81	697.20	760.00	3409.90	4053.88	1123.55	1266.64	1625.72	1713.91
Interest on Loan	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Rate of Interest on Loan (%)	93.14	98.06	64.72	70.24	309.49	365.71	100.91	113.39	150.12	157.56



**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2014-19)**

(₹ in lakh)

2014-19 Particulars	Combined Asset			
	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND XXXI-1.loan1-	8.90	40.00	0.00	40.00
BOND XXXI-10.loan1-	8.90	40.00	0.00	40.00
BOND XXXI-20.loan1-	8.90	15.00	0.00	15.00
BOND XXXI-29.loan1-	8.90	40.00	0.00	40.00
BOND XXXI-37.DOCO DRAWL ON 01-JAN-2013-	8.90	20.00	0.00	20.00
BOND XXXI-46.loan1-	8.90	531.00	0.00	531.00
BOND XXXI-69.loan1-	8.90	68.00	0.00	68.00
BOND XXXI-79.loan1-	8.90	37.00	0.00	37.00
BOND XXXIII-11.loan2-	8.64	40.00	0.00	40.00
BOND XXXIII-2.loan2-	8.64	40.00	0.00	40.00
BOND XXXIII-21.loan2-	8.64	10.00	0.00	10.00
BOND XXXIII-30.loan2-	8.64	40.00	0.00	40.00
BOND XXXIII-38.DOCO DRAWL ON 01-JAN-2013-	8.64	24.00	0.00	24.00
BOND XXXIII-47.loan2-	8.64	313.00	0.00	313.00
BOND XXXIII-70.loan2-	8.64	72.00	0.00	72.00
BOND XXXIII-80.loan2-	8.64	37.00	0.00	37.00
BOND-XXXIV-12.loan3-	8.84	40.00	0.00	40.00
BOND-XXXIV-22.loan3-	8.84	30.00	0.00	30.00



2014-19 Particulars	Combined Asset			
	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND-XXXIV-3.loan3-	8.84	50.00	0.00	50.00
BOND-XXXIV-31.loan3-	8.84	50.00	0.00	50.00
BOND-XXXIV-39.DOCO DRAWL ON 01-JAN-2013-	8.84	217.00	0.00	217.00
BOND-XXXIV-48.loan3-	8.84	652.00	0.00	652.00
BOND-XXXIV-56.DOCO DRAWL ON 01-OCT-2012-	8.84	100.00	0.00	100.00
BOND-XXXIV-63.DOCO DRAWL ON 01-NOV-2012-	8.84	200.00	0.00	200.00
BOND-XXXIV-71.loan3-	8.84	798.00	0.00	798.00
BOND-XXXIV-81.loan3-	8.84	429.00	0.00	429.00
BOND-XXXV-13.loan4-	9.64	40.00	0.00	40.00
BOND-XXXV-23.loan4-	9.64	10.00	0.00	10.00
BOND-XXXV-49.loan4-	9.64	7.00	0.00	7.00
BOND XXXVI-14.loan5-	9.35	40.00	0.00	40.00
BOND XXXVI-32.loan4-	9.35	40.00	0.00	40.00
BOND XXXVI-4.loan4-	9.35	40.00	0.00	40.00
BOND XXXVI-40.DOCO DRAWL ON 01-JAN-2013-	9.35	20.00	0.00	20.00
BOND XXXVI-50.loan5-	9.35	488.00	0.00	488.00
BOND XXXVI-57.DOCO DRAWL ON 01-OCT-2012-	9.35	100.00	0.00	100.00
BOND XXXVI-64.DOCO DRAWL ON 01-NOV-2012-	9.35	270.00	0.00	270.00
BOND XXXVI-72.loan4-	9.35	85.00	0.00	85.00
BOND XXXVI-82.loan4-	9.35	45.00	0.00	45.00
BOND XXXVII-15.loan6-	9.25	81.00	0.00	81.00
BOND XXXVII-24.loan5-	9.25	10.00	0.00	10.00





2014-19 Particulars	Combined Asset			
	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND XXXVII-33.loan5-	9.25	10.00	0.00	10.00
BOND XXXVII-5.loan5-	9.25	10.00	0.00	10.00
BOND XXXVII-51.loan6-	9.25	1138.00	0.00	1138.00
BOND XXXVII-58.DOCO DRAWL ON 01-OCT-2012-	9.25	1.00	0.00	1.00
BOND XXXVIII-52.loan7-	9.25	253.08	0.00	253.08
BOND XXXVIII-59.DOCO DRAWL ON 01-OCT-2012-	9.25	158.62	0.00	158.62
BOND XXXVIII-65.DOCO DRAWL ON 01-NOV-2012-	9.25	257.22	0.00	257.22
BOND XXXIX-16.loan7-	9.40	540.00	0.00	540.00
BOND XXXIX-25.loan6-	9.40	273.00	0.00	273.00
BOND XXXIX-34.loan6-	9.40	482.00	0.00	482.00
BOND XXXIX-41.DOCO DRAWL ON 01-JAN-2013-	9.40	56.00	0.00	56.00
BOND XXXIX-6.loan6-	9.40	482.00	0.00	482.00
BOND XXXIX-73.loan5-	9.40	218.00	0.00	218.00
BOND XXXIX-83.loan5-	9.40	113.00	0.00	113.00
SBI (21.03.2012)-42.DOCO DRAWL ON 01-JAN-2013 DRAWL ON 01-JAN-2013-	10.25	70.00	0.00	70.00
SBI (21.03.2012)-74.loan6-	10.25	303.00	0.00	303.00
SBI (21.03.2012)-84.loan6-	10.25	172.00	0.00	172.00
BOND XL-17.loan8-	9.30	422.92	0.00	422.92
BOND XL-26.loan7-	9.30	315.17	0.00	315.17
BOND XL-35.loan7-	9.30	341.16	0.00	341.16
BOND XL-53.loan8-	9.30	1471.32	0.00	1471.32



2014-19 Particulars	Combined Asset			
	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND XL-7.loan7-	9.30	340.94	0.00	340.94
BOND XL-75.loan7-	9.30	300.00	0.00	300.00
BOND XL-85.loan7-	9.30	610.49	0.00	610.49
BOND XL-DOCO-	9.30	62.62	0.00	62.62
BOND XL-DOCO XL-	9.30	332.33	0.00	332.33
BOND - XLI-18.ADDCAP FOR 2012-2013 loan9-	8.85	120.39	0.00	120.39
BOND - XLI-27.ADDCAP FOR 2012-2013 loan8-	8.85	68.05	0.00	68.05
BOND - XLI-43.Loan7-	8.85	614.68	0.00	614.68
BOND - XLI-44.ADDCAP FOR 2012-2013 Loan8-	8.85	203.74	0.00	203.74
BOND - XLI-54.ADDCAP FOR 2012-2013 loan9-	8.85	666.89	0.00	666.89
BOND - XLI-61.ADDCAP FOR 2012-2013 Addcap loan1-	8.85	35.11	0.00	35.11
BOND - XLI-67.ADDCAP FOR 2012-2013 Addcap loan1-	8.85	393.15	0.00	393.15
BOND - XLI-76.loan8-	8.85	1053.44	0.00	1053.44
BOND - XLI-77.ADDCAP FOR 2012-2013 loan9-	8.85	1024.91	0.00	1024.91
BOND - XLI-8.ADDCAP FOR 2012-2013 loan8-	8.85	124.10	0.00	124.10
BOND - XLI-86.loan8-	8.85	148.66	0.00	148.66
BOND - XLI-87.ADDCAP FOR 2012-2013 loan9-	8.85	67.14	0.00	67.14
BOND - XLIV-19.ADDCAP FOR 2013-2014 loan10-	8.70	71.10	0.00	71.10
BOND - XLIV-28.ADDCAP FOR 2013-2014 loan9-	8.70	58.80	0.00	58.80
BOND - XLIV-36.ADDCAP FOR 2013-2014 loan8-	8.70	116.63	0.00	116.63
BOND - XLIV-45.ADDCAP FOR 2013-2014 Loan9-	8.70	84.10	0.00	84.10
BOND - XLIV-55.ADDCAP FOR 2013-2014 loan10-	8.70	419.38	0.00	419.38



2014-19	Combined Asset			
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND - XLIV-62.ADDCAP FOR 2013-2014 Addcap loan2-	8.70	50.76	0.00	50.76
BOND - XLIV-68.ADDCAP FOR 2013-2014 Addcap loan2-	8.70	139.61	0.00	139.61
BOND - XLIV-78.ADDCAP FOR 2013-2014 loan10-	8.70	268.72	0.00	268.72
BOND - XLIV-88.ADDCAP FOR 2013-2014 loan10-	8.70	112.31	0.00	112.31
BOND - XLIV-9.ADDCAP FOR 2013-2014 loan9-	8.70	116.63	0.00	116.63
<b>Total</b>		<b>19901.17</b>	<b>0.00</b>	<b>19901.17</b>

### CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN FOR TARIFF PERIOD 2014-19

(₹ in lakh)

2014-19	Combined Asset				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	19901.17	19901.17	19901.17	19901.17	19901.17
Cumulative Repayments of Loans upto Previous Year	65.91	393.63	830.24	2118.03	3405.82
Net Loans Opening	19835.26	19507.54	19070.93	17783.14	16495.35
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	327.72	436.61	1287.79	1287.79	1767.14
Net Closing Loan	19507.54	19070.93	17783.14	16495.35	14728.21
Average Net Loan	19671.40	19289.24	18427.04	17139.25	15611.78
Interest on Loan	0.09	0.09	0.09	0.09	0.09
Rate of Interest on Loan (%)	1789.89	1755.93	1677.94	1560.96	1423.13

