

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 41/TT/2017

Coram:

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

Date of Order : 30.08.2017

In the matter of:

Truing up of transmission tariff of 2009-14 tariff period under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 and determination of transmission tariff for 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for combined assets: a) 400/220 kV,315 MVAR, ICT-I along with associated bays at Hamirpur GIS Sub-station, b) 400kV,80 MVAR Bus Reactor along with associated bays at Hamirpur GIS Sub-station and c) LILO of one circuit of 400kV D/C Parbati-Amritsar T/L at Hamirpur along with associated bays & Line reactor at Hamirpur GIS Sub-station, under Northern Region System Strengthening Scheme-XX in Northern Region under the 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**

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited
Vidyut Bhawan, Vidyut Marg,
Jaipur - 302005
2. Ajmer Vidyut Vitran Nigam Limited
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur
3. Jaipur Vidyut Vitran Nigam Limited
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur.



4. Jodhpur Vidyut Vitran Nigam Limited
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur
5. Himachal Pradesh State Electricity Board
Vidyut Bhawan
Kumar House Complex Building II
Shimla-171004
6. Punjab State Power Corporation Limited
Thermal Shed TIA,
Near 22 Phatak, Patiala-147001
7. Haryana Power Purchase Centre
Shakti Bhawan, Sector-6
Panchkula (Haryana) 134 109
8. Power Development Department
Government of Jammu & Kashmir
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Limited
(Formerly Uttar Pradesh State Electricity Board)
Shakti Bhawan, 14, Ashok Marg
Lucknow - 226 001
10. Delhi Transco Ltd.
Shakti Sadan, Kotla Road,
New Delhi-110002
11. BSES Yamuna Power Ltd.
BSES Bhawan, Nehru Place,
New Delhi.
12. BSES Rajdhani Power Ltd.
BSES Bhawan, Nehru Place,
New Delhi
13. North Delhi Power Ltd.
Power Trading and Load Dispatch Group
Cennet Building, Adjacent to 66/11 kV Pitampura-3
Grid Building, Near PP Jewellers
Pitampura, New Delhi-110 034.
14. Chandigarh Administration
Sector -9, Chandigarh.



15. Uttarakhand Power Corporation Ltd.
Urja Bhawan, Kanwali Road,
Dehradun.
16. North Central Railway,
Allahabad.
17. New Delhi Municipal Council
Palika Kendra, Sansad Marg,
New Delhi-110002

.....Respondents

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

For Respondents : None

ORDER

The present petition has been filed by Power Grid Corporation of India Ltd. (“the petitioner”) for truing up of capital expenditure of 2009-14 tariff period for combined assets: a) 400/220 kV, 315 MVAR, ICT-I along with associated bays at Hamirpur GIS Sub-station, b) 400 kV, 80 MVAR bus reactor along with associated bays at Hamirpur GIS Sub-station, and c) LILO of one circuit of 400 kV D/C Parbati-Amritsar Transmission Line at Hamirpur along with associated bays and line reactor at Hamirpur GIS Sub-station, (hereinafter referred to as “transmission assets”) under transmission system under System Strengthening Scheme-XX in Northern Region, under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 Tariff Regulations”) based on actual capital expenditure for the period from COD to 31.3.2014, and for determination of tariff for the period from 1.4.2014 to 31.3.2019 under the Central Electricity Regulatory



Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”).

2. The final tariff was allowed for the instant assets, vide order dated 4.2.2016 in Petition No. 36/TT/2013, based on the admitted capital cost of ₹12927.42 lakh as on COD (1.1.2014) and ₹13773.34 lakh as on 31.3.2014 as under:-

Particulars	(₹ in lakh)
	2013-14 (pro-rata)
Depreciation	135.75
Interest on Loan	219.50
Return on Equity	196.35
Interest on Working Capital	17.84
O & M Expenses	100.52
Total	669.96

3. This order has been issued after considering the petitioner's affidavits dated 22.2.2017.

4. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act, 2003 (“the Act”). The petitioner has served the petition on the respondents. U.P. Power Corporation Limited (UPPCL), Respondent No. 9 has filed reply vide affidavit dated 19.4.2017. The petitioner has filed rejoinder to the reply of UPPCL, vide affidavit dated 3.5.2017. The issues raised by UPPCL and the clarifications given by the petitioner are dealt with in the respective paras of this order.

5. UPPCL has submitted that the petitioner should explain whether Government of India has delegated all the powers of Cabinet Committee for Economic Affairs regarding granting of approval of government projects to the



Board of Directors of Public Sector Utilities for all times to come. UPPTCL has stated that the petitioner should submit the concerned orders of the Government of India. The petitioner has clarified that as per Clause 2 (i) of DPE's Office Memorandum No. DPE/11(2)/97-Fin dated 22.7.1997 Navratna Company has full power to incur expenditure on purchase of new items or for replacement, without any monetary ceiling. The petitioner has submitted a copy of OM No. 26(3)/2005-GM-GL-92 dated 1.5.2008 and OM No. DPE/11(2)/97-FIN dated 22.7.1997, a copy of which has also been provided to UPPCL. It is observed from the above said Office Memorandums, that the Navratna status of the petitioner and other PSUs is reviewed by the Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises on yearly basis and if they do not fulfil the conditions laid down the Navratna status is withdrawn. However, this is not a relevant consideration as the approval of the Board of Directors should be accorded when the company is enjoying the Navratna status. In the present case, PGCIL as a Navratna company has approved the investment approval and therefore, the same has been considered for the purpose of tariff.

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

Truing-up of Annual Fixed Charges of 2009-14 tariff period

7. The truing up of tariff for 2009-14 has been determined as discussed below.

Capital Cost

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



“6. Truing up of Capital Expenditure and Tariff.

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

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

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

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

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

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

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

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

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

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

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

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



9. The Commission, vide order dated 4.2.2016 in Petition No. 36/T/2013, admitted the following capital cost as on 31.3.2014, for the purpose of computation of transmission tariff for 2009-14 period after scrutiny of IDC and IEDC, Initial Spares and additional capital expenditure:-

(₹ in lakh)	
Particulars	2013-14
Capital Cost Claimed as on COD	13327.31
(+) Additional Capital Expenditure Claimed (2013-14)	612.12
(-) IDC claimed on accrual basis	1298.89
(+) IDC worked out on cash basis	1298.89
(-) IEDC claimed on accrual basis	387.12
(+) IEDC worked out on cash basis	387.12
(-) Initial Spares claimed on accrual basis	567.68
(+)Initial Spares discharged up to COD	167.79
(+)Initial Spares discharged during 2013-14	233.80
Total Capital Cost deemed to be claimed on cash basis as on 31.3.2014	13773.34

10. The petitioner has submitted that the actual capital expenditure incurred as on COD for all assets, as certified vide Auditor's Certificate dated 28.7.2016. Details of capital cost claimed is as under:-

(₹ in lakh)	
Particulars	2013-14
Capital Cost Claimed as on COD	13327.31
(+) Additional Capital Expenditure Claimed (2013-14)	612.12
(-) IDC claimed on accrual basis	1298.89
(+) IDC worked out on cash basis	1298.89
(-) IEDC claimed on accrual basis	387.12
(+) IEDC worked out on cash basis	387.12
(-) Initial Spares claimed on accrual basis	606.97
(+)Initial Spares discharged up to COD	167.79
(+)Initial Spares discharged during 2013-14	233.80
Total capital cost deemed to be claimed on cash basis as on 31.3.2014	13734.04

11. It is observed that there is a mismatch between element-wise cost up to COD allowed by the Commission vide order dated 4.2.2016 in Petition No. 36/TT/2013 and element-wise cost up to COD claimed in the instant petition, although the total cost upto COD is same in both case. In this regard, the petitioner has submitted that an inadvertent error occurred due to the IDC and IEDC allocated to "land cost" in the old

certificate. The petitioner has requested to condone the inadvertent error and allow tariff based on the Auditor's Certificate dated 28.7.2016.

12. In view of the above, the capital cost based on the Auditor's Certificate dated 28.7.2016 has been considered for the purpose of truing-up tariff of the 2009-14 tariff period.

Debt: Equity

13. Clause (1) of Regulation 12 of the 2009 Tariff Regulations provides that:-

"12. Debt-Equity Ratio.

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

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

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

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

14. The admitted debt:equity ratio of 70:30 as admitted vide order dated 4.2.2016 in Petition No. 36/TT/2013 has been considered for the purpose of truing up of the approved tariff for 2009-14.

Return on Equity ("ROE")

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

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

16. The petitioner has submitted the MAT rate applicable during the various years. Return on equity has been worked out by considering year wise MAT rate submitted by the petitioner in accordance with Regulation 15 of the 2009 Tariff Regulations.

17. The variation in the tax rate during the 2009-14 tariff period applicable to the petitioner as per the Finance Act of the relevant year for the purpose of grossing up of ROE is as follows:-

Year	MAT Rate (in %)	Grossed up ROE (Base rate/(1-t) (in %)
2009-10	16.995	18.674
2010-11	19.931	19.358
2011-12	20.008	19.377
2012-13	20.008	19.377
2013-14	20.960	19.610



18. The trued up ROE allowed for the instant transmission asset is given below:-

Particulars	(₹ in lakh)
	2013-14 (pro-rata)
Opening Equity	3866.44
Addition due to Additional Capitalization	253.78
Closing Equity	4120.21
Average Equity	3993.32
Return on Equity (Base Rate)	15.50%
Tax rate for the year 2013-14 (MAT)	20.961%
Rate of Return on Equity (Pre Tax)	19.610%
Return on Equity (Pre Tax)	195.77

Interest on Loan (“IOL”)

19. Regulation 16 of the 2009 Tariff regulations provides as follows:-

“16. (1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.

(3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year:

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

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:

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

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

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



(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:

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

20. The petitioner has claimed the IOL based on actual interest rates for each year during the 2009-14 period. 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 provided under Regulation 16 of the 2009 Tariff Regulations and it is as follows:-

Particulars	(₹ in lakh)
	2013-14 (pro-rata)
Gross Normative Loan	9021.68
Cumulative Repayment upto Previous Year	0.00
Net Loan-Opening	9021.68
Addition due to Additional capitalisation	592.14
Repayment during the year	139.45
Net Loan-Closing	9474.38
Average Loan	9248.03
Weighted Average Rate of Interest on Loan	9.4638%
Interest	218.80



Depreciation

21. 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:-

(a) Coal/Lignite based thermal generating station	25 years
(b) Gas/Liquid fuel based thermal generating station	25 years
(c) AC and DC sub-station	25 years
(d) Hydro generating station	35 years
(e) Transmission line	35 years”

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

"(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.”

23. The instant assets have been put under commercial operation as on 1.4.2014 and would complete 12 years on 1.4.2026. Accordingly, remaining depreciable value of the asset shall be spread over in the balance useful life of the asset after 2009-14. The depreciation for the tariff period 2009-14 has been trued up in accordance with Regulation 17 of the 2009 Tariff Regulations based on admitted capital expenditure as under:-

Particulars	(₹ in lakh)
	2013-14 (pro-rata)
Opening Gross Block	12888.12
Addition during 2009-14 due to Projected Additional Capitalisation	845.92
Closing Gross Block	13734.04
Average Gross Block	13311.08
Rate of Depreciation	4.1905%
Depreciable Value	9626.73
Remaining Depreciable Value	9626.73
Depreciation	139.45



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

24. The petitioner has claimed the same O&M Expenses that was approved in order dated 4.2.2016 in Petition No.36/TT/2013 for the year 2013-14. Accordingly, the O&M Expenses claimed by the petitioner, allowed and true up are the same, and are as follows:-

Particulars	(₹ in lakh)
	2013-14 (pro-rata)
Approved vide order dated 4.2.2016	100.52
As claimed by petitioner	100.52
Allowed after true up	100.52

Interest on working capital

25. 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.

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

27. In accordance with Clause (3) of Regulation 18 of the 2009 Tariff Regulations, rate of interest on working capital shall be on normative basis and in case of transmission assets declared under commercial operation after 1.7.2010 shall be equal to SBI Base Rate plus 350 basis points as on 1st April of the year in which the transmission asset was declared under commercial operation. State



Bank of India base rate as on 1.4.2012 was 9.70%. Therefore, interest rate of 13.20% has been considered to work out the interest on working capital in the instant case.

28. The IWC trued up of the instant assets is as under:-

(₹ in lakh)	
Particulars	2013-14 (pro-rata)
Maintenance Spares	60.31
O & M expenses	33.51
Receivables	448.29
Total	542.11
Rate of Interest	13.20%
Interest	17.89

Annual Transmission charges

29. In view of above, the annual transmission charges after truing up for the 2009-14 tariff period is as under:-

(₹ in lakh)	
Particulars	2013-14 (pro-rata)
Depreciation	139.45
Interest on Loan	218.80
Return on Equity	195.77
Interest on Working Capital	17.89
O & M Expenses	100.52
Total	672.44

DETERMINATION OF ANNUAL TRANSMISSION CHARGES FOR 2014-19

30. The petitioner has claimed the following transmission charges for the 2014-19 tariff period:-



(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	621.34	665.58	712.56	745.73	745.73
Interest on Loan	924.52	929.26	938.29	921.57	850.82
Return on Equity	858.77	915.58	980.07	1026.46	1026.46
Interest on Working Capital	73.87	76.92	80.33	82.43	81.48
O&M Expenses	335.26	346.39	357.90	369.74	382.04
Total	2813.76	2933.73	3069.15	3145.93	3086.53

31. 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	50.29	51.96	53.69	55.46	57.31
O & M Expenses	27.94	28.87	29.83	30.81	31.84
Receivables	468.96	488.96	511.53	524.32	514.42
Total	547.19	569.79	595.05	610.59	603.57
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	73.87	76.92	80.33	82.43	81.48

Capital Cost

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

Capital Expenditure

33. Sub-clause (i) of Clause 1 and sub-clause (ix) of Clause 3 of Regulation 14 of the 2014 Tariff Regulations provides as follows:-



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

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

“(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:

(ix) In case of transmission system, any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement due to obsolesce of technology, replacement of switchyard equipment due to increase of fault level, tower strengthening, communication equipment, emergency restoration system, insulators cleaning infrastructure, replacement of porcelain insulator with polymer insulators, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system;”

34. Capital cost of ₹13734.04 lakh has been considered as on 31.3.2014 for truing up the tariff of the 2009-14 period. The same capital cost has been considered as on 1.4.2014 for the purpose of determination of tariff for 2014-19 tariff period.

Projected Additional Capital Expenditure

35. The petitioner has claimed the following projected additional capital expenditure during 2014-19 period:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17
Projected Add Cap	1316.10	615.22	1577.08

36. UPPCL has submitted that the “initial spares” may be allowed as specified in Regulation 13 of the 2014 Tariff Regulations. The petitioner has submitted that the “initial spares” procured for the instant project are essential spares and may be allowed in full under the “Power to Relax” as provided in Regulation 44 of the



2014 Tariff Regulations. We have considered the submissions of the petitioner and UPPCL. The “initial spares” are allowed as provided in the 2014 Tariff Regulations. The allowable limit of “initial spares” works out to ₹407.62 lakh out of the total “initial spares” claim of ₹606.97 lakh. We have already adjusted the discharged “initial spares” of ₹167.79 lakh and ₹233.80 lakh in respect of the capital cost as on COD and add cap during 2013-14 respectively, as indicated at Table-III above, the balance of ₹6.03 lakh has been adjusted along with the add cap claimed during the 2014-15 as the petitioner has submitted that the amount of “initial spares” has finally been discharged during 2014-15. Hence, following projected capital cost has been allowed for the 2014-19 tariff period:-

(₹ in lakh)			
Particulars	2014-15	2015-16	2016-17
Projected Add Cap	1322.13	615.22	1577.08

Debt:Equity Ratio

37. 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.”

38. 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. For additional capitalization, the petitioner has proposed normative debt:equity ratio of 70:30 and the same has been considered.



Interest on Loan (“IOL”)

39. Clause (5) & (6) of Regulation 26 of the 2014 Tariff Regulations provides 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.”

40. UPPCL has submitted that the petitioner should explain the reasons for variation of weighted average rate of interest vis-à-vis constant rates of IOL from different agencies over the period of tariff. The petitioner in its rejoinder has submitted that the variation in weighted rate of interest over the tariff period is due to deployment of new loan to meet the additional capital expenditure and repayment of the loans. We have considered the submissions of UPPCL and the clarification given by the petitioner. The IOL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations by actual weighted average rate of interest during the 2014-15.

41. The details of weighted average rate of interest are placed at **Annexure-II** and the IOL has been worked out and is allowed as follows:-

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross loan opening	9613.83	10539.32	10969.97	12073.93	12073.93



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Cumulative Repayment upto previous year	139.45	750.11	1405.17	2107.20	2842.40
Net Loan-Opening	9474.38	9789.21	9564.81	9966.73	9231.53
Additions during the year	925.49	430.65	1103.96	0.00	0.00
Repayment during the year	610.66	655.06	702.03	735.20	735.20
Net Loan-Closing	9789.21	9564.81	9966.73	9231.53	8496.33
Average Loan	9631.79	9677.01	9765.77	9599.13	8863.93
Rate of Interest (%)	9.4688%	9.4858%	9.5021%	9.5033%	9.5046%
Interest	912.02	917.94	927.96	912.23	842.48

Return on Equity (“ROE”)

42. 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:

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

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

43. The petitioner has submitted that the grossed up ROE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial



year. Any under-recovery or over-recovery of grossed up ROE after truing up shall be recovered or refunded to the beneficiaries on year to year basis. 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.

44. We have considered the submissions made by the petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. Accordingly, the MAT rate of 20.960% applicable during the 2013-14 has been considered for the purpose of return on equity which shall be trued up with actual tax rate in accordance with clause 25 (3) of the 2014 Tariff Regulations.

45. Accordingly, the following ROE allowed:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	4120.21	4516.85	4701.42	5174.54	5174.54
Additional Capitalization	396.64	184.57	473.12	0.00	0.00
Closing Equity	4516.85	4701.42	5174.54	5174.54	5174.54
Average Equity	4318.53	4609.13	4937.98	5174.54	5174.54
Return on Equity (Base Rate) (%)	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for the financial 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)	846.86	903.85	968.34	1014.73	1014.73

Depreciation



46. 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."

47. The instant assets would complete its 12 years life beyond 2018-19. Hence, remaining depreciable value has been spread over in the balance useful life of the asset after 2018-19.

48. 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	13734.04	15056.17	15671.39	17248.47	17248.47
Addition during 2009-14 due to Projected Additional Capitalisation	1322.13	615.22	1577.08	0.00	0.00
Closing Gross Block	15056.17	15671.39	17248.47	17248.47	17248.47
Average Gross Block	14395.11	15363.78	16459.93	17248.47	17248.47
Rate of Depreciation	4.2421%	4.2636%	4.2651%	4.2624%	4.2624%
Depreciable Value	10563.39	11396.24	12329.94	12986.78	12986.78
Remaining Depreciable Value	10423.94	10646.13	10924.77	10879.59	10144.38
Depreciation	610.66	655.06	702.03	735.20	735.20

Operation & Maintenance Expenses ("O&M Expenses")



49. 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 2008-09 to 2012-13. The petitioner has further submitted that the wage revision of the employees of the petitioner Company 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.

50. We have considered the submissions of the petitioner. The O&M Expenses have been worked out as per the norms 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. The petitioner has claimed O&M Expenses as specified in Regulation 29(4) of the 2014 Tariff Regulations and accordingly, the same is considered for the purpose of computation of tariff. The details of O&M Expenses allowed are as follows:-

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	335.26	346.39	357.90	369.74	382.04

Interest on Working Capital (“IWC”)

51. 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;”

52. The petitioner has submitted that interest on working capital for the tariff period 2014-19 has been computed by 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%.

53. 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) for all the assets covered in this petition. The interest on working capital allowed is shown in the table below:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	50.29	51.96	53.69	55.46	57.31
O & M expenses	27.94	28.87	29.83	30.81	31.84
Receivables	462.98	483.23	505.97	518.93	509.20
Total	541.20	564.06	589.48	605.21	598.35
Interest	73.06	76.15	79.58	81.70	80.78

Annual Transmission Charges

54. The details of the annual fixed charges allowed for the instant transmission assets for the tariff period 2014-19 is as follows:-



Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	610.66	655.06	702.03	735.20	735.20
Interest on Loan	912.02	917.94	927.96	912.23	842.48
Return on Equity	846.86	903.85	968.34	1014.73	1014.73
Interest on Working Capital	73.06	76.15	79.58	81.70	80.78
O & M Expenses	335.26	346.39	357.90	369.74	382.04
Total	2777.86	2899.38	3035.80	3113.61	3055.23

Filing Fee and Publication Expenses

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

Sharing of Transmission Charges

56. 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.

57. This order disposes of Petition No. 41/TT/2017.

sd/-
(Dr. M. K. Iyer)
Member

sd/-
(A.S. Bakshi)
Member

sd/-
(A.K. Singhal)
Member

sd/-
(Gireesh B. Pradhan)
Chairperson



ANNEXURE-I**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN
FOR TARIFF PERIOD 2009-14****(₹ in lakh)**

	Details of Loan	2013-14
1	Bond XLI	
	Gross loan opening	1600.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1600.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1600.00
	Average Loan	1600.00
	Rate of Interest	8.85%
	Interest	141.60
	Rep Schedule	12 annual installments from 19.10.2016
2	Bond XXXIV	
	Gross loan opening	1700.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1700.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1700.00
	Average Loan	1700.00
	Rate of Interest	8.84%
	Interest	150.28
	Rep Schedule	12 annual installments from 21.10.2014
3	Bond XXXVII	
	Gross loan opening	1100.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1100.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1100.00
	Average Loan	1100.00
	Rate of Interest	9.25%
	Interest	101.75
	Rep Schedule	12 annual installments from 26.12.2015.
4	Bond XL	
	Gross loan opening	1000.00
	Cumulative Repayment upto DOCO/previous year	0.00



	Net Loan-Opening	1000.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1000.00
	Average Loan	1000.00
	Rate of Interest	9.30%
	Interest	93.00
	Rep Schedule	12 annual installments from 28.6.2016
5	Bond XLIII	
	Gross loan opening	100.00
	Cumulative Repayment upto DOC0/previous year	0.00
	Net Loan-Opening	100.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	100.00
	Average Loan	100.00
	Rate of Interest	7.93%
	Interest	7.93
	Rep Schedule	12 annual installments from 28.5.2017
6	Bond XLV	
	Gross loan opening	759.11
	Cumulative Repayment upto DOC0/previous year	0.00
	Net Loan-Opening	759.11
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	759.11
	Average Loan	759.11
	Rate of Interest	9.65%
	Interest	73.25
	Rep Schedule	Bullet Payment as on 13.3.2023
7	Bond XLV (Add Cap 2013-14)\	
	Gross loan opening	0.00
	Cumulative Repayment upto DOC0/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	428.48
	Repayment during the year	0.00
	Net Loan-Closing	428.48
	Average Loan	214.24
	Rate of Interest	9.65%
	Interest	20.67
	Rep Schedule	Bullet Payment as on 13.3.2023
8	SBI	
	Gross loan opening	3070.00



	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	3070.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	3070.00
	Average Loan	3070.00
	Rate of Interest	10.25%
	Interest	314.68
	Rep Schedule	22 half yearly installment from 31.8.2016
	Total Loan	
	Gross loan opening	9329.11
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	9329.11
	Additions during the year	428.48
	Repayment during the year	0.00
	Net Loan-Closing	9757.59
	Average Loan	9543.35
	Rate of Interest	9.4638%
	Interest	903.16



ANNEXURE-II**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN
FOR TARIFF PERIOD 2014-19**

(₹ in lakh)

	Details of Loan	2014-15	2015-16	2016-17	2017-18	2018-19
1	Bond-XXXIV					
	Gross loan opening	1700.00	1700.00	1700.00	1700.00	1700.00
	Cumulative Repayment upto DOCO/previous year	0.00	141.67	283.33	425.00	566.67
	Net Loan-Opening	1700.00	1558.33	1416.67	1275.00	1133.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	141.67	141.67	141.67	141.67	141.67
	Net Loan-Closing	1558.33	1416.67	1275.00	1133.33	991.67
	Average Loan	1629.17	1487.50	1345.83	1204.17	1062.50
	Rate of Interest	8.84%	8.84%	8.84%	8.84%	8.84%
	Interest	144.02	131.50	118.97	106.45	93.93
	Rep Schedule	12 annual installments from 21.10.2014				
2	Bond-XXXVII					
	Gross loan opening	1100.00	1100.00	1100.00	1100.00	1100.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	91.67	183.33	275.00
	Net Loan-Opening	1100.00	1100.00	1008.33	916.67	825.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	91.67	91.67	91.67	91.67
	Net Loan-Closing	1100.00	1008.33	916.67	825.00	733.33
	Average Loan	1100.00	1054.17	962.50	870.83	779.17
	Rate of Interest	9.25%	9.25%	9.25%	9.25%	9.25%
	Interest	101.75	97.51	89.03	80.55	72.07
	Rep Schedule	12 annual installments from 26.12.2015.				
3	Bond-XL					
	Gross loan opening	1000.00	1000.00	1000.00	1000.00	1000.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	83.33	166.67
	Net Loan-Opening	1000.00	1000.00	1000.00	916.67	833.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	83.33	83.33	83.33
	Net Loan-Closing	1000.00	1000.00	916.67	833.33	750.00
	Average Loan	1000.00	1000.00	958.33	875.00	791.67
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	93.00	93.00	89.13	81.38	73.63
	Rep Schedule	12 annual installments from 28.6.2016				
4	Bond-XLI					
	Gross loan opening	1600.00	1600.00	1600.00	1600.00	1600.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	133.33	266.67
	Net Loan-Opening	1600.00	1600.00	1600.00	1466.67	1333.33



	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	133.33	133.33	133.33
	Net Loan-Closing	1600.00	1600.00	1466.67	1333.33	1200.00
	Average Loan	1600.00	1600.00	1533.33	1400.00	1266.67
	Rate of Interest	8.85%	8.85%	8.85%	8.85%	8.85%
	Interest	141.60	141.60	135.70	123.90	112.10
	Rep Schedule	12 annual installments from 19.10.2016				
5	Bond-XLIII					
	Gross loan opening	100.00	100.00	100.00	100.00	100.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	8.33
	Net Loan-Opening	100.00	100.00	100.00	100.00	91.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	8.33	8.33
	Net Loan-Closing	100.00	100.00	100.00	91.67	83.33
	Average Loan	100.00	100.00	100.00	95.83	87.50
	Rate of Interest	7.93%	7.93%	7.93%	7.93%	7.93%
	Interest	7.93	7.93	7.93	7.60	6.94
	Rep Schedule	12 annual installments from 18.5.2017				
6	Bond-XLV (For Add Cap 2013-14)					
	Gross loan opening	428.48	428.48	428.48	428.48	428.48
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	35.71
	Net Loan-Opening	428.48	428.48	428.48	428.48	392.77
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	35.71	35.71
	Net Loan-Closing	428.48	428.48	428.48	392.77	357.07
	Average Loan	428.48	428.48	428.48	410.63	374.92
	Rate of Interest	9.65%	9.65%	9.65%	9.65%	9.65%
	Interest	41.35	41.35	41.35	39.63	36.18
	Rep Schedule	12 annual installments from 28.2.2018				
7	Bond-XLV					
	Gross loan opening	759.11	759.11	759.11	759.11	759.11
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	63.26
	Net Loan-Opening	759.11	759.11	759.11	759.11	695.85
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	63.26	63.26
	Net Loan-Closing	759.11	759.11	759.11	695.85	632.59
	Average Loan	759.11	759.11	759.11	727.48	664.22
	Rate of Interest	9.65%	9.65%	9.65%	9.65%	9.65%
	Interest	73.25	73.25	73.25	70.20	64.10
	Rep Schedule	12 annual installments from 28.2.2018				
8	Bond-XLVI					
	Gross loan opening	0.00	832.27	832.27	832.27	832.27
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	832.27	832.27	832.27	832.27
	Additions during the year	832.27	0.00	0.00	0.00	0.00



	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	832.27	832.27	832.27	832.27	832.27
	Average Loan	416.14	832.27	832.27	832.27	832.27
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	38.70	77.40	77.40	77.40	77.40
	Rep Schedule	Matured on 4.9.2019, 4.9.2024 and 4.9.2029 equally				
9	SBI					
	Gross loan opening	3070.00	3070.00	3070.00	3070.00	3070.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	279.09	558.18
	Net Loan-Opening	3070.00	3070.00	3070.00	2790.91	2511.82
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	279.09	279.09	279.09
	Net Loan-Closing	3070.00	3070.00	2790.91	2511.82	2232.73
	Average Loan	3070.00	3070.00	2930.45	2651.36	2372.27
	Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
	Interest	314.68	314.68	300.37	271.76	243.16
	Rep Schedule	22 half yearly installment from 31.8.2016				
10	SBI					
	Gross loan opening	0.00	89.00	89.00	89.00	89.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	89.00	89.00	89.00	89.00
	Additions during the year	89.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	89.00	89.00	89.00	89.00	89.00
	Average Loan	44.50	89.00	89.00	89.00	89.00
	Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
	Interest	4.56	9.12	9.12	9.12	9.12
	Rep Schedule	22 half yearly installment from 31.8.2016				
11	SBI (Add Cap for 2015-16)					
	Gross loan opening	0.00	0.00	375.00	375.00	375.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	0.00	375.00	375.00	375.00
	Additions during the year	0.00	375.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	375.00	375.00	375.00	375.00
	Average Loan	0.00	187.50	375.00	375.00	375.00
	Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
	Interest	0.00	19.22	38.44	38.44	38.44
	Rep Schedule	22 half yearly installment from 31.8.2016				
12	Bond-LI					
	Gross loan opening	0.00	0.00	55.65	55.65	55.65
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	0.00	55.65	55.65	55.65
	Additions during the year	0.00	55.65	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	55.65	55.65	55.65	55.65



Average Loan	0.00	27.83	55.65	55.65	55.65
Rate of Interest	8.40%	8.40%	8.40%	8.40%	8.40%
Interest	0.00	2.34	4.67	4.67	4.67
Rep Schedule	12 annual installments from 19.10.2016				
Total Loan					
Gross loan opening	9757.59	10678.86	11109.51	11109.51	11109.51
Cumulative Repayment upto DOCO/previous year	0.00	141.67	375.00	1104.09	1940.48
Net Loan-Opening	9757.59	10537.19	10734.51	10005.42	9169.03
Additions during the year	921.27	430.65	0.00	0.00	0.00
Repayment during the year	141.67	233.33	729.09	836.39	836.39
Net Loan-Closing	10537.19	10734.51	10005.42	9169.03	8332.64
Average Loan	10147.39	10635.85	10369.96	9587.22	8750.83
Weighted Average Rate of Interest	9.4688%	9.4858%	9.5021%	9.5033%	9.5046%
Interest	960.84	1008.89	985.37	911.10	831.73

