# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

## **Petition No. 509/TT/2014**

Coram:

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

Date of Hearing : 23.11.2015 Date of Order : 17.12.2015

#### In the matter of:

Truing up of transmission tariff for 2009-14 tariff period and determination of transmission tariff for 2014-19 tariff period for 500 MW HVDC back to back station at Gazuwaka (Asset-I), Vijayawada- Gazuwaka 400 kV D/C Line and 50% FSC Jeypore-Gazuwaka 400 kV S/C transmission line at Jeypore (Asset-II), and (a) 40% FSC on Rengali- Indravati 400 kV S/C transmission line & (b) 40% FSC on Meramundali- Jeypore 400 kV S/C transmission line at Jeypore (Asset-III) under "Augmentation of capacity of Gazuwaka HVDC back to back project (500 MW)" in Southern Region and Eastern Region under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

#### And in the matter of:

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

#### **Versus**

- 1. Karnataka Power Transmission Corporation Ltd. KaveriBhawan, Bangalore-560009
- Transmission Corporation of Andhra Pradesh Ltd. (APTRANSCO), Vidyut Soudha Hyderabad-500082



# 3. Kerala State Electricity Board (KSEB) Vaidyuthi Bhavanam, Pattom Thiruvananthapuram-695004

# 4. Tamil Nadu Electricity Board NPKRR Maaligai, 800, Anna Salai Chennai- 600002

# 5. Electricity Department Government of Goa VidyutiBhawan, Panaji Goa- 403001

# 6. Electricity Department Government of Pondicherry Pondicherry- 605001

7. Eastern Power Distribution Company of Andhra Pradesh Ltd. P&T Colony, Seethmmadhara, Vishakhapatnam Andhra Pradesh

# 8. Southern Power Distribution Company of Andhra Pradesh Tiruchanoor Road, Kesavayana Gunta Tirupati- 517 501

 Central Power Distribution Company of Andhra Pradesh Mint Compound, Hyderabad- 500 063

# Northern Power Distribution Company of Andhra Pradesh Chaitanyapuri, Kazipet Warangal- 506 004

 Bangalore Electricity Supply Company Ltd. K.R.Circle Bangalore- 560 001

# 12. Gulbarga Electricity Supply Company Ltd. Station Main Road, Gulbarga

 Hubli Electricity Supply Company Ltd. Navanagar, P B Road Hubli

# 14. MESCOM Corporate Office Paradigm Plaza, AB Shetty Circle



Mangalore- 575 001

- 15. Chamundeswari Electricity Supply Corporation Ltd. New Kantharaj Urs Road, Saraswatipuram, Mysore-570 009
- 16. Bihar State Electricity Board Vidyut Bhawan, Bailey Road, Patna-800 001
- 17. West Bengal State Electricity Distribution Company Ltd. Bidyut Bhawan, Bidhan Nagar, Block DJ, Salt Lake City Kolkata-700 091
- 18. Grid Corporation of Orissa Ltd Shahid Nagar, Bhubaneswar- 751 007
- 19. Damodar Valley Corporation DVC Tower, Maniktala, Civic Centre, Kolkata- 700 054
- 20. Power Department Govt. Of Sikkim, Gangtok-737 101
- 21. Jharkhand State Electricity Board Infront of Main Secretariat, Doranda, Ranchi- 834002

.....Respondents

The following were present:

For Petitioner: Shri S. K. Niranjan, PGCIL

> Shri Jasbir Singh, PGCIL Shri Anshul Garq, PGCIL Shri S.S. Raju, PGCIL Shri Rakesh Prasad, PGCIL Shri M.M. Mondal, PGCIL Shri S. K. Venkatesan, PGCIL

For Respondent: None

#### ORDER

The present petition has been preferred by Power Grid Corporation of India Ltd. ('the petitioner'), a transmission licensee, for truing up of capital expenditure and tariff for 500 MW HVDC back to back station at Gazuwaka (Asset-I), Vijayawada- Gazuwaka 400 kV D/C Line and 50% FSC Jeypore-Gazuwaka 400 kV S/C transmission line at Jeypore (Asset-II), and (a) 40% FSC on Rengali-Indravati 400 kV S/C transmission line & (b) 40% FSC on Meramundali- Jeypore 400 kV S/C transmission line at Jeypore (Asset-III) under "Augmentation of capacity of Gazuwaka HVDC back to back project (500 MW)" in Southern Region and 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 1.4.2009 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.

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

3. The petitioner has served the petition to the respondents and notice of this application has been published in the newspaper in accordance with Section 64 of the 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. None of the respondents have filed reply to the petition. The hearing in this matter was held on 23.11.2015. 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 transmission asset was accorded by Ministry of Power vide its letter dated 26.10.2004 at an estimated cost of ₹76925 lakh including IDC of ₹9612 lakh. The Asset-I was put under commercial operation w.e.f. 1.3.2005 and Asset-II and Asset-III were put under commercial operation w.e.f. 1.1.2007.
- b. The tariff for 2009-14 period was allowed vide order dated 11.4.2011 in Petition No. 242/2010 in accordance with the 2009 Tariff Regulations. The tariff allowed for the tariff period 2009-14 is as under:-

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14				
Asset-I									
Depreciation	1930.04	1930.04	1930.04	1930.04	1930.04				
Interest on Loan	555.09	498.07	441.24	384.75	328.87				
Return on equity	1781.35	1781.35	1781.35	1781.35	1781.35				
Interest on Working Capital	111.08	111.14	111.31	111.53	111.87				
O & M Expenses	443.00	468.00	495.00	523.00	553.00				
Total	4820.56	4788.60	4758.94	4730.67	4705.12				
Asset-II	Asset-II								

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	1444.11	1445.43	1448.07	1449.39	1449.39
Interest on Loan	1188.21	1072.57	958.05	841.81	724.02
Return on equity	1290.59	1291.90	1294.52	1295.83	1295.83
Interest on Working Capital	107.36	106.47	105.75	105.01	104.28
O & M Expenses	511.77	541.10	572.08	604.77	639.23
Total	4542.04	4457.47	4378.47	4296.82	4212.75
Asset-III					
Depreciation	170.52	173.16	177.12	178.44	178.44
Interest on Loan	147.47	136.68	126.97	114.28	100.15
Return on equity	159.44	162.06	166.00	167.31	167.31
Interest on Working Capital	15.19	15.38	15.66	15.78	15.84
O & M Expenses	104.80	110.80	117.14	123.84	130.92

- c. The Commission, in its order dated 11.4.2011 in Petition No. 242/2010 has determined the tariff based on admitted capital cost of ₹36851.61 lakh for Asset-I, ₹27333.75 lakh for Asset II, and ₹3270.24 lakh for Asset IIIas on 31.3.2009 and additional capital expenditure of ₹100 lakh and ₹150 lakh proposed during 2009-14 for Asset-II and Asset-III, respectively, by the petitioner for the 2009-14 tariff period.
- d. The MAT rate applicable as on 2008-09 was considered to arrive at rate of return on equity for the 2009-14 tariff period, 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.
- e. The instant petition was filed on 26.11.2014.

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

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

# **Capital Cost**

- 6. The petitioner has claimed admitted capital cost of ₹36851.61 lakh as on 31.3.2009 and no additional capitalization during 2009-14 for Asset-I. For Asset-II, the tariff has been claimed based on admitted capital cost of ₹27333.75 lakh as on 31.3.2009 and additional capitalization of ₹153.17 lakh during the 2009-14 tariff period, and for Asset-III, the tariff claim is based on admitted capital cost of ₹3270.24 lakh as on 31.3.2009 and additional capitalization of ₹186.10 lakh during 2009-14. The petitioner has claimed additional capitalization towards Balance and Retention payment for works executed after the cut-off date in accordance with Clause 2 of Regulation 9 of the 2009 Tariff Regulations.
- 7. The capital cost admitted as on 31.3.2009 vide order dated 11.4.2011 in Petition No. 242/2010 has been considered as the opening capital cost as on 1.4.2009 for truing up in accordance with Regulation 7 of the 2009 Tariff Regulations. The admitted capital cost of ₹36851.61 lakh for Asset-I, ₹27333.75 lakh for Asset-II, and ₹3270.24 lakh for Asset-III as on 1.4.2009 has been considered for truing up for the tariff period 2009-14.

## **Additional Capital Expenditure**

8. The petitioner has not claimed any additional capital expenditure for Asset-I, for Asset-II the additional capital expenditure claimed is ₹43.09 lakh,

₹18.07 lakh, and ₹92.01 lakh for 2010-11, 2011-12, and 2013-14, respectively, and for Asset-III, additional capital expenditure claimed is ₹52.55 lakh, ₹21.93 lakh, and ₹111.62 lakh for 2010-11, 2011-12, and 2013-14, respectively, and the petitioner has submitted Auditor's Certificate for the cost incurred.

- 9. The petitioner has claimed additional capitalization towards Balance and Retention payment beyond the cut-off date under Clause (2) of Regulation 9 of the 2009 Tariff Regulations. The petitioner was directed to submit the necessary justification for claiming the balance and retention payment under Clause (2) of Regulation 9 of the 2009 Tariff Regulations. The Petitioner in its reply submitted that as per order dated 11.4.2011 in Petition No. 242/2010, additional capital expenditure was allowed by the Commission beyond cut-off date by invoking Regulation 44 of the 2009 Tariff Regulations. Any additional expenditure beyond cut-off date comes under Clause 2(viii) of Regulation 9 of the 2009 Tariff Regulations and accordingly, the same is being claimed under balance and retention payment beyond cut-off date.
- 10. Clause 2(viii) of Regulation 9 of the 2009 Tariff Regulations provides as follows:-
  - "(2) The capital expenditure incurred on the following counts after the cut-off date may, in its discretion be admitted by the Commission, subject to prudence check
  - (viii) "Any undischarged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date, after prudence check of the details of such deferred liability, total estimated cost of package, reason for such withholding payment and release of such payments etc."

- 11. The total actual additional capitalization of ₹153.17 lakh for Asset-II and ₹186.10 lakh for Asset-III claimed during the tariff period 2009-14 is more than the additional capitalization of ₹100 lakh for Asset-II and ₹150 lakh for Asset-III for the tariff period 2009-14 approved by the Commission vide order dated 11.4.2011 in Petition No. 242/2010. The Commission sought the reasons for variation in actual amount towards additional capitalization as compared to the amount approved by the Commission for 2009-14 tariff period. The petitioner in its replies vide affidavit dated 21.11.2015, submitted that the increase in amount with respect to approved additional capitalization of ₹250 lakh is due to an expenditure of ₹96 lakh incurred in 2010-11 on account of CT, Bus post insulators and payments for modification of FSC capacitors, which was not envisaged at the time of making projections. It is submitted by the petitioner that an amount of ₹99.99 lakh is yet to be made to BHEL towards balance/retention payments for assets under this petition, as the same was withheld due to nonfinalization of contract closing. The amount has not been projected in 2014-19 tariff period as it is under dispute. The petitioner has stated that it shall approach the Commission for this amount during 2014-19 tariff period on the basis of actual settlement with BHEL.
- 12. The total capital cost of the transmission asset including additional capitalization incurred during 2009-14, works out to ₹36851.61 lakh for Asset-I, ₹27486.92 lakh for Asset-II, and ₹3456.34 lakh for Asset-III, including additional capitalization incurred during 2009-14 tariff period.

13. We have considered the submission of the petitioner. The additional capitalization of ₹153.17 lakh for Asset-II and ₹186.10 lakh for Asset-III for 2009-14 in accordance with Clause 2(viii) of Regulation 9 of the 2009 Tariff Regulations as the same is towards the balance and retention amount. The summary of capital cost including additional capitalization approved and now trued up is shown in table below:-

(₹ in lakh) Total Admitted Additional Capitalization Total Capital cost Capital Additio includina Cost as **Particulars** nal Additional on 2009-10|2010-11|2011-12|2012-13|2013-14| Capitali Capitalizatio 31.3.2009 zation n Asset I Approved 36851.61 0.00 0.00 0.00 0.00 0.00 0.00 36851.61 Trued Up 36851.61 0.00 0.00 0.00 0.00 0.00 0.00 36851.61 Asset II Approved 27333.75 0.00 50.00 50.00 0.00 0.00 100.00 27433.75 Trued Up 27333.75 0.00 43.09 18.07 0.00 92.01 153.17 27486.92 Asset III Approved 3270.24 0.00 100.00 50.00 0.00 0.00 150.00 3420.24 Trued Up 3270.24 0.00 52.55 21.93 0.00 | 111.62 186.10 3456.34

#### **Debt: Equity**

14. Clause 2 of Regulation 12 of the 2009 Tariff Regulations provides that:-

"In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered."

15. The petitioner has claimed trued up Annual Fixed Charge based on debt:equity ratio of 72.35:27.65 for Asset-I, 72.99:27.01 for Asset-II, and 72.11:27.89 for Asset-III as considered by the Commission in its order dated

11.4.2011 in Petition No. 242/2010. The admitted debt:equity ratio as on 31.3.2009 vide order dated 11.4.2011 has been considered as opening debt:equity ratio as on 1.4.2009 for the purpose of truing up of the approved tariff of tariff period 2009-14 as given under:-

Funding	Amount (₹ in lakh)	(%)
Asset-I		
Debt	26661.42	72.35
Equity	10190.19	27.65
Total	36851.61	100.00
Asset-II		
Debt	19950.94	72.99
Equity	7382.81	27.01
Total	27333.75	100.00
Asset-III		
Debt	2358.15	72.11
Equity	912.09	27.89
Total	3270.24	100.00

16. With respect to additional capitalization, the petitioner has submitted the debt:equity ratio of 70:30 for Asset-III and Asset-III. The Commission observed that the petitioner in its petition has submitted that it is claiming debt:equity ratio on notional basis for additional capitalisation incurred during 2009-14 period. The Commission vide its letter dated 14.11.2015 sought an undertaking that actual equity infused is not less than 30%. In response, the petitioner vide its Affidavit dated 21.11.2015 submitted that no loan has been deployed for funding additional capital expenditure during 2009-14 and hence, the entire expenditure has been funded through equity, which is more than 30%.

17. We have considered the submission of the petitioner and has accordingly allowed the debt:equity ratio in accordance with Clause 2 of Regulation 12 of the 2009 Tariff Regulations. The overall debt equity as on 31.03.2014 including additional capitalization is as under :-

Funding	Amount (₹ in lakh)	(%)
Asset-I		
Debt	26661.42	72.35
Equity	10190.19	27.65
Total	36851.61	100.00
Asset-II		
Debt	20058.16	72.97
Equity	7428.76	27.03
Total	27486.92	100.00
Asset-III		
Debt	2488.42	72.00
Equity	967.92	28.00
Total	3456.34	100.00

# **Interest on Loan ("IOL")**

- 18. Regulation 16 of the 2009 Tariff Regulations provides the methodology for working out weighted average rate of interest on loan. The Commission in its earlier order dated 8.6.2011 in Petition No. 238/2010 has held that:-
  - "...in case of floating rate of interest, any change in the rates of interest during the tariff period will be considered at the time of true up".
- 19. The Petitioner has submitted the weighted average rate of interest on loan based on its actual loan portfolio and rate of interest.

20. We have considered the submissions of the petitioner. 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 approved as follows:-

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Asset-I					
Approved vide order dated 11.4.2011	555.09	498.07	441.24	384.75	328.87
As claimed by petitioner	524.49	474.56	566.93	462.54	333.90
Allowed after true up	524.48	474.55	566.96	462.55	333.92
Asset-II					
Approved vide order dated 11.4.2011	1188.21	1072.57	958.05	841.81	724.02
As claimed by petitioner	1188.22	1074.19	963.43	845.23	728.69
Allowed after true up	1188.22	1074.18	963.43	845.23	728.69
Asset-III					
Approved vide order dated 11.4.2011	147.47	136.68	126.97	114.28	100.15
As claimed by petitioner	147.47	135.62	124.55	111.24	100.24
Allowed after true up	147.47	135.62	124.55	111.24	100.24

# Return on Equity ("ROE")

- 21. 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:

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

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

(5) The generating company or the transmission licensee, as the case 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."

22. The petitioner has submitted that the MAT rate considered in the tariff order approving transmission tariff for the transmission asset was 11.330%, as applicable for 2008-09. 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))
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	20.961	19.610

23. Accordingly, the ROE as trued up is shown in the table below:-

(₹ in lakh)

					III Iakiij
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Asset-I					
Approved vide order dated 11.4.2011	1781.35	1781.35	1781.35	1781.35	1781.35
As claimed by petitioner	1902.92	1972.62	1974.55	1974.55	1998.30
Allowed after true up	1902.92	1972.62	1974.55	1974.55	1998.30
Asset-II					
Approved vide order dated 11.4.2011	1290.59	1291.90	1294.52	1295.83	1295.83
As claimed by petitioner	1378.67	1430.42	1433.60	1434.12	1454.07
Allowed after true up	1378.67	1430.42	1433.60	1434.12	1454.07
Asset-III					
Approved vide order dated 11.4.2011	159.44	162.06	166.00	167.31	167.31
As claimed by petitioner	170.32	178.09	180.43	181.06	186.53
Allowed after true up	170.32	178.09	180.43	181.07	186.53

24. The return on equity allowed in the instant order is more than the return on equity allowed vide order dated 11.4.2011 due to increase in the applicable MAT rate for the purpose of grossing up of base rate of return on equity.

## **Depreciation**

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

## "17. Depreciation:

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."

<sup>(4)</sup> 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:

26. 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 and additional capitalization as under:-

(₹ in lakh)

12 III IANI					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Asset-I					
Approved vide order dated 11.4.2011	1930.04	1930.04	1930.04	1930.04	1930.04
As claimed by petitioner	1930.05	1930.05	1930.05	1930.05	1930.05
Allowed after true up	1930.04	1930.04	1930.04	1930.04	1930.04
Asset-II					
Approved vide order dated 11.4.2011	1444.11	1445.43	1448.07	1449.39	1449.39
As claimed by petitioner	1444.11	1445.25	1446.86	1447.34	1449.77
Allowed after true up	1444.11	1445.25	1446.86	1447.34	1449.77
Asset-III					
Approved vide order dated 11.4.2011	170.52	173.16	177.12	178.44	178.44
As claimed by petitioner	170.52	171.90	173.87	174.45	177.40
Allowed after true up	170.52	171.90	173.87	174.45	177.40

# Operation & Maintenance Expense ("O&M Expense")

27. The petitioner has computed O&M expense for the assets mentioned in the petition and in accordance with the O&M norms specified in Regulation 19(g) of the 2009 Tariff Regulations. Accordingly, the O&M Expenses have been worked out as given in the table below:-

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Asset-I					
Actual (No of bays)	1	1	1	1	1
Norms as per Regulation (₹lakh/bay)	443.00	468.00	495.00	523.00	553.00
Total (₹ in lakh)	443.00	468.00	495.00	523.00	553.00
Asset-II					

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
No of bays	6	6	6	6	6
400 kV(₹lakh/bay)	52.40	55.40	58.57	61.92	65.46
400kV (AC, D/C) (Line Length) (in km)	314.782	314.782	314.782	314.782	314.782
400kV (AC, D/C) (Line Length) (in ₹lakh/km)	0.627	0.663	0.701	0.741	0.783
400 kV (6 nos bays) (₹in lakh)	314.40	332.40	351.42	371.52	392.76
400kV (AC, D/C) (Line Length) (in km)(₹ lakh)	197.368	208.7	220.662	233.253	246.474
Total	511.77	541.10	572.08	604.77	639.23
Asset-III					
400kV Sub- stations(₹lakh/bay)	52.40	55.40	58.57	61.92	65.46
No of bays	2	2	2	2	2
Total	104.80	110.80	117.14	123.84	130.92

The O&M Expenses claimed by the petitioner for tariff period 2009-14 is 28. same as that approved in the tariff order dated 11.4.2011 in Petition No. 242/2010. Accordingly, the O&M Expenses claimed by the petitioner, allowed and trued up are the same, and they are as follows:-

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Asset-I					
Approved vide order dated 11.4.2011	443.00	468.00	495.00	523.00	553.00
As claimed by petitioner	443.00	468.00	495.00	523.00	553.00
Allowed after true up	443.00	468.00	495.00	523.00	553.00
Asset-II					
Approved vide order dated 11.4.2011	511.77	541.10	572.08	604.77	639.23
As claimed by petitioner	511.77	541.10	572.08	604.77	639.23
Allowed after true up	511.77	541.10	572.08	604.77	639.23
Asset-III					
Approved vide order dated 11.4.2011	104.80	110.80	117.14	123.84	130.92
As claimed by petitioner	104.80	110.80	117.14	123.84	130.92
Allowed after true up	104.80	110.80	117.14	123.84	130.92

#### Interest on Working Capital("IWC")

- 29. 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.
- 30. The petitioner has submitted that the rate of interest on working capital has been considered as 12.25% 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.
- 31. The Commission in its order dated 11.4.2011 in Petition No. 242/2010 approved rate of interest on working capital of 12.25% as applicable for 2008-09. In accordance with clause (3) of Regulation 18 of the 2009 Tariff Regulations, as amended, rate of interest on working capital shall be on normative basis and in case of transmission assets declared under commercial operation prior to 1.4.2009 shall be equal to short-term Prime Lending Rate as applicable as on 1.4.2009. State Bank of India short-term Prime Lending Rate as on 1.4.2009 was 12.25%. Therefore, interest rate of 12.25% has been considered to work out the interest on working capital in the instant case.
- 32. The IWC trued up is as under:-

(₹ in lakh)

					( III lakii)
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Asset-I					
Maintenance Spares	66.45	70.20	74.25	78.45	82.95
O & M expenses	36.92	39.00	41.25	43.58	46.08
Receivables	818.90	826.64	847.42	834.55	821.96
Total	922.27	935.84	962.92	956.59	950.99
Rate of Interest (%)	12.25	12.25	12.25	12.25	12.25
Interest	112.98	114.64	117.96	117.18	116.50
Asset-II					
Maintenance Spares	76.77	81.17	85.81	90.72	95.89
O & M expenses	42.65	45.09	47.67	50.40	53.27
Receivables	771.99	766.72	754.12	739.90	729.91
Total	891.40	892.98	887.60	881.01	879.06
Rate of Interest (%)	12.25	12.25	12.25	12.25	12.25
Interest	109.20	109.39	108.73	107.92	107.69
Asset-III					
Maintenance Spares	15.72	16.62	17.57	18.58	19.64
O & M expenses	8.73	9.23	9.76	10.32	10.91
Receivables	101.42	102.01	101.97	101.09	101.88
Total	125.88	127.87	129.30	129.98	132.43
Rate of Interest (%)	12.25	12.25	12.25	12.25	12.25
Interest	15.42	15.66	15.84	15.92	16.22

33. The IWC claimed by the petitioner, allowed and trued up are as shown in the table below:-

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Asset-I					
Approved vide order dated 11.4.2011	111.08	111.14	111.31	111.53	111.87
As claimed by petitioner	112.98	114.64	117.96	117.18	116.50
Allowed after true up	112.98	114.64	117.96	117.18	116.50
Asset-II					
Approved vide order dated 11.4.2011	107.36	106.47	105.75	105.01	104.28
As claimed by petitioner	109.20	109.39	108.73	107.92	107.68
Allowed after true up	109.20	109.39	108.73	107.92	107.69

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Asset-III					
Approved vide order dated 11.4.2011	15.19	15.38	15.66	15.78	15.84
As claimed by petitioner	15.42	15.66	15.84	15.92	16.22
Allowed after true up	15.42	15.66	15.84	15.92	16.22

34. The IWC has increased on account of increase in receivables due to increase in RoE, Interest and Depreciation on account of additional capital expenditure and variation in ROE on account of applicable MAT rate during the 2009-14 tariff period.

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

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

ASSET-I	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Block					
Opening Gross block	36851.61	36851.61	36851.61	36851.61	36851.61
Addition during 2009-14 due to Projected Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Gross block	36851.61	36851.61	36851.61	36851.61	36851.61
Average Gross block	36851.61	36851.61	36851.61	36851.61	36851.61
Depreciation					
Rate of Depreciation(%)	5.237	5.237	5.237	5.237	5.237
Depreciable Value	33166.45	33166.45	33166.45	33166.45	33166.45
Elapsed Life (Beginning of the year)	4	5	6	7	8
Weighted Balance Useful life of the assets	21	20	19	18	17
Remaining Depreciable Value	25099.97	23169.93	21239.89	19309.85	17379.81
Depreciation	1930.04	1930.04	1930.04	1930.04	1930.04
Cumulative Depreciation	9996.52	11926.56	13856.60	15786.64	17716.68

ASSET-I	2009-10	2010-11	2011-12	2012-13	2013-14
Interest on Loan					
Gross Normative Loan	26661.42	26661.42	26661.42	26661.42	26661.42
Cumulative Repayment upto	8066.48	9996.52	11926.56	13856.60	15786.64
Previous Year	0000.40				
Net Loan-Opening	18594.94	16664.90	14734.86	12804.82	10874.78
Addition due to Additional	0.00	0.00	0.00	0.00	0.00
Capitalization Repayment during the year	1930.04	1930.04	1930.04	1930.04	1930.04
Net Loan-Closing	16664.90	14734.86	12804.82	10874.78	8944.74
Average Loan	17629.92	15699.88	13769.84	11839.80	9909.76
Weighted Average Rate of Interest	17029.92	15099.00	13709.04	11039.00	9909.76
on Loan(%)	2.9749	3.0226	4.1174	3.9068	3.3696
Interest	524.48	474.55	566.96	462.55	333.92
Return on Equity					
Opening Equity	10190.19	10190.19	10190.19	10190.19	10190.19
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	10190.19	10190.19	10190.19	10190.19	10190.19
Average Equity	10190.19	10190.19	10190.19	10190.19	10190.19
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	16.995	19.931	20.008	20.008	20.961
Return on Equity (Pre Tax ) (%)	18.674	19.358	19.377	19.377	19.610
Return on Equity (Pre Tax)	1902.92	1972.62	1974.55	1974.55	1998.30
Return on Equity (Fie Tax)	1902.92	1912.02	1974.33	1974.00	1990.30
Interest on Working Capital					
Maintenance Spares	66.45	70.20	74.25	78.45	82.95
O & M expenses	36.92	39.00	41.25	43.58	46.08
Receivables	818.90	826.64	847.42	834.55	821.96
Total	922.27	935.84	962.92	956.59	950.99
Interest	112.98	114.64	117.96	117.18	116.50
Annual Transmission Charges	4000.04	4000.04	4000.04	4000.04	4000.04
Depreciation	1930.04	1930.04	1930.04	1930.04	1930.04
Interest on Loan	524.48	474.55	566.96	462.55	333.92
Return on Equity	1902.92	1972.62	1974.55	1974.55	1998.30
Interest on Working Capital	112.98	114.64	117.96	117.18	116.50
O & M Expenses	443.00	468.00	495.00	523.00	553.00
Total	4913.41	4959.85	5084.51	5007.33	4931.75

ASSET-II	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Block					
Opening Gross block	27333.75	27333.75	27376.84	27394.91	27394.91



ASSET-II	2009-10	2010-11	2011-12	2012-13	2013-14
Addition during 2009-14 due to Projected Additional Capitalization	0.00	43.09	18.07	0.00	92.01
Closing Gross block	27333.75	27376.84	27394.91	27394.91	27486.92
Average Gross block	27333.75	27355.30	27385.88	27394.91	27440.92
Depreciation					
Rate of Depreciation(%)	5.283	5.283	5.283	5.283	5.283
Depreciable Value	24600.38	24619.77	24647.29	24655.42	24696.82
Elapsed Life (Beginning of the year)	2	3	4	5	6
Weighted Balance Useful life of the assets	31	30	29	28	27
Remaining Depreciable Value	20189.36	18764.64	17346.91	15908.19	14502.25
Depreciation	1444.11	1445.25	1446.86	1447.34	1449.77
Cumulative Depreciation/ Advance against Depreciation	5855.13	7300.37	8747.23	10194.57	11644.34
Interest on Loan					
Gross Normative Loan	19950.94	19950.94	19981.10	19993.75	19993.75
Cumulative Repayment upto Previous Year	4485.26	5929.37	7374.61	8821.47	10268.81
Net Loan-Opening	15465.68	14021.57	12606.49	11172.28	9724.94
Addition due to Additional Capitalization	0.00	30.16	12.65	0.00	64.41
Repayment during the year	1444.11	1445.25	1446.86	1447.34	1449.77
Net Loan-Closing	14021.57	12606.49	11172.28	9724.94	8339.58
Average Loan	14743.63	13314.03	11889.38	10448.61	9032.26
Weighted Average Rate of Interest on Loan (%)	8.0592	8.0681	8.1033	8.0894	8.0677
Interest	1188.22	1074.18	963.43	845.23	728.69
Return on Equity					
Opening Equity	7382.81	7382.81	7395.74	7401.16	7401.16
Additions	0.00	12.93	5.42	0.00	27.60
Closing Equity	7382.81	7395.74	7401.16	7401.16	7428.76
Average Equity	7382.81	7389.27	7398.45	7401.16	7414.96
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	16.995	19.931	20.008	20.008	20.961
Return on Equity (Pre Tax ) (%)	18.674	19.358	19.377	19.377	19.610
Return on Equity (Pre Tax)	1378.67	1430.42	1433.60	1434.12	1454.07
Interest on Working Capital					
Maintenance Spares	76.77	81.17	85.81	90.72	95.89



ASSET-II	2009-10	2010-11	2011-12	2012-13	2013-14
O & M expenses	42.65	45.09	47.67	50.40	53.27
Receivables	771.99	766.72	754.12	739.90	729.91
Total	891.40	892.98	887.60	881.01	879.06
Interest	109.20	109.39	108.73	107.92	107.69
Annual Transmission Charges					
Depreciation	1444.11	1445.25	1446.86	1447.34	1449.77
Interest on Loan	1188.22	1074.18	963.43	845.23	728.69
Return on Equity	1378.67	1430.42	1433.60	1434.12	1454.07
Interest on Working Capital	109.20	109.39	108.73	107.92	107.69
O & M Expenses	511.77	541.10	572.08	604.77	639.23
Total	4631.95	4600.34	4524.70	4439.39	4379.45

ASSET-III	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Block					
Opening Gross block	3270.24	3270.24	3322.79	3344.72	3344.72
Addition during 2009-14 due to Projected Additional Capitalization	0.00	52.55	21.93	0.00	111.62
Closing Gross block	3270.24	3322.79	3344.72	3344.72	3456.34
Average Gross block	3270.24	3296.52	3333.76	3344.72	3400.53
Depreciation					
Rate of Depreciation (%)	5.214	5.215	5.215	5.216	5.217
Depreciable Value	2940.88	2964.52	2998.04	3007.91	3058.14
Elapsed Life (Beginning of the year)	2	3	4	5	6
Weighted Balance Useful life of the assets	23	22	21	20	19
Remaining Depreciable Value	2591.13	2444.26	2305.87	2141.87	2017.65
Depreciation	170.52	171.90	173.87	174.45	177.40
Cumulative Depreciation/ Advance against Depreciation	520.27	692.17	866.04	1040.49	1217.88
_					
Interest on Loan					
Gross Normative Loan	2358.15	2358.15	2394.94	2410.29	2410.29
Cumulative Repayment upto Previous Year	399.41	569.93	741.83	915.70	1090.15
Net Loan-Opening	1958.74	1788.22	1653.11	1494.59	1320.14
Addition due to Additional Capitalization	0.00	36.79	15.35	0.00	78.13



ASSET-III	2009-10	2010-11	2011-12	2012-13	2013-14
			-		
Repayment during the year	170.52	171.90	173.87	174.45	177.40
Net Loan-Closing	1788.22	1653.11	1494.59	1320.14	1220.88
Average Loan	1873.48	1720.66	1573.85	1407.36	1270.51
Weighted Average Rate of Interest on Loan (%)	7.8717	7.8816	7.9136	7.9043	7.8897
Interest	147.47	135.62	124.55	111.24	100.24
Return on Equity					
Opening Equity	912.09	912.09	927.86	934.43	934.43
Additions	0.00	15.77	6.58	0.00	33.49
Closing Equity	912.09	927.86	934.43	934.43	967.92
Average Equity	912.09	919.97	931.14	934.43	951.18
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	16.995	19.931	20.008	20.008	20.961
Return on Equity (Pre Tax) (%)	18.674	19.358	19.377	19.377	19.610
Return on Equity (Pre Tax)	170.32	178.09	180.43	181.07	186.53
Interest on Working Capital					
Maintenance Spares	15.72	16.62	17.57	18.58	19.64
O & M expenses	8.73	9.23	9.76	10.32	10.91
Receivables	101.42	102.01	101.97	101.09	101.88
Total	125.88	127.87	129.30	129.98	132.43
Interest	15.42	15.66	15.84	15.92	16.22
Annual Transmission Charges					
Depreciation	170.52	171.90	173.87	174.45	177.40
Interest on Loan	147.47	135.62	124.55	111.24	100.24
Return on Equity	170.32	178.09	180.43	181.07	186.53
Interest on Working Capital	15.42	15.66	15.84	15.92	16.22
O & M Expenses	104.80	110.80	117.14	123.84	130.92
Total	608.53	612.07	611.83	606.52	611.30

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

36. The petitioner has claimed the transmission charges as under:-

(₹ in lakh)

					(* III lakii)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I					
Depreciation	1930.05	1930.05	1930.05	743.04	743.05
Interest on Loan	262.49	214.13	184.95	199.82	139.37
Return on Equity	1998.30	1998.30	1998.30	1998.30	1998.30
Interest on Working Capital	128.39	129.99	132.19	108.36	110.34
O & M Expenses	578.00	627.00	679.00	736.00	797.00
Total	4897.23	4899.47	4924.49	3785.52	3788.06
Asset-II					
Depreciation	1452.19	1452.19	1452.19	1452.19	1452.19
Interest on Loan	611.75	491.59	371.88	252.10	137.08
Return on Equity	1456.78	1456.78	1456.78	1456.78	1456.78
Interest on Working Capital	113.32	111.64	109.98	108.37	106.90
O & M Expenses	584.35	603.91	623.88	644.59	665.97
Total	4218.39	4116.11	4014.71	3914.03	3818.92
Asset-III					
Depreciation	180.34	180.34	180.34	180.34	180.34
Interest on Loan	88.97	74.45	60.03	45.82	32.41
Return on Equity	189.81	189.81	189.81	189.81	189.81
Interest on Working Capital	17.23	17.12	17.01	16.92	16.86
O & M Expenses	120.60	124.60	128.74	133.02	137.42
Total	596.95	586.32	575.93	565.91	556.84

The details submitted by the petitioner in support of its claim for interest on 37. working capital are given hereunder:-

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I					
Maintenance Spares	86.70	94.05	101.85	110.40	119.55
O & M expenses	48.17	52.25	56.58	61.33	66.42
Receivables	816.21	816.58	820.75	630.92	631.34
Total	951.08	962.88	979.18	802.65	817.31

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	128.39	129.99	132.19	108.36	110.34
Asset-II					
Maintenance Spares	87.65	90.59	93.58	96.69	99.90
O & M expenses	48.70	50.33	51.99	53.72	55.50
Receivables	703.07	686.02	669.12	652.34	636.49
Total	839.41	826.94	814.69	802.74	791.88
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	113.32	111.64	109.98	108.37	106.90
Asset-III					
Maintenance Spares	18.09	18.69	19.31	19.95	20.61
O & M expenses	10.05	10.38	10.73	11.09	11.45
Receivables	99.49	97.72	95.99	94.32	92.81
Total	127.63	126.79	126.03	125.36	124.87
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	17.23	17.12	17.01	16.92	16.86

# **Capital Cost**

- 38. Clause (1) and (3) of Regulation 9 of the 2014 Tariff Regulations provides as follows:-
  - "(1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects."
  - "(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."
- 39. The petitioner has claimed capital expenditure of ₹36851.61 lakh for Asset-I, ₹27486.92 lakh for Asset-II and ₹3456.34 lakh for Asset-III as on 31.3.2014 including additional capitalization during tariff period 2009-14. Further,

the petitioner has not projected any additional capital expenditure during the tariff period 2014-19.

40. The trued up capital cost of ₹36851.61 lakh for Asset-I, ₹27486.92 lakh for Asset-II and ₹3456.34 lakh for Asset-III as on 31.3.2014 is considered for the purpose of tariff for tariff period 2014-19.

# **Additional Capital Expenditure**

41. The petitioner has not claimed any additional expenditure for the tariff period 2014-19. No additional capital expenditure has been considered for the tariff period 2014-19.

#### **Debt:Equity Ratio**

- 42. 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."
- 43. The admitted debt:equity ratio of the assets for the tariff period ending 31.3.2014 has been considered as opening debt:equity ratio as on 1.4.2014.
- 44. The details of the debt:equity considered for the purpose of tariff for 2014-19 tariff period is as follows:-

Funding	Amount (₹in lakh)	(%)
Asset-I		
Debt	26661.42	72.35
Equity	10190.19	27.65
Total	36851.61	
Asset-II		
Debt	20058.16	72.97
Equity	7428.76	27.03
Total	27486.92	
Asset-III		
Debt	2488.42	72.00
Equity	967.92	28.00
Total	3456.34	

#### Interest on Loan ("IOL")

- 45. Clause (5) and (6) of Regulation 26 of the 2014 Tariff Regulations is 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."
- The weighted average rate of IOL has been considered on the basis of 46. rate prevailing as on 1.4.2014. The petitioner has prayed that the change in

interest rate due to floating rate of interest applicable, if any, during 2014-19 tariff period shall be adjusted at the time of truing up. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up or next revision of tariff. By considering above, 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:-

Asset-I	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	26661.42	26661.42	26661.42	26661.42	26661.42
Cumulative Repayment up to Previous Year	17716.68	19646.72	21576.76	23506.80	24249.85
Net Loan-Opening	8944.74	7014.70	5084.66	3154.62	2411.57
Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Repayment during the year	1930.04	1930.04	1930.04	743.05	743.05
Net Loan-Closing	7014.70	5084.66	3154.62	2411.57	1668.52
Average Loan	7979.72	6049.68	4119.64	2783.09	2040.04
Weighted Average Rate of Interest on Loan (%)	3.2919	3.5418	4.4916	7.1800	6.8300
Interest	262.69	214.27	185.04	199.83	139.33
Asset-II					
Gross Normative Loan	20058.16	20058.16	20058.16	20058.16	20058.16
Cumulative Repayment up to Previous Year	11718.58	13170.77	14622.97	16075.16	17527.36
Net Loan-Opening	8339.58	6887.39	5435.19	3983.00	2530.80
Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Repayment during the year	1452.20	1452.20	1452.20	1452.20	1452.20
Net Loan-Closing	6887.39	5435.19	3983.00	2530.80	1078.61
Average Loan	7613.49	6161.29	4709.09	3256.90	1804.70
Weighted Average Rate of Interest on Loan (%)	8.0350	7.9787	7.8971	7.7406	7.5958
Interest	611.74	491.59	371.88	252.10	137.08

Asset-I	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-III					
Gross Normative Loan	2488.42	2488.42	2488.42	2488.42	2488.42
Cumulative Repayment upto Previous Year	1267.54	1447.89	1628.23	1808.57	1988.91
Net Loan-Opening	1220.88	1040.53	860.19	679.85	499.51
Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Repayment during the year	180.34	180.34	180.34	180.34	180.34
Net Loan-Closing	1040.53	860.19	679.85	499.51	319.17
Average Loan	1130.71	950.36	770.02	589.68	409.34
Weighted Average Rate of Interest on Loan (%)	7.8686	7.8351	7.7968	7.7727	7.9200
Interest	88.97	74.46	60.04	45.83	32.42

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

- 47. Clause (1) and(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 inrupee 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."

48. The petitioner has computed ROE at the rate of 19.610% after grossing up the ROE 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.

- 49. 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.
- 50. 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 determined by the Commission is shown in the table below:-

				(₹	in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I					
Opening Equity	10190.19	10190.19	10190.19	10190.19	10190.19
Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Equity	10190.19	10190.19	10190.19	10190.19	10190.19
Average Equity	10190.19	10190.19	10190.19	10190.19	10190.19
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 of Equity (Pre-Tax) (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity (Pre- Tax)	1998.30	1998.30	1998.30	1998.30	1998.30
Asset-II					
Opening Equity	7428.76	7428.76	7428.76	7428.76	7428.76
Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Equity	7428.76	7428.76	7428.76	7428.76	7428.76
Average Equity	7428.76	7428.76	7428.76	7428.76	7428.76
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 of Equity(Pre-Tax) (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity(Pre- Tax)	1456.78	1456.78	1456.78	1456.78	1456.78
Asset-III					
Opening Equity	967.92	967.92	967.92	967.92	967.92
Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Equity	967.92	967.92	967.92	967.92	967.92
Average Equity	967.92	967.92	967.92	967.92	967.92
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 of Equity (Pre-Tax)(%)	19.610	19.610	19.610	19.610	19.610
Return on Equity(Pre- Tax)	189.81	189.81	189.81	189.81	189.81

#### **Depreciation**

51. 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."
- 52. The petitioner has computed depreciation considering capital expenditure of ₹36851.61 lakh for Asset-I, ₹27486.92 lakh for Asset-II, and ₹3456.34 lakh for Asset-III as on 31.3.2014.
- 53. We have considered the submission made by the petitioner with reference to depreciation. Depreciation is allowed as provided under Regulation 27 of the 2014 Tariff Regulations. The details of the depreciation claimed and allowed are given hereunder:-

(₹ in lakh)

			(2.1)	i ianii)
2014-15	2015-16	2016-17	2017-18	2018-19
36851.61	36851.61	36851.61	36851.61	36851.61
0.00	0.00	0.00	0.00	0.00
36851.61	36851.61	36851.61	36851.61	36851.61
5.237	5.237	5.237	2.0163	2.0163
33166.45	33166.45	33166.45	33166.45	33166.45
15449.77	13519.73	11589.69	9659.65	8916.60
1930.04	1930.04	1930.04	743.05	743.05
27486.92	27486.92	27486.92	27486.92	27486.92
0.00	0.00	0.00	0.00	0.00
27486.92	27486.92	27486.92	27486.92	27486.92
5.283	5.283	5.283	5.283	5.283
24738.23	24738.23	24738.23	24738.23	24738.23
13093.89	11641.70	10189.50	8737.31	7285.11
1452.20	1452.20	1452.20	1452.20	1452.20
3456.34	3456.34	3456.34	3456.34	3456.34
0.00	0.00	0.00	0.00	0.00
3456.34	3456.34	3456.34	3456.34	3456.34
5.218	5.218	5.218	5.218	5.218
3108.37	3108.37	3108.37	3108.37	3108.37
1890.48	1710.14	1529.80	1349.46	1169.11
180.34	180.34	180.34	180.34	180.34
	36851.61 0.00 36851.61 5.237 33166.45 15449.77 1930.04 27486.92 0.00 27486.92 5.283 24738.23 13093.89 1452.20 3456.34 0.00 3456.34 5.218 3108.37 1890.48	36851.61 36851.61  0.00 0.00  36851.61 36851.61 5.237 5.237 33166.45 33166.45 15449.77 13519.73 1930.04 1930.04  27486.92 27486.92 0.00 0.00  27486.92 27486.92 5.283 5.283 24738.23 24738.23 13093.89 11641.70 1452.20 1452.20  3456.34 3456.34 0.00 0.00  3456.34 3456.34 5.218 5.218 3108.37 3108.37 1890.48 1710.14	36851.61       36851.61       36851.61       36851.61         0.00       0.00       0.00         36851.61       36851.61       36851.61       5.237       5.237         33166.45       33166.45       33166.45       33166.45       1589.69         1930.04       1930.04       1930.04       1930.04         27486.92       27486.92       27486.92       27486.92         5.283       5.283       5.283       5.283         24738.23       24738.23       24738.23       13093.89       11641.70       10189.50         1452.20       1452.20       1452.20         3456.34       3456.34       3456.34       3456.34         5.218       5.218       5.218       5.218         3108.37       3108.37       3108.37       1529.80	2014-15         2015-16         2016-17         2017-18           36851.61         36851.61         36851.61         36851.61           0.00         0.00         0.00         0.00           36851.61         36851.61         36851.61         36851.61           5.237         5.237         5.237         2.0163           33166.45         33166.45         33166.45         33166.45           15449.77         13519.73         11589.69         9659.65           1930.04         1930.04         1930.04         743.05           27486.92         27486.92         27486.92         27486.92           0.00         0.00         0.00         0.00           27486.92         27486.92         27486.92         27486.92           5.283         5.283         5.283         5.283           24738.23         24738.23         24738.23         24738.23           13093.89         11641.70         10189.50         8737.31           1452.20         1452.20         1452.20           3456.34         3456.34         3456.34         3456.34           0.00         0.00         0.00         0.00           3456.34         3456.34         <

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

The petitioner has computed normative O&M Expenses as per sub clause 54. (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\

					₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I					
Actual (No of bays)	1	1	1	1	1
Norms as per Regulation (₹lakh/bay)	578.00	627.00	679.00	736.00	797.00
Total (₹ in lakh)	578.00	627.00	679.00	736.00	797.00
Asset-II					
400 kV(₹lakh/bay)	60.30	62.30	64.37	66.51	68.71
No of bays	6	6	6	6	6
400 kV (AC, D/C) (Line Length) (in ₹lakh/km)	0.707	0.731	0.755	0.780	0.806
400 kV (AC, D/C) (Line Length) (in km)	314.78	314.78	314.78	314.782	314.782
400 kV (6 nos. bays)	361.8	373.8	386.22	399.06	412.26
400 kV (AC, D/C) (Line Length) (in km)(₹ lakh )	222.55	230.11	237.66	245.53	253.7143
Total	584.35	603.91	623.88	644.59	665.97
Asset-III					
400kV Sub- stations( <b>₹</b> ₹lakh/bay)	60.30	62.30	64.37	66.51	68.71
No of bays	2	2	2	2	2
Total	120.60	124.60	128.74	133.02	137.42

55. The petitioner has submitted that 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 Company is due during 2014-19 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.

- 56. 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.
- 57. The details of O&M Expenses allowed are given hereunder:-

(₹ in lakh)

O & M Expenses Allowed	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	578.00	627.00	679.00	736.00	797.00
Asset-II	584.35	603.91	623.88	644.59	665.97
Asset-III	120.60	124.60	128.74	133.02	137.42

#### **Interest on Working Capital ("IWC")**

58. 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;"

- 59. 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%.
- 60. 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 as determined by the Commission is shown in the table below:-

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I					
Maintenance Spares	86.70	94.05	101.85	110.40	119.55
O & M expenses	48.17	52.25	56.58	61.33	66.42
Receivables	816.24	816.60	820.76	630.92	631.34
Total	951.10	962.90	979.19	802.66	817.30
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	128.40	129.99	132.19	108.36	110.34
Asset-II					
Maintenance Spares	87.65	90.59	93.58	96.69	99.90
O & M expenses	48.70	50.33	51.99	53.72	55.50
Receivables	703.07	686.02	669.12	652.34	636.49
Total	839.41	826.93	814.69	802.74	791.88
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	113.32	111.64	109.98	108.37	106.90
Asset-III					
Maintenance Spares	18.09	18.69	19.31	19.95	20.61
O & M expenses	10.05	10.38	10.73	11.09	11.45
Receivables	99.49	97.72	95.99	94.32	92.81
Total	127.63	126.80	126.03	125.36	124.87
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	17.23	17.12	17.01	16.92	16.86

# **Annual Transmission Charges**

The detailed computation of the various components of the annual fixed 61. charges for the transmission asset for the tariff period 2014-19 is summarised below:-

				(2 111 1	<u> </u>
ASSET-I	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Block					
Opening Gross block	36851.61	36851.61	36851.61	36851.61	36851.61
Addition during 2014-19 due to					
Projected Additional	0.00	0.00	0.00	0.00	0.00
Capitalization					
Closing Gross block	36851.61	36851.61	36851.61	36851.61	36851.61
Average Gross block	36851.61	36851.61	36851.61	36851.61	36851.61
Depreciation					
Rate of Depreciation (%)	5.237	5.237	5.237	2.016	2.016
Depreciable Value	33166.45	33166.45	33166.45	33166.45	33166.45
Elapsed Life (Beginning of the	9	10	11	12	13
year)	3	10		12	10
Weighted Balance Useful life of	16	15	14	13	12
the assets					
Remaining Depreciable Value	15449.77	13519.73	11589.69	9659.65	8916.60
Depreciation	1930.04	1930.04	1930.04	743.05	743.05
Cumulative Depreciation	19646.72	21576.76	23506.80	24249.85	24992.90
Interest on Loan					
Gross Normative Loan	26661.42	26661.42	26661.42	26661.42	26661.42
Cumulative Repayment up to	17716.68	19646.72	21576.76	23506.80	24249.85
Previous Year					
Net Loan-Opening	8944.74	7014.70	5084.66	3154.62	2411.57
Addition due to Additional	0.00	0.00	0.00	0.00	0.00
Capitalization					
Repayment during the year	1930.04	1930.04	1930.04	743.05	743.05
Net Loan-Closing	7014.70	5084.66	3154.62	2411.57	1668.52
Average Loan	7979.72	6049.68	4119.64	2783.09	2040.04
Weighted Average Rate of	3.2919	3.5418	4.4916	7.1800	6.8300
Interest on Loan					
Interest	262.69	214.27	185.04	199.83	139.33
Return on Equity					
Opening Equity	10190.19	10190.19	10190.19	10190.19	10190.19
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	10190.19	10190.19	10190.19	10190.19	10190.19

ASSET-I	2014-15	2015-16	2016-17	2017-18	2018-19
Average Equity	10190.19	10190.19	10190.19	10190.19	10190.19
Return on Equity (Base Rate)	15.500	15.500	15.500	15.500	15.500
(%)	13.300	13.300	13.300	13.300	13.300
MAT Rate for respective year	20.961	20.961	20.961	20.961	20.961
(%)					
Return on Equity (Pre Tax) (%)	19.610	9.610	19.610	19.610	19.610
Return on Equity (Pre Tax)	1998.30	1998.30	1998.30	1998.30	1998.30
Interest on Working Capital					
Maintenance Spares	86.70	94.05	101.85	110.40	119.55
O & M expenses	48.17	52.25	56.58	61.33	66.42
Receivables	816.24	816.60	820.76	630.92	631.34
Total	951.10	962.90	979.19	802.66	817.30
Interest	128.40	129.99	132.19	108.36	110.34
Annual Transmission					
Charges					
Depreciation	1930.04	1930.04	1930.04	743.05	743.05
Interest on Loan	262.69	214.27	185.04	199.83	139.33
Return on Equity	1998.30	1998.30	1998.30	1998.30	1998.30
Interest on Working Capital	128.40	129.99	132.19	108.36	110.34
O & M Expenses	578.00	627.00	679.00	736.00	797.00
Total	4897.42	4899.59	4924.56	3785.53	3788.02

ASSET-II	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Block					
Opening Gross block	27486.92	27486.92	27486.92	27486.92	27486.92
Addition during 2014-19 due to					
Projected Additional	0.00	0.00	0.00	0.00	0.00
Capitalization					
Closing Gross block	27486.92	27486.92	27486.92	27486.92	27486.92
Average Gross block	27486.92	27486.92	27486.92	27486.92	27486.92
Depreciation					
Rate of Depreciation (%)	5.283	5.283	5.283	5.283	5.283
Depreciable Value	24738.23	24738.23	24738.23	24738.23	24738.23
Elapsed Life (Beginning of the	7	8	9	10	11
year)	,	0	9	10	1 1
Weighted Balance Useful life of	26	25	24	23	22
the assets	20	20	27	20	22
Remaining Depreciable Value	13093.89	11641.70	10189.50	8737.31	7285.11
Depreciation	1452.20	1452.20	1452.20	1452.20	1452.20
Cumulative Depreciation	13096.53	14548.73	16000.92	17453.12	18905.31
-					
Interest on Loan					
Gross Normative Loan	20058.16	20058.16	20058.16	20058.16	20058.16



ASSET-II	2014-15	2015-16	2016-17	2017-18	2018-19
Cumulative Repayment upto	11718.58	13170.77	14622.97	16075.16	17527.36
Previous Year	11710.50	13170.77	14622.97	16075.16	17527.36
Net Loan-Opening	8339.58	6887.39	5435.19	3983.00	2530.80
Addition due to Additional	0.00	0.00	0.00	0.00	0.00
Capitalization					
Repayment during the year	1452.20	1452.20	1452.20	1452.20	1452.20
Net Loan-Closing	6887.39	5435.19	3983.00	2530.80	1078.61
Average Loan	7613.49	6161.29	4709.09	3256.90	1804.70
Weighted Average Rate of	8.0350	7.9787	7.8971	7.7406	7.5958
Interest on Loan					
Interest	611.74	491.59	371.88	252.10	137.08
Return on Equity					
Opening Equity	7428.76	7428.76	7428.76	7428.76	7428.76
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	7428.76	7428.76	7428.76	7428.76	7428.76
Average Equity	7428.76	7428.76	7428.76	7428.76	7428.76
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	20.961	20.961	20.961	20.961
Return on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity (Pre Tax)	1456.78	1456.78	1456.78	1456.78	1456.78
Interest on Working Capital					
Maintenance Spares	87.65	90.59	93.58	96.69	99.90
O & M expenses	48.70	50.33	51.99	53.72	55.50
Receivables	703.07	686.02	669.12	652.34	636.49
Total	839.41	826.93	814.69	802.74	791.88
Interest	113.32	111.64	109.98	108.37	106.90
<b>Annual Transmission Charges</b>					
Depreciation	1452.20	1452.20	1452.20	1452.20	1452.20
Interest on Loan	611.74	491.59	371.88	252.10	137.08
Return on Equity	1456.78	1456.78	1456.78	1456.78	1456.78
Interest on Working Capital	113.32	111.64	109.98	108.37	106.90
O & M Expenses	584.35	603.91	623.88	644.59	665.97
Total	4218.39	4116.11	4014.72	3914.04	3818.94

ASSET-III	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Block					
Opening Gross block	3456.34	3456.34	3456.34	3456.34	3456.34
Addition during 2014-19 due to Projected Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Gross block	3456.34	3456.34	3456.34	3456.34	3456.34



2014-15	2015-16	2016-17	2017-18	2018-19
				3456.34
3430.34	3430.34	3-30.3-	3430.34	3430.34
5 2177	5 2177	5 2177	5 2177	5.2177
				3108.37
3100.37	3100.37	3100.37	3100.37	3100.37
7	8	9	10	11
18	17	16	15	14
1890.48	1710.14	1529.80	1349.46	1169.11
180 34	180 34	180 34	180 34	180.34
1				2119.59
1390.23	1376.37	1730.91	1939.23	2119.59
0400 40	0.400_40	0.400, 40	0.400.40	0.400.40
2488.42	2488.42	2488.42	2488.42	2488.42
1267.54	1447.89	1628.23	1808.57	1988.91
4000.00	4040.50	000.40	070.05	100.51
1220.88	1040.53	860.19	679.85	499.51
0.00	0.00	0.00	0.00	0.00
				180.34
1				319.17
1130.71	950.36	770.02	589.68	409.34
7.8686	7.8351	7.7968	7.7727	7.9200
88.97	74.46	60.04	45.83	32.42
				967.92
0.00		0.00	0.00	0.00
	967.92	967.92	967.92	967.92
967.92	967.92	967.92	967.92	967.92
15 500	15 500	15 500	15 500	15.500
13.300	13.300	13.300	13.300	13.300
20 961	20 961	20 961	20 961	20.961
20.901	20.901	20.901	20.901	20.901
10.610	10.610	10.610	10.610	19.610
19.010	19.010	19.010	19.010	19.010
189.81	189.81	189.81	189.81	189.81
18.09	18.69	19.31	19.95	20.61
10.05	10.38	10.73	11.09	11.45
99.49	97.72	95.99	94.32	92.81
127.63	126.80	126.03	125.36	124.87
				16.86
	18 1890.48 180.34 1398.23  2488.42 1267.54 1220.88 0.00 180.34 1040.53 1130.71 7.8686 88.97  967.92 0.00 967.92 967.92 15.500 20.961 19.610 189.81	3456.34       3456.34         5.2177       5.2177         3108.37       3108.37         7       8         18       17         1890.48       1710.14         180.34       180.34         1398.23       1578.57         2488.42       2488.42         1220.88       1040.53         0.00       0.00         180.34       180.34         1040.53       860.19         1130.71       950.36         7.8686       7.8351         88.97       74.46         967.92       967.92         967.92       967.92         967.92       967.92         15.500       15.500         20.961       20.961         19.610       19.610         189.81       189.81         18.09       18.69         10.05       10.38         99.49       97.72	3456.34         3456.34         3456.34         3456.34           5.2177         5.2177         3108.37         3108.37           7         8         9           18         17         16           1890.48         1710.14         1529.80           180.34         180.34         180.34           1398.23         1578.57         1758.91           2488.42         2488.42         2488.42           1267.54         1447.89         1628.23           1220.88         1040.53         860.19           0.00         0.00         0.00           180.34         180.34         180.34           1040.53         860.19         679.85           1130.71         950.36         770.02           7.8686         7.8351         7.7968           88.97         74.46         60.04           967.92         967.92         967.92           967.92         967.92         967.92           967.92         967.92         967.92           967.92         967.92         967.92           15.500         15.500         15.500           189.81         189.81         189.81	3456.34         3456.34         3456.34         3456.34           5.2177         5.2177         5.2177         5.2177           3108.37         3108.37         3108.37         3108.37           7         8         9         10           18         17         16         15           1890.48         1710.14         1529.80         1349.46           180.34         180.34         180.34         180.34           1398.23         1578.57         1758.91         1939.25           2488.42         2488.42         2488.42         2488.42           1267.54         1447.89         1628.23         1808.57           1220.88         1040.53         860.19         679.85           0.00         0.00         0.00         0.00           180.34         180.34         180.34         180.34           1040.53         860.19         679.85         499.51           1130.71         950.36         77.02         589.68           7.8686         7.8351         7.7968         7.7727           88.97         74.46         60.04         45.83           967.92         967.92         967.92         967.92



ASSET-III	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Transmission					
Charges					
Depreciation	180.34	180.34	180.34	180.34	180.34
Interest on Loan	88.97	74.46	60.04	45.83	32.42
Return on Equity	189.81	189.81	189.81	189.81	189.81
Interest on Working Capital	17.23	17.12	17.01	16.92	16.86
O & M Expenses	120.60	124.60	128.74	133.02	137.42
Total	596.95	586.33	575.94	565.93	556.85

#### Filing Fee and Publication Expenses

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

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

63. 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**

64. 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.

#### **Deferred Tax Liability**

65. The petitioner has sought recovery of deferred tax liability before 1.4.2009 from the beneficiaries or long term consumers/ DICs as and when materialized under Regulation 49 of the 2014 Tariff Regulations. The deferred tax liability shall be dealt as per Regulation 49 of the 2014 Tariff Regulations, as amended. Accordingly, the petitioner is entitled to recover the deferred tax liability upto 31.3.2009 whenever the same materializes, directly from the beneficiaries or long term transmission customers /DICs.

#### **Foreign Exchange Rate Variation**

66. The Petitioner has sought recovery of FERV on foreign loans deployed as provided in Clause 50 of the 2014 Tariff Regulations. The Petitioner is entitled to recover the FERV directly from the beneficiaries or the long term transmission customers/DICs as the case may be, in accordance with Clause 1 of Regulation 51 of the 2014 Tariff Regulations.

#### **Sharing of Transmission Charges**

67. 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 Regulations.

This Order disposes of Petition No. 509/TT/2014. 68.

Sd/-Sd/-(Dr. M. K. lyer) (A.S. Bakshi) Member Member

# ANNEXURE-I

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

## ASSET-I

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
BOND XII-					
Gross Opening Loan	427.00	427.00	427.00	427.00	427.00
Cumulative Repayments of loans up to previous year	142.33	177.91	213.49	249.07	284.65
Net Loans Opening	284.67	249.09	213.51	177.93	142.35
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	35.58	35.58	35.58	35.58	35.58
Net Closing Loans	249.09	213.51	177.93	142.35	106.77
Average Net Loan	266.88	231.30	195.72	160.14	124.56
Rate of Interest on Loan (%)	9.7010	9.7010	9.7010	9.7010	9.7010
Interest on Loan	25.89	22.44	18.99	15.54	12.08
BOND XIII-Option 1					
Gross Opening Loan	2051.00	2051.00	2051.00	2051.00	2051.00
Cumulative Repayments of loans up to previous year	512.75	683.67	854.59	1025.51	1196.43
Net Loans Opening	1538.25	1367.33	1196.41	1025.49	854.57
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	170.92	170.92	170.92	170.92	170.92
Net Closing Loans	1367.33	1196.41	1025.49	854.57	683.65
Average Net Loan	1452.79	1281.87	1110.95	940.03	769.11
Rate of Interest on Loan	8.6303%	8.6304%	8.6305%	8.6295%	8.6295%
Interest on Loan	125.38	110.63	95.88	81.12	66.37
BOND XV					
Gross Opening Loan	2151.00	2151.00	2151.00	2151.00	2151.00
Cumulative Repayments of loans up to previous year	358.50	537.75	717.00	896.25	1075.50
Net Loans Opening	1792.50	1613.25	1434.00	1254.75	1075.50



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Add: Drawals during the	0.00	0.00	0.00	0.00	0.00
year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	179.25	179.25	179.25	179.25	179.25
Net Closing Loans	1613.25	1434.00	1254.75	1075.50	896.25
Average Net Loan	1702.88	1523.63	1344.38	1165.13	985.88
Rate of Interest on Loan	6.6799%	6.6801%	6.6797%	6.6800%	6.6804%
Interest on Loan	113.75	101.78	89.80	77.83	65.86
BOND XVI					
Gross Opening Loan	1132.00	1132.00	1132.00	1132.00	1132.00
Cumulative Repayments of loans upto previous year	113.20	226.40	339.60	452.80	566.00
Net Loans Opening	1018.80	905.60	792.40	679.20	566.00
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	113.20	113.20	113.20	113.20	113.20
Net Closing Loans	905.60	792.40	679.20	566.00	452.80
Average Net Loan	962.20	849.00	735.80	622.60	509.40
Rate of Interest on Loan	7.1004%	7.1001%	7.0998%	7.0993%	7.1005%
Interest on Loan	68.32	60.28	52.24	44.20	36.17
BOND XVII-Add cap for 20	005-06 Drawl or	n 22-9-2005			
Gross Opening Loan	184.00	184.00	184.00	184.00	184.00
Cumulative Repayments of loans upto previous year	0.00	18.40	36.80	55.20	73.60
Net Loans Opening	184.00	165.60	147.20	128.80	110.40
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	18.40	18.40	18.40	18.40	18.40
Net Closing Loans	165.60	147.20	128.80	110.40	92.00
Average Net Loan	174.80	156.40	138.00	119.60	101.20
Rate of Interest on Loan	7.3913%	7.3913%	7.3913%	7.3913%	7.3913%
Interest on Loan	12.92	11.56	10.20	8.84	7.48
BOND XVII-Add cap for 20	006-07	<u>'</u>			
Gross Opening Loan	143.38	143.38	143.38	143.38	143.38
Cumulative Repayments of loans upto previous	0.00	14.34	28.68	43.02	57.36
year Net Loans Opening	143.38	129.04	114.70	100.36	86.02
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Less: Repayment(s) of loans during the year	14.34	14.34	14.34	14.34	14.34
Net Closing Loans	129.04	114.70	100.36	86.02	71.68
Average Net Loan	136.21	121.87	107.53	93.19	78.85
Rate of Interest on Loan	7.3930%	7.3931%	7.3933%	7.3935%	7.3938%
Interest on Loan	10.07	9.01	7.95	6.89	5.83
Oriental Bank of Commerc					
Gross Opening Loan	417.00	417.00	417.00	417.00	417.00
Cumulative Repayments of loans upto previous year	173.75	208.50	243.25	278.00	312.75
Net Loans Opening	243.25	208.50	173.75	139.00	104.25
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	34.75	34.75	34.75	34.75	34.75
Net Closing Loans	208.50	173.75	139.00	104.25	69.50
Average Net Loan	225.88	191.13	156.38	121.63	86.88
Rate of Interest on Loan	9.5982%	10.2207%	12.3157%	12.3721%	12.3500%
Interest on Loan	21.68	19.53	19.26	15.05	10.73
SEB AB (publ)-ADD CAP t	for 2004-05 (8-3	3-2005)-6.44			
Gross Opening Loan	179.55	179.55	179.55	179.55	179.55
Cumulative Repayments of loans upto previous year	59.85	74.81	89.77	104.73	119.69
Net Loans Opening	119.70	104.74	89.78	74.82	59.86
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	14.96	14.96	14.96	14.96	14.96
Net Closing Loans	104.74	89.78	74.82	59.86	44.90
Average Net Loan	112.22	97.26	82.30	67.34	52.38
Rate of Interest on Loan	1.1317%	1.1516%	2.6124%	2.2721%	1.4128%
Interest on Loan	1.27	1.12	2.15	1.53	0.74
SEB AB(publ)-ADD CAP for	or 2004-05-6.47	7			
Gross Opening Loan	155.24	155.24	155.24	155.24	155.24
Cumulative Repayments of loans upto previous year	51.75	64.69	77.63	90.57	103.51
Net Loans Opening	103.49	90.55	77.61	64.67	51.73
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	12.94	12.94	12.94	12.94	12.94

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Net Closing Loans	90.55	77.61	64.67	51.73	38.79
Average Net Loan	97.02	84.08	71.14	58.20	45.26
Rate of Interest on Loan	1.1338%	1.1537%	2.6146%	2.2680%	1.4141%
Interest on Loan	1.10	0.97	1.86	1.32	0.64
SEB AB(publ)-ADD CAP for				1.02	0.04
Gross Opening Loan	350.2	350.2	350.2	350.2	350.2
Cumulative Repayments	330.Z	550.Z	000.2	000.2	000.2
of loans upto previous year	116.73	145.91	175.09	204.27	233.45
Net Loans Opening	233.47	204.29	175.11	145.93	116.75
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	29.18	29.18	29.18	29.18	29.18
Net Closing Loans	204.29	175.11	145.93	116.75	87.57
Average Net Loan	218.88	189.70	160.52	131.34	102.16
Rate of Interest on Loan	1.1285%	1.1492%	2.6227%	2.2689%	1.4096%
Interest on Loan	2.47	2.18	4.21	2.98	1.44
SEB AB(publ)-ADD CAP f	or 2004-05 (31	Mar-2005)-6.	.24		
Gross Opening Loan	620.89	620.89	620.89	620.89	620.89
Cumulative Repayments of loans upto previous year	206.96	258.7	310.44	362.18	413.92
Net Loans Opening	413.93	362.19	310.45	258.71	206.97
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	51.74	51.74	51.74	51.74	51.74
Net Closing Loans	362.19	310.45	258.71	206.97	155.23
Average Net Loan	388.06	336.32	284.58	232.84	181.10
Rate of Interest on Loan	1.1313%	1.1507%	2.6214%	2.2719%	1.4081%
Interest on Loan	4.39	3.87	7.46	5.29	2.55
SEB AB(publ)-ADD CAP for	or 2004-05 (6 J	un-2005)-5.9	279	-	
Gross Opening Loan	1811.45	1811.45	1811.45	1811.45	1811.45
Cumulative Repayments of loans upto previous year	603.82	754.77	905.72	1056.67	1207.62
Net Loans Opening	1207.63	1056.68	905.73	754.78	603.83
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	150.95	150.95	150.95	150.95	150.95
Net Closing Loans	1056.68	905.73	754.78	603.83	452.88
Average Net Loan	1132.16	981.21	830.26	679.31	528.36
<u> </u>					

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Rate of Interest on Loan	1.1332%	1.1547%	2.6173%	2.2685%	1.4081%
Interest on Loan	12.83	11.33	21.73	15.41	7.44
SEB AB(publ)-COD-6.42	12.03	11.55	21.73	13.41	7.44
Gross Opening Loan	17030.03	17030.03	17030.03	17030.03	17030.03
Cumulative Repayments	17030.03	17030.03	17030.03	17030.03	17030.03
of loans upto previous	5676.68	7095.83	8514.98	9934.13	11353.28
year	007 0.00	7 000.00	0011.00	0001.10	11000.20
Net Loans Opening	11353.35	9934.20	8515.05	7095.90	5676.75
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	1419.15	1419.15	1419.15	1419.15	1419.15
Net Closing Loans	9934.2	8515.05	7095.9	5676.75	4257.6
Average Net Loan	10643.78	9224.63	7805.48	6386.33	4967.18
Rate of Interest on Loan	1.1335%	1.15463%	2.6168%	2.2680%	1.4082%
Interest on Loan	120.65	106.51	204.25	144.84	69.95
BOND XXVII-ADD CAP for	2007-08 Draw	l on 31-3-200	)8		
Gross Opening Loan	4.60	4.60	4.60	4.60	4.60
Cumulative Repayments of loans upto previous year	0.00	0.00	0.00	0.38	0.76
Net Loans Opening	4.60	4.60	4.60	4.22	3.84
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	0.00	0.00	0.38	0.38	0.38
Net Closing Loans	4.60	4.60	4.22	3.84	3.46
Average Net Loan	4.60	4.60	4.41	4.03	3.65
Rate of Interest on Loan	9.4700%	9.4700%	9.4700%	9.4700%	9.4700%
Interest on Loan	0.44	0.44	0.42	0.38	0.35
Summary					
Gross Opening Loan	26657.34	26657.34	26657.34	26657.34	26657.34
Cumulative Repayments of loans upto previous year	8016.32	10261.68	12507.04	14752.78	16998.52
Net Loans Opening	18641.02	16395.66	14150.30	11904.56	9658.82
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	2245.36	2245.36	2245.74	2245.74	2245.74
Net Closing Loans	16395.66	14150.30	11904.56	9658.82	7413.08
Average Net Loan	17518.34	15272.98	13027.43	10781.69	8535.95
Rate of Interest on Loan	2.9749%	3.0226%	4.1174%	3.9068%	3.3696%
Interest on Loan	521.16	461.65	536.39	421.21	287.63

# ASSET-II

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
BOND XII-					
Gross Opening Loan	637.00	637.00	637.00	637.00	637.00
Cumulative Repayments of loans upto previous year	212.33	265.41	318.49	371.57	424.65
Net Loans Opening	424.67	371.59	318.51	265.43	212.35
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	53.08	53.08	53.08	53.08	53.08
Net Closing Loans	371.59	318.51	265.43	212.35	159.27
Average Net Loan	398.13	345.05	291.97	238.89	185.81
Rate of Interest on Loan	9.7003%	9.7000%	9.6996%	9.6990%	9.6981%
Interest on Loan	38.62	33.47	28.32	23.17	18.02
BOND XIII-					
Gross Opening Loan	11217.00	11217.00	11217.00	11217.00	11217.00
Cumulative Repayments of loans upto previous year	2804.25	3739.00	4673.75	5608.50	6543.25
Net Loans Opening	8412.75	7478.00	6543.25	5608.50	4673.75
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	934.75	934.75	934.75	934.75	934.75
Net Closing Loans	7478.00	6543.25	5608.50	4673.75	3739.00
Average Net Loan	7945.38	7010.63	6075.88	5141.13	4206.38
Rate of Interest on Loan	8.6300%	8.6300%	8.6300%	8.6300%	8.6300%
Interest on Loan	685.69	605.02	524.35	443.68	363.01
BOND XV-					
Gross Opening Loan	3203.00	3203.00	3203.00	3203.00	3203.00
Cumulative Repayments of loans upto previous year	533.83	800.75	1067.67	1334.59	1601.51
Net Loans Opening	2669.17	2402.25	2135.33	1868.41	1601.49
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	266.92	266.92	266.92	266.92	266.92
Net Closing Loans	2402.25	2135.33	1868.41	1601.49	1334.57
Average Net Loan	2535.71	2268.79	2001.87	1734.95	1468.03
Rate of Interest on Loan	6.6800%	6.6800%	6.6800%	6.6800%	6.6800%
Interest on Loan	169.39	151.56	133.72	115.89	98.06
BOND XVI-					
Gross Opening Loan	1570.00	1570.00	1570.00	1570.00	1570.00

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Cumulative Repayments of loans upto previous year	157.00	314.00	471.00	628.00	785.00
Net Loans Opening	1413.00	1256.00	1099.00	942.00	785.00
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	157.00	157.00	157.00	157.00	157.00
Net Closing Loans	1256.00	1099.00	942.00	785.00	628.00
Average Net Loan	1334.50	1177.50	1020.50	863.50	706.50
Rate of Interest on Loan	7.1000%	7.1000%	7.1000%	7.1000%	7.1000%
Interest on Loan	94.75	83.60	72.46	61.31	50.16
BOND XVII-					
Gross Opening Loan	1842.89	1842.89	1842.89	1842.89	1842.89
Cumulative Repayments of loans upto previous year	0.00	184.29	368.58	552.87	737.16
Net Loans Opening	1842.89	1658.60	1474.31	1290.02	1105.73
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	184.29	184.29	184.29	184.29	184.29
Net Closing Loans	1658.60	1474.31	1290.02	1105.73	921.44
Average Net Loan	1750.75	1566.46	1382.17	1197.88	1013.59
Rate of Interest on Loan	7.3900%	7.3900%	7.3900%	7.3900%	7.3900%
Interest on Loan	129.38	115.76	102.14	88.52	74.90
BOND XVIII-					
Gross Opening Loan	288.00	288.00	288.00	288.00	288.00
Cumulative Repayments of loans upto previous year	0.00	24.00	48.00	72.00	96.00
Net Loans Opening	288.00	264.00	240.00	216.00	192.00
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	24.00	24.00	24.00	24.00	24.00
Net Closing Loans	264.00	240.00	216.00	192.00	168.00
Average Net Loan	276.00	252.00	228.00	204.00	180.00
Rate of Interest on Loan	8.1500%	8.1500%	8.1500%	8.1500%	8.1500%
Interest on Loan	22.49	20.54	18.58	16.63	14.67
Oriental Bank of Commerce-					
Gross Opening Loan	621.00	621.00	621.00	621.00	621.00
Cumulative Repayments of loans upto previous year	258.75	310.50	362.25	414.00	465.75
Net Loans Opening	362.25	310.50	258.75	207.00	155.25
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Less: Repayment(s) of loans during the year	51.75	51.75	51.75	51.75	51.75
Net Closing Loans	310.50	258.75	207.00	155.25	103.50
Average Net Loan	336.38	284.63	232.88	181.13	129.38
Rate of Interest on Loan	9.6000%	10.2207%	12.3157%	12.3721%	12.3500%
Interest on Loan	32.29	29.09	28.68	22.41	15.98
BOND XXVII-					
Gross Opening Loan	153.54	153.54	153.54	153.54	153.54
Cumulative Repayments of loans upto previous year	0.00	0.00	0.00	12.80	25.60
Net Loans Opening	153.54	153.54	153.54	140.74	127.94
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	0.00	0.00	12.80	12.80	12.80
Net Closing Loans	153.54	153.54	140.74	127.94	115.14
Average Net Loan	153.54	153.54	147.14	134.34	121.54
Rate of Interest on Loan	9.4700%	9.4700%	9.4700%	9.4700%	9.4700%
Interest on Loan	14.54	14.54	13.93	12.72	11.51
Summary					
Gross Opening Loan	19532.43	19532.43	19532.43	19532.43	19532.43
Cumulative Repayments of loans upto previous year	3966.16	5637.95	7309.74	8994.33	10678.92
Net Loans Opening	15566.27	13894.48	12222.69	10538.10	8853.51
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	1671.79	1671.79	1684.59	1684.59	1684.59
Net Closing Loans	13894.48	12222.69	10538.10	8853.51	7168.92
Average Net Loan	14730.38	13058.59	11380.40	9695.81	8011.22
Rate of Interest on Loan	8.0592%	8.0681%	8.1033%	8.0894%	8.0677%
Interest on Loan	1187.15	1053.57	922.19	784.33	646.32

# ASSET-III

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
BOND XII-COD- 1.1.2007					
Gross Opening Loan	37.00	37.00	37.00	37.00	37.00
Cumulative Repayments of loans upto previous year	12.33	15.41	18.49	21.57	24.65
Net Loans Opening	24.67	21.59	18.51	15.43	12.35
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	3.08	3.08	3.08	3.08	3.08
Net Closing Loans	21.59	18.51	15.43	12.35	9.27
Average Net Loan	23.13	20.05	16.97	13.89	10.81
Rate of Interest on Loan	9.7000%	9.7000%	9.7000%	9.7000%	9.7000%
Interest on Loan	2.24	1.94	1.65	1.35	1.05
BOND XII-COD- 1.10.2005					
Gross Opening Loan	32.00	32.00	32.00	32.00	32.00
Cumulative Repayments of loans upto previous year	10.67	13.34	16.01	18.68	21.35
Net Loans Opening	21.33	18.66	15.99	13.32	10.65
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	2.67	2.67	2.67	2.67	2.67
Net Closing Loans	18.66	15.99	13.32	10.65	7.98
Average Net Loan	20.00	17.33	14.66	11.99	9.32
Rate of Interest on Loan	9.7000%	9.7000%	9.7000%	9.7000%	9.7000%
Interest on Loan	1.94	1.68	1.42	1.16	0.90
BOND XIII-Option 1-COD- 1 Jan					
Gross Opening Loan	455.00	455.00	455.00	455.00	455.00
Cumulative Repayments of loans upto previous year	113.75	151.67	189.59	227.51	265.43
Net Loans Opening	341.25	303.33	265.41	227.49	189.57
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	37.92	37.92	37.92	37.92	37.92
Net Closing Loans	303.33	265.41	227.49	189.57	151.65
Average Net Loan	322.29	284.37	246.45	208.53	170.61
Rate of Interest on Loan	8.6300%	8.6300%	8.6300%	8.6300%	8.6300%



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Interest on Loan	27.81	24.54	21.27	18.00	14.72
BOND XIII-Option 1-COD- 1 Oct					
Gross Opening Loan	402.00	402.00	402.00	402.00	402.00
Cumulative Repayments of loans upto previous year	100.50	134.00	167.50	201.00	234.50
Net Loans Opening	301.50	268.00	234.50	201.00	167.50
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	33.50	33.50	33.50	33.50	33.50
Net Closing Loans	268.00	234.50	201.00	167.50	134.00
Average Net Loan	284.75	251.25	217.75	184.25	150.75
Rate of Interest on Loan	8.6300%	8.6300%	8.6300%	8.6300%	8.6300%
Interest on Loan	24.57	21.68	18.79	15.90	13.01
BOND XV-COD-1.1.2007					
Gross Opening Loan	184.00	184.00	184.00	184.00	184.00
Cumulative Repayments of loans upto previous year	30.67	46.00	61.33	76.66	91.99
Net Loans Opening	153.33	138.00	122.67	107.34	92.01
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	15.33	15.33	15.33	15.33	15.33
Net Closing Loans	138.00	122.67	107.34	92.01	76.68
Average Net Loan	145.67	130.34	115.01	99.68	84.35
Rate of Interest on Loan	6.6800%	6.6800%	6.6800%	6.6800%	6.6800%
Interest on Loan	9.73	8.71	7.68	6.66	5.63
BOND XV-COD-1.10.2005					
Gross Opening Loan	162.00	162.00	162.00	162.00	162.00
Cumulative Repayments of loans upto previous year	27.00	40.50	54.00	67.50	81.00
Net Loans Opening	135.00	121.50	108.00	94.50	81.00
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	13.50	13.50	13.50	13.50	13.50
Net Closing Loans	121.50	108.00	94.50	81.00	67.50
Average Net Loan	128.25	114.75	101.25	87.75	74.25
Rate of Interest on Loan	6.6800%	6.6800%	6.6800%	6.6800%	6.6800%
Interest on Loan	8.57	7.67	6.76	5.86	4.96
BOND XVI-COD-1.1.2007					
Gross Opening Loan	23.00	23.00	23.00	23.00	23.00



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Cumulative Repayments of loans upto previous year	2.30	4.60	6.90	9.20	11.50
Net Loans Opening	20.70	18.40	16.10	13.80	11.50
Add: Drawals during the					
year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	2.30	2.30	2.30	2.30	2.30
Net Closing Loans	18.40	16.10	13.80	11.50	9.20
Average Net Loan	19.55	17.25	14.95	12.65	10.35
Rate of Interest on Loan	7.1000%	7.1000%	7.1000%	7.1000%	7.1000%
Interest on Loan	1.39	1.22	1.06	0.90	0.73
BOND XVI-COD- 1.10.2005					
Gross Opening Loan	275.00	275.00	275.00	275.00	275.00
Cumulative Repayments of loans upto previous year	27.50	55.00	82.50	110.00	137.50
Net Loans Opening	247.50	220.00	192.50	165.00	137.50
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	27.50	27.50	27.50	27.50	27.50
Net Closing Loans	220.00	192.50	165.00	137.50	110.00
Average Net Loan	233.75	206.25	178.75	151.25	123.75
Rate of Interest on Loan	7.1000%	7.1000%	7.1000%	7.1000%	7.1000%
Interest on Loan	16.60	14.64	12.69	10.74	8.79
BOND XVII-Add cap for 2006-07					
Gross Opening Loan	133.39	133.39	133.39	133.39	133.39
Cumulative Repayments of loans upto previous year	0.00	13.34	26.68	40.02	53.36
Net Loans Opening	133.39	120.05	106.71	93.37	80.03
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	13.34	13.34	13.34	13.34	13.34
Net Closing Loans	120.05	106.71	93.37	80.03	66.69
Average Net Loan	126.72	113.38	100.04	86.70	73.36
Rate of Interest on Loan	7.3900%	7.3900%	7.3900%	7.3900%	7.3900%
Interest on Loan	9.36	8.38	7.39	6.41	5.42
BOND XVII-COD- 1.1.2007					
Gross Opening Loan	213.00	213.00	213.00	213.00	213.00

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Cumulative Repayments of loans upto previous year	0.00	21.30	42.60	63.90	85.20
Net Loans Opening	213.00	191.70	170.40	149.10	127.80
Add: Drawals during the					
year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	21.30	21.30	21.30	21.30	21.30
Net Closing Loans	191.70	170.40	149.10	127.80	106.50
Average Net Loan	202.35	181.05	159.75	138.45	117.15
Rate of Interest on Loan	7.3900%	7.3900%	7.3900%	7.3900%	7.3900%
Interest on Loan	14.95	13.38	11.81	10.23	8.66
BOND XVII-COD- 1.10.2005					
Gross Opening Loan	81.00	81.00	81.00	81.00	81.00
Cumulative Repayments of loans upto previous year	0.00	8.10	16.20	24.30	32.40
Net Loans Opening	81.00	72.90	64.80	56.70	48.60
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	8.10	8.10	8.10	8.10	8.10
Net Closing Loans	72.90	64.80	56.70	48.60	40.50
Average Net Loan	76.95	68.85	60.75	52.65	44.55
Rate of Interest on Loan	7.3900%	7.3900%	7.3900%	7.3900%	7.3900%
Interest on Loan	5.69	5.09	4.49	3.89	3.29
BOND XVIII-Add cap for 2005-06					
Gross Opening Loan	77.00	77.00	77.00	77.00	77.00
Cumulative Repayments of loans upto previous year	0.00	6.42	12.84	19.26	25.68
Net Loans Opening	77.00	70.58	64.16	57.74	51.32
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	6.42	6.42	6.42	6.42	6.42
Net Closing Loans	70.58	64.16	57.74	51.32	44.90
Average Net Loan	73.79	67.37	60.95	54.53	48.11
Rate of Interest on Loan	8.1500%	8.1500%	8.1500%	8.1500%	8.1500%
Interest on Loan	6.01	5.49	4.97	4.44	3.92
BOND XVIII-COD- 1.1.2007					
Gross Opening Loan	183.00	183.00	183.00	183.00	183.00

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Cumulative Repayments of loans upto previous year	0.00	15.25	30.50	45.75	61.00
Net Loans Opening	183.00	167.75	152.50	137.25	122.00
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	15.25	15.25	15.25	15.25	15.25
Net Closing Loans	167.75	152.50	137.25	122.00	106.75
Average Net Loan	175.38	160.13	144.88	129.63	114.38
Rate of Interest on Loan	8.1500%	8.1500%	8.1500%	8.1500%	8.1500%
Interest on Loan	14.29	13.05	11.81	10.56	9.32
Oriental Bank of Commerc	e-COD-1.1.2	007			
Gross Opening Loan	36.00	36.00	36.00	36.00	36.00
Cumulative Repayments of loans upto previous year	15.00	18.00	21.00	24.00	27.00
Net Loans Opening	21.00	18.00	15.00	12.00	9.00
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	3.00	3.00	3.00	3.00	3.00
Net Closing Loans	18.00	15.00	12.00	9.00	6.00
Average Net Loan	19.50	16.50	13.50	10.50	7.50
Rate of Interest on Loan	9.6000%	10.2207%	12.3157%	12.3721%	12.3500%
Interest on Loan	1.87	1.69	1.66	1.30	0.93
Oriental Bank of Commerc	e-COD-1.10.	2005			
Gross Opening Loan	32.00	32.00	32.00	32.00	32.00
Cumulative Repayments of loans upto previous year	13.33	16.00	18.67	21.34	24.01
Net Loans Opening	18.67	16.00	13.33	10.66	7.99
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	2.67	2.67	2.67	2.67	2.67
Net Closing Loans	16.00	13.33	10.66	7.99	5.32
Average Net Loan	17.34	14.67	12.00	9.33	6.66
Rate of Interest on Loan	9.600%	10.221%	12.316%	12.372%	12.350%
Interest on Loan	1.66	1.50	1.48	1.15	0.82
BOND XXVII-Add cap for 2	007-08 (31-3	-2008)			
Gross Opening Loan	28.350	28.350	28.350	28.350	28.350
Cumulative Repayments of loans upto previous year	0.000	0.000	0.000	2.360	4.720
Net Loans Opening	28.350	28.350	28.350	25.990	23.630
Add: Drawals during the	0.000	0.000	0.000	0.000	0.000



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
year					
Less: Repayment(s) of loans during the year	0.000	0.000	2.360	2.360	2.360
Net Closing Loans	28.350	28.350	25.990	23.630	21.270
Average Net Loan	28.350	28.350	27.170	24.810	22.450
Rate of Interest on Loan	9.4700%	9.4700%	9.4700%	9.4700%	9.4700%
Interest on Loan	2.68	2.68	2.57	2.35	2.13
Summary					
Gross Opening Loan	2353.74	2353.74	2353.74	2353.74	2353.74
Cumulative Repayments of loans upto previous year	353.05	558.93	764.81	973.05	1181.29
Net Loans Opening	2000.69	1794.81	1588.93	1380.69	1172.45
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	205.88	205.88	208.24	208.24	208.24
Net Closing Loans	1794.81	1588.93	1380.69	1172.45	964.21
Average Net Loan	1897.75	1691.87	1484.81	1276.57	1068.33
Rate of Interest on Loan	7.8717%	7.8816%	7.9136%	7.9043%	7.8897%
Interest on Loan	149.39	133.35	117.50	100.90	84.29

## **ANNEXURE-II**

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

## ASSET-I

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
BOND XII-					
Gross Opening Loan	427.00	427.00	427.00	427.00	427.00
Cumulative Repayments of loans upto previous year	320.23	355.81	391.39	426.97	426.97
Net Loans Opening	106.77	71.19	35.61	0.03	0.03
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	35.58	35.58	35.58	0	0
Net Closing Loans	71.19	35.61	0.03	0.03	0.03
Average Net Loan	88.98	53.40	17.82	0.03	0.03
Rate of Interest on Loan	9.6988%	9.7004%	9.7000%	9.7000%	9.7000%
Interest on Loan	8.63	5.18	1.73	0.00	0.00
BOND XIII-Option 1					
Gross Opening Loan	2051	2051	2051	2051	2051
Cumulative Repayments of loans upto previous year	1367.35	1538.27	1709.19	1880.11	2051.03
Net Loans Opening	683.65	512.73	341.81	170.89	0.00
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	170.92	170.92	170.92	170.92	0.00
Net Closing Loans	512.73	341.81	170.89	0.00	0.00
Average Net Loan	598.19	427.27	256.35	85.45	0.00
Rate of Interest on Loan	8.6294%	8.6292%	8.6288%	8.6254%	8.6254%
Interest on Loan	51.62	36.87	22.12	7.37	0.00
BOND XV					
Gross Opening Loan	2151.00	2151.00	2151.00	2151.00	2151.00
Cumulative Repayments of loans upto previous year	1254.75	1434.00	1613.25	1792.50	1971.75
Net Loans Opening	896.25	717.00	537.75	358.50	179.25
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Less: Repayment(s) of	179.25	179.25	179.25	179.25	179.25
loans during the year  Net Closing Loans	717.00	537.75	358.50	179.25	0.00
			448.13		89.63
Average Net Loan	806.63	627.38		268.88	
Rate of Interest on Loan	6.6797%	6.6802%	6.6812%	6.6797%	6.6834%
Interest on Loan	53.88	41.91	29.94	17.96	5.99
BOND XVI					
Gross Opening Loan	1132.00	1132.00	1132.00	1132.00	1132.00
Cumulative Repayments of loans upto previous year	679.20	792.40	905.60	1018.80	1132.00
Net Loans Opening	452.80	339.60	226.40	113.20	0.00
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	113.20	113.20	113.20	113.20	0.00
Net Closing Loans	339.60	226.40	113.20	0.00	0.00
Average Net Loan	396.20	283.00	169.80	56.60	0.00
Rate of Interest on Loan	7.0999%	7.0989%	7.1025%	7.1025%	7.1000%
Interest on Loan	28.13	20.09	12.06	4.02	0.00
BOND XVII-Add cap for 2005-06 Drawl on 22-9-2005					
Gross Opening Loan	184.00	184.00	184.00	184.00	184.00
Cumulative Repayments of loans upto previous year	92.00	110.40	128.80	147.20	165.60
Net Loans Opening	92.00	73.60	55.20	36.80	18.40
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	18.40	18.40	18.40	18.40	18.40
Net Closing Loans	73.60	55.20	36.80	18.40	0.00
Average Net Loan	82.80	64.40	46.00	27.60	9.20
Rate of Interest on Loan	7.3913%	7.3913%	7.3913%	7.3913%	7.3913%
Interest on Loan	6.12	4.76	3.40	2.04	0.68
BOND XVII-Add cap for 2006-07					
Gross Opening Loan	143.38	143.38	143.38	143.38	143.38
Cumulative Repayments of loans upto previous year	71.70	86.04	100.38	114.72	129.06
	71.70 71.68	86.04 57.34	100.38	28.66	129.06



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
year	201110	2010 10	2010 17	2017 10	2010 10
Less: Repayment(s) of					
loans during the year	14.34	14.34	14.34	14.34	14.34
Net Closing Loans	57.34	43.00	28.66	14.32	0.00
Average Net Loan	64.51	50.17	35.83	21.49	7.16
Rate of Interest on Loan	7.3942%	7.3949%	7.3960%	7.3988%	7.3000%
Interest on Loan	4.77	3.71	2.65	1.59	0.52
Oriental Bank of					
Commerce					
Gross Opening Loan	417.00	417.00	417.00	417.00	417.00
Cumulative Repayments					
of loans upto previous	347.50	382.25	417.00	417.00	417.00
year	00.50				
Net Loans Opening	69.50	34.75	0.00	0.00	0.00
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	34.75	34.75	0.00	0.00	0.00
Net Closing Loans	34.75	0.00	0.00	0.00	0.00
Average Net Loan	52.13	17.38	0.00	0.00	0.00
Rate of Interest on Loan	12.3500%	12.3500%	12.3500%	12.3500%	12.3500%
Interest on Loan	6.44	2.15	0.00	0.00	0.00
SEB AB (publ)-ADD CAP for 2004-05 (8-3-2005)- 6.44					
Gross Opening Loan	179.55	179.55	179.55	179.55	179.55
Cumulative Repayments of loans upto previous year	134.63	149.59	164.55	179.51	179.51
Net Loans Opening	44.92	29.96	15.00	0.04	0.04
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	14.96	14.96	14.96	14.96	14.96
Net Closing Loans	29.96	15.00	0.04	0.04	0.04
Average Net Loan	37.44	22.48	7.52	0.04	0.04
Rate of Interest on Loan	1.1218%	1.1121%	1.0638%	0.0000%	0.0000%
Interest on Loan	0.42	0.25	0.08	0.00	0.00
SEB AB(publ)-ADDCAP for 2004-05-6.47	0.12	0.20	0.00	0.00	0.00
Gross Opening Loan	155.22	155.22	155.22	155.22	155.22
Cumulative Repayments of loans upto previous	116.41	129.35	142.29	155.23	155.23
year					



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Net Loans Opening	38.81	25.87	12.93	0.00	0.00
Add: Drawals during the					
year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	12.94	12.94	12.94	0.00	0.00
Net Closing Loans	25.87	12.93	0.00	0.00	0.00
Average Net Loan	32.34	19.40	6.47	0.00	0.00
Rate of Interest on Loan	1.1200%	1.1200%	1.1200%	1.1200%	1.1200%
Interest on Loan	0.36	0.22	0.07	0.00	0.00
SEB AB(publ)-ADDCAP for 2004-05 (29 Mar- 2005)-6.25					
Gross Opening Loan	350.19	350.19	350.19	350.19	350.19
Cumulative Repayments of loans upto previous year	262.65	291.83	321.01	350.19	350.19
Net Loans Opening	87.54	58.36	29.18	0.00	0.00
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	29.18	29.18	29.18	0.00	0.00
Net Closing Loans	58.36	29.18	0.00	0.00	0.00
Average Net Loan	72.95	43.77	14.59	0.00	0.00
Rate of Interest on Loan	1.1241%	1.1195%	1.1200%	1.1200%	1.1200%
Interest on Loan	0.82	0.49	0.16	0.00	0.00
SEB AB(publ)-ADDCAP for 2004-05 (31 Mar- 2005)-6.24					
Gross Opening Loan	620.89	620.88	620.88	620.88	620.88
Cumulative Repayments of loans upto previous year	465.68	517.42	569.16	620.9	620.9
Net Loans Opening	155.21	103.46	51.72	0.00	0.00
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	51.74	51.74	51.74	0.00	0.00
Net Closing Loans	103.47	51.72	-0.02	0.00	0.00
Average Net Loan	129.34	77.59	25.85	0.00	0.00
Rate of Interest on Loan	1.1211%	1.1213%	1.1219%	1.1200%	1.1200%
Interest on Loan	1.45	0.87	0.29	0.00	0.00
SEB AB(publ)-ADDCAP for 2004-05 (6 Jun-2005)- 5.9279					
Gross Opening Loan	1811.45	1811.45	1811.45	1811.45	1811.45



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Cumulative Repayments		_0.0.10	_0.0 17		_01010
of loans upto previous	1358.57	1509.52	1660.47	1811.42	1811.42
year					
Net Loans Opening	452.88	301.93	150.98	0.03	0.03
Add: Drawals during the	0.00	0.00	0.00	0.00	0.00
year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of	150.95	150.95	150.95	0.00	0.00
loans during the year					
Net Closing Loans	301.93	150.98	0.03	0.03	0.03
Average Net Loan	377.41	226.46	75.51	0.03	0.03
Rate of Interest on Loan	1.1235%	1.1261%	1.1258%	0.0000%	0.0000%
Interest on Loan	4.24	2.55	0.85	0.00	0.00
SEB AB(publ)-COD-6.42					
Gross Opening Loan	17030.01	17030.01	17030.01	17030.01	17030.01
Cumulative Repayments					
of loans upto previous	12772.38	14191.53	15610.68	17029.83	17029.83
year	1057.00	0000 10	1 1 1 2 2 2	0.10	0.10
Net Loans Opening	4257.63	2838.48	1419.33	0.18	0.18
Add: Drawals during the	0.00	0.00	0.00	0.00	0.00
year Less: Repayment(s) of					
loans during the year	1419.15	1419.15	1419.15	0	0
Net Closing Loans	2838.48	1419.33	0.18	0.18	0.18
Average Net Loan	3548.06	2128.91	709.75	0.18	0.18
Rate of Interest on Loan	1.1240%	1.1241%	1.1243%	1.1200%	1.1200%
Interest on Loan	39.88	23.93	7.98	0.00	0.00
BOND XXVII-ADDCAP	33.00	20.00	7.50	0.00	0.00
for 2007-08 Drawl on 31-					
3-2008					
Gross Opening Loan	4.60	4.60	4.60	4.60	4.60
Cumulative Repayments					
of loans upto previous	1.14	1.52	1.90	2.28	2.66
year	2.12				
Net Loans Opening	3.46	3.08	2.70	2.32	1.94
Add: Drawals during the	0.00	0.00	0.00	0.00	0.00
year					
Less: Repayment(s) of loans during the year	0.38	0.38	0.38	0.38	0.38
Net Closing Loans	3.08	2.70	2.32	1.94	1.56
Average Net Loan	3.06	2.70	2.52	2.13	1.75
Rate of Interest on Loan	9.4700%	9.4700%	9.4700%	9.4700%	9.4700%
Interest on Loan	0.31	0.27	0.24	0.20	0.17
Summary	20057.00	20057.22	00007.00	00057.00	00057.00
Gross Opening Loan	26657.29	26657.28	26657.28	26657.28	26657.28



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Cumulative Repayments of loans upto previous year	19244.19	21489.93	23735.67	25946.66	26443.15
Net Loans Opening	7413.10	5167.35	2921.61	710.62	214.13
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	2245.74	2245.74	2210.99	511.45	227.33
Net Closing Loans	5167.36	2921.61	710.62	199.17	0.00
Average Net Loan	6290.23	4044.48	1816.12	454.89	107.06
Rate of Interest on Loan	3.2919%	3.5418%	4.4916%	7.1800%	6.8300%
Interest on Loan	207.07	143.25	81.57	33.19	7.36

# ASSET-II

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
BOND XII-					
Gross Opening Loan	637.00	637.00	637.00	637.00	637.00
Cumulative Repayments of loans upto previous year	477.75	530.83	583.91	636.99	636.99
Net Loans Opening	159.25	106.17	53.09	0.01	0.01
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	53.08	53.08	53.08	0.00	0.00
Net Closing Loans	106.17	53.09	0.01	0.01	0.01
Average Net Loan	132.71	79.63	26.55	0.01	0.01
Rate of Interest on Loan	9.6981%	9.6981%	9.6981%	9.6981%	9.6981%
Interest on Loan	12.87	7.72	2.57	0.00	0.00
BOND XIII-					
Gross Opening Loan	11217.00	11217.00	11217.00	11217.00	11217.00
Cumulative Repayments of loans upto previous year	7478.00	8412.75	9347.50	10282.25	11217.00
Net Loans Opening	3739.00	2804.25	1869.50	934.75	0.00
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	934.75	934.75	934.75	934.75	0.00
Net Closing Loans	2804.25	1869.50	934.75	0.00	0.00
Average Net Loan	3271.63	2336.88	1402.13	467.38	0.00
Rate of Interest on Loan	8.6300%	8.6300%	8.6300%	8.6300%	8.6300%



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Loan	282.34	201.67	121.00	40.33	0.00
BOND XV-	202.01	201.01	121.00	10.00	0.00
Gross Opening Loan	3203.00	3203.00	3203.00	3203.00	3203.00
Cumulative Repayments of loans upto previous year	1868.42	2135.34	2402.26	2669.18	2936.10
Net Loans Opening	1334.58	1067.66	800.74	533.82	266.90
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	266.92	266.92	266.92	266.92	266.92
Net Closing Loans	1067.66	800.74	533.82	266.90	0.00
Average Net Loan	1201.12	934.20	667.28	400.36	133.45
Rate of Interest on Loan	6.6800%	6.6800%	6.6800%	6.6800%	6.6800%
Interest on Loan	80.23	62.40	44.57	26.74	8.91
BOND XVI-					
Gross Opening Loan	1570.00	1570.00	1570.00	1570.00	1570.00
Cumulative Repayments of loans upto previous year	942.00	1099.00	1256.00	1413.00	1570.00
Net Loans Opening	628.00	471.00	314.00	157.00	0.00
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	157.00	157.00	157.00	157.00	0.00
Net Closing Loans	471.00	314.00	157.00	0.00	0.00
Average Net Loan	549.50	392.50	235.50	78.50	0.00
Rate of Interest on Loan	7.1000%	7.1000%	7.1000%	7.1000%	7.1000%
Interest on Loan	39.01	27.87	16.72	5.57	0.00
BOND XVII-					
Gross Opening Loan	1842.89	1842.89	1842.89	1842.89	1842.89
Cumulative Repayments of loans upto previous year	921.45	1105.74	1290.03	1474.32	1658.61
Net Loans Opening	921.44	737.15	552.86	368.57	184.28
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	184.29	184.29	184.29	184.29	184.29
Net Closing Loans	737.15	552.86	368.57	184.28	0.00
Average Net Loan	829.30	645.01	460.72	276.43	92.14
Rate of Interest on Loan	7.3900%	7.3900%	7.3900%	7.3900%	7.3900%
Interest on Loan	61.28	47.67	34.05	20.43	6.81
BOND XVIII-					
Gross Opening Loan	288.00	288.00	288.00	288.00	288.00



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Cumulative Repayments of	120.00	144.00	168.00	192.00	216.00
loans upto previous year	400.00	4.4.4.00	400.00		
Net Loans Opening	168.00	144.00	120.00	96.00	72.00
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	24.00	24.00	24.00	24.00	24.00
Net Closing Loans	144.00	120.00	96.00	72.00	48.00
Average Net Loan	156.00	132.00	108.00	84.00	60.00
Rate of Interest on Loan	8.1500%	8.1500%	8.1500%	8.1500%	8.1500%
Interest on Loan	12.71	10.76	8.80	6.85	4.89
Oriental Bank of Commerce-					
Gross Opening Loan	621.00	621.00	621.00	621.00	621.00
Cumulative Repayments of loans upto previous year	517.50	569.25	621.00	621.00	621.00
Net Loans Opening	103.50	51.75	0.00	0.00	0.00
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	51.75	51.75	0.00	0.00	0.00
Net Closing Loans	51.75	0.00	0.00	0.00	0.00
Average Net Loan	77.63	25.88	0.00	0.00	0.00
Rate of Interest on Loan	12.3500%	12.3500%	12.3500%	12.3500%	12.3500%
Interest on Loan	9.59	3.20	0.00	0.00	0.00
BOND XXVII-					
Gross Opening Loan	153.54	153.54	153.54	153.54	153.54
Cumulative Repayments of loans upto previous year	38.39	51.19	63.99	76.79	89.59
Net Loans Opening	115.15	102.35	89.55	76.75	63.95
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	12.80	12.80	12.80	12.80	12.80
Net Closing Loans	102.35	89.55	76.75	63.95	51.15
Average Net Loan	108.75	95.95	83.15	70.35	57.55
Rate of Interest on Loan	9.4700%	9.4700%	9.4700%	9.4700%	9.4700%
Interest on Loan	10.30	9.09	7.87	6.66	5.45
Summary					
Gross Opening Loan	19532.43	19532.43	19532.43	19532.43	19532.43
Cumulative Repayments of loans upto previous year	12363.51	14048.10	15732.69	17365.53	18945.29
Net Loans Opening	7168.92	5484.33	3799.74	2166.90	587.14



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	1684.59	1684.59	1632.84	1579.76	488.01
Net Closing Loans	5484.33	3799.74	2166.90	587.14	99.13
Average Net Loan	6326.63	4642.04	2983.32	1377.02	343.13
Rate of Interest on Loan	8.0350%	7.9787%	7.8971%	7.7406%	7.5960%
Interest on Loan	508.35	370.37	235.60	106.59	26.06

## ASSET-III

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
BOND XII-COD- 1.1.2007					
Gross Opening Loan	37.00	37.00	37.00	37.00	37.00
Cumulative Repayments of loans upto previous year	27.73	30.41	33.89	36.97	36.97
Net Loans Opening	9.27	6.59	3.11	0.03	0.03
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	3.08	3.08	3.08	0.00	0.00
Net Closing Loans	6.19	3.51	0.03	0.03	0.03
Average Net Loan	7.73	5.05	1.57	0.03	0.03
Rate of Interest on Loan	9.7000%	9.7000%	9.7000%	9.7000%	9.7000%
Interest on Loan	0.75	0.49	0.15	0.00	0.00
BOND XII-COD- 1.10.2005					
Gross Opening Loan	32.00	32.00	32.00	32.00	32.00
Cumulative Repayments of loans upto previous year	24.02	26.69	29.36	32.03	32.03
Net Loans Opening	7.98	5.31	2.64	-0.03	-0.03
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	2.67	2.67	2.67	0.00	0.00
Net Closing Loans	5.31	2.64	0.00	0.00	0.00
Average Net Loan	6.65	3.98	1.32	0.00	0.00
Rate of Interest on Loan	9.7000%	9.7000%	9.7000%	9.7000%	9.7000%
Interest on Loan	0.64	0.39	0.13	0.00	0.00
BOND XIII-Option 1-COD-1 Jan					

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	455.00	455.00	455.00	455.00	455.00
Cumulative Repayments of loans upto previous year	303.35	341.27	379.19	417.11	455.03
Net Loans Opening	151.65	113.73	75.81	37.89	0.00
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	37.92	37.92	37.92	37.92	0.00
Net Closing Loans	113.73	75.81	37.89	0.00	0.00
Average Net Loan	132.69	94.77	56.85	18.95	0.00
Rate of Interest on Loan	8.6300%	8.6300%	8.6300%	8.6300%	8.6300%
Interest on Loan	11.45	8.18	4.91	1.63	0.00
BOND XIII-Option 1-COD-1 Oct					
Gross Opening Loan	402.00	402.00	402.00	402.00	402.00
Cumulative Repayments of loans upto previous year	268.00	301.50	335.00	368.50	402.00
Net Loans Opening	134.00	100.50	67.00	33.50	0.00
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	33.50	33.50	33.50	33.50	33.50
Net Closing Loans	100.50	67.00	33.50	0.00	0.00
Average Net Loan	117.25	83.75	50.25	16.75	0.00
Rate of Interest on Loan	8.6300%	8.6300%	8.6300%	8.6300%	8.6300%
Interest on Loan	10.12	7.23	4.34	1.45	0.00
BOND XV-COD-1.1.2007					
Gross Opening Loan	184.00	184.00	184.00	184.00	184.00
Cumulative Repayments of loans upto previous year	107.32	122.65	137.98	153.31	168.64
Net Loans Opening	76.68	61.35	46.02	30.69	15.36
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	15.33	15.33	15.33	15.33	15.33
Net Closing Loans	61.35	46.02	30.69	15.36	0.03
Average Net Loan	69.02	53.69	38.36	23.03	7.70
Rate of Interest on Loan	6.6800%	6.6800%	6.6800%	6.6800%	6.6800%
Interest on Loan	4.61	3.59	2.56	1.54	0.51
BOND XV-COD-1.10.2005					
Gross Opening Loan	162.00	162.00	162.00	162.00	162.00
Cumulative Repayments of loans upto previous year	94.50	108.00	121.50	135.00	135.00



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Net Loans Opening	67.50	54.00	40.50	27.00	27.00
Add: Drawals during the	0.00	0.00	0.00	0.00	0.00
year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	13.50	13.50	13.50	13.50	13.50
Net Closing Loans	54.00	40.50	27.00	13.50	4.06
Average Net Loan	60.75	47.25	33.75	20.25	15.53
Rate of Interest on Loan	6.6800%	6.6800%	6.6800%	6.6800%	6.6800%
Interest on Loan	4.06	3.16	2.25	1.35	1.04
BOND XVI-COD-1.1.2007					
Gross Opening Loan	23.00	23.00	23.00	23.00	23.00
Cumulative Repayments of loans upto previous year	13.80	16.10	18.40	20.70	23.00
Net Loans Opening	9.20	6.90	4.60	2.30	0.00
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	2.30	2.30	2.30	2.30	2.30
Net Closing Loans	6.90	4.60	2.30	0.00	0.00
Average Net Loan	8.05	5.75	3.45	1.15	0.00
Rate of Interest on Loan	7.1000%	7.1000%	7.1000%	7.1000%	7.1000%
Interest on Loan	0.57	0.41	0.24	0.08	0.00
BOND XVI-COD-1.10.2005					
Gross Opening Loan	275.00	275.00	275.00	275.00	275.00
Cumulative Repayments of loans upto previous year	165.00	192.50	220.00	247.50	275.00
Net Loans Opening	110.00	82.50	55.00	27.50	0.00
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	27.50	27.50	27.50	27.50	0.00
Net Closing Loans	82.50	55.00	27.50	0.00	0.00
Average Net Loan	96.25	68.75	41.25	13.75	0.00
Rate of Interest on Loan	7.1000%	7.1000%	7.1000%	7.1000%	7.1000%
Interest on Loan	6.83	4.88	2.93	0.98	0.00
BOND XVII-Add cap for					
2006-07					
Gross Opening Loan	133.39	133.39	133.39	133.39	133.39
Cumulative Repayments of loans upto previous year	66.70	80.04	93.38	106.72	120.06
Net Loans Opening	66.69	53.35	40.01	26.67	13.33
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Less: Repayment(s) of loans during the year	13.34	13.34	13.34	13.34	13.34
Net Closing Loans	53.35	40.01	26.67	13.33	0.00
Average Net Loan	60.02	46.68	33.34	20.00	6.66
Rate of Interest on Loan	7.3900%	7.3900%	7.3900%	7.3900%	7.3900%
Interest on Loan	4.44	3.45	2.46	1.48	0.49
BOND XVII-COD- 1.1.2007		00			0
Gross Opening Loan	213.00	213.00	213.00	213.00	213.00
Cumulative Repayments of loans upto previous year	106.50	127.80	149.10	170.40	191.70
Net Loans Opening	106.50	85.20	63.90	42.60	21.30
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	21.30	21.30	21.30	21.30	21.30
Net Closing Loans	85.20	63.90	42.60	21.30	0.00
Average Net Loan	95.85	74.55	53.25	31.95	10.65
Rate of Interest on Loan	7.3900%	7.3900%	7.3900%	7.3900%	7.3900%
Interest on Loan	7.08	5.51	3.94	2.36	0.79
BOND XVII-COD- 1.10.2005					
Gross Opening Loan	81.00	81.00	81.00	81.00	81.00
Cumulative Repayments of loans upto previous year	40.50	48.60	56.70	64.80	72.90
Net Loans Opening	40.50	32.40	24.30	16.20	8.10
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	8.10	8.10	8.10	8.10	8.10
Net Closing Loans	32.40	24.30	16.20	8.10	0.00
Average Net Loan	36.45	28.35	20.25	12.15	4.05
Rate of Interest on Loan	7.3900%	7.3900%	7.3900%	7.3900%	7.3900%
Interest on Loan	2.69	2.10	1.50	0.90	0.30
BOND XVIII-Add cap for 2005-06					
Gross Opening Loan	77.00	77.00	77.00	77.00	77.00
Cumulative Repayments of loans upto previous year	32.10	38.52	44.94	51.36	57.78
Net Loans Opening	44.90	38.48	32.06	25.64	19.22
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	6.42	6.42	6.42	6.42	6.42



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Net Closing Loans	38.48	32.06	25.64	19.22	12.80
Average Net Loan	41.69	35.27	28.85	22.43	16.01
Rate of Interest on Loan	8.1500%	8.1500%	8.1500%	8.1500%	8.1500%
Interest on Loan	3.40	2.87	2.35	1.83	1.30
BOND XVIII-COD-1.1.2007					
Gross Opening Loan	183.00	183.00	183.00	183.00	183.00
Cumulative Repayments of loans upto previous year	76.25	91.50	106.75	122.00	137.25
Net Loans Opening	106.75	91.50	76.25	61.00	45.75
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	15.25	15.25	15.25	15.25	15.25
Net Closing Loans	91.50	76.25	61.00	45.75	30.50
Average Net Loan	99.13	83.88	68.63	53.38	38.13
Rate of Interest on Loan	8.1500%	8.1500%	8.1500%	8.1500%	8.1500%
Interest on Loan	8.08	6.84	5.59	4.35	3.11
Oriental Bank of Commerce-COD-1.1.2007					
Gross Opening Loan	36.00	36.00	36.00	36.00	36.00
Cumulative Repayments of loans upto previous year	30.00	33.00	36.00	36.00	36.00
Net Loans Opening	6.00	3.00	0.00	0.00	0.00
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	3.00	3.00	0.00	0.00	0.00
Net Closing Loans	3.00	0.00	0.00	0.00	0.00
Average Net Loan	4.50	1.50	0.00	0.00	0.00
Rate of Interest on Loan	12.3500%	12.3500%	12.3500%	12.3500%	12.3500%
Interest on Loan	0.56	0.19	0.00	0.00	0.00
Oriental Bank of Commerce-COD-1.10.2005					
Gross Opening Loan	32.00	32.00	32.00	32.00	32.00
Cumulative Repayments of loans upto previous year	26.68	29.35	32.02	32.02	32.02
Net Loans Opening	5.32	2.65	0.00	0.00	0.00
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	2.67	2.67	0.00	0.00	0.00
Net Closing Loans	2.65	0.00	0.00	0.00	0.00
Average Net Loan	3.99	1.33	0.00	0.00	0.00



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Rate of Interest on Loan	12.350%	12.350%	12.350%	12.350%	12.350%
Interest on Loan	0.49	0.16	0.00	0.00	0.00
BOND XXVII-Add cap for 2007-08 (31-3-2008)					
Gross Opening Loan	28.350	28.350	28.350	28.350	28.350
Cumulative Repayments of loans upto previous year	7.080	9.440	11.800	14.160	16.520
Net Loans Opening	21.270	18.910	16.550	14.190	11.830
Add: Drawals during the year	0.000	0.000	0.000	0.000	0.000
Less: Repayment(s) of loans during the year	2.360	2.360	2.360	2.360	2.360
Net Closing Loans	18.910	16.550	14.190	11.830	9.470
Average Net Loan	20.090	17.730	15.370	13.010	10.650
Rate of Interest on Loan	9.4700%	9.4700%	9.4700%	9.4700%	9.4700%
Interest on Loan	1.90	1.68	1.46	1.23	1.01
Summary					
Gross Opening Loan	2353.74	2353.74	2353.74	2353.74	2353.74
Cumulative Repayments of loans upto previous year	1389.53	1597.37	1806.01	2008.58	2191.90
Net Loans Opening	964.21	756.37	547.73	345.16	161.84
Add: Drawals during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loans during the year	208.24	208.24	202.57	196.82	131.40
Net Closing Loans	755.97	548.13	345.16	148.34	30.44
Average Net Loan	860.09	652.25	446.45	246.75	96.14
Rate of Interest on Loan	7.8686%	7.8353%	7.7968%	7.7727%	7.9200%
Interest on Loan	67.68	51.11	34.81	19.18	8.55