

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 391/TT/2014

Coram:

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

**Date of Hearing : 20.1.2016
Date of Order : 11.03.2016**

In the matter of:

Truing up of transmission tariff for 2009-14 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 and determination of transmission tariff for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for 315 MVA, 400/220kV ICT II at Misa Sub-station along with associated bays under "North East/Northern Western Interconnector-I and Transmission system of Kameng HEP" in North Eastern Region under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

And in the matter of:

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

.....**Petitioner**

Versus

1. Assam Electricity Grid Corporation Limited
(Formerly Assam State Electricity Board),
"Bijulee Bhawan", Paltanbazar, Guwahati- 781 001
2. Meghalaya Energy Corporation Ltd.
(Formerly Meghalaya State Electricity Board)
Short Round Road, "Lumjingshai",
Shillong-793 001



3. Government of Arunachal Pradesh,
Itanagar, Arunachal Pradesh
4. Power and Electricity Department,
Govt. of Mizoram,
Aizawl, Mizoram
5. Manipur State Electricity Distribution
Company Ltd. (Formerly Electricity Department,
Government of Manipur)
Keishampat, Imphal
6. Department of Power,
Government of Nagaland
Kohima, Nagaland
7. Tripura State Electricity Corporation Ltd.,
Vidhyut Bhawan, North Banamalipur,
Agartala, Tripura (W) – 799001

.....**Respondents**

The following were present:-

For Petitioner: Shri Anshul Garg, PGCIL
 Shri S.K. Venkatesan, PGCIL
 Shri M.M. Mondal, PGCIL
 Shri Y.K Sehgal, PGCIL
 Shri Nitish Kumar, PGCIL
 Shri G.C Dhal, PGCIL
 Shri Amit Yadav, PGCIL
 Shri Rakesh Prasad, PGCIL
 Shri S.S. Raju, PGCIL
 Shri Jasbir Singh, 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 315 MVA, 400/220kV ICT II at Misa Sub-station along with



associated bays under “North East/Northern Western Interconnector-I and Transmission system of Kameng HEP” in North 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 electricity departments who are procuring transmission service from the petitioner, mainly beneficiaries of the North 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 Electricity Act, 2003 (“the Act”). No comments have been received from the public in response to the notices published by the petitioner under Section 64 of the Act. The hearing in this matter was held on 20.1.2016. The petitioner was directed to file certain information vide letter dated 18.1.2016. The petitioner submitted information vide affidavit dated 29.1.2016. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

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



- (a) The investment approval for the transmission scheme was accorded by the Board of Directors of the petitioner company vide Memorandum No. C/CP/NER-NR.WR Intr-I dated 27.2.2009 for an estimated cost of ₹1113019 lakh including IDC of ₹106605 lakh based on 4th Quarter, 2008 price level. The petitioner has built the transmission asset in the North Eastern Region. The date of commercial operation for the Asset is 1.7.2012. The approved apportioned cost of the asset is ₹3015.76 lakh.
- (b) The petitioner had earlier submitted the instant petition as on 18.9.2014, for truing up of transmission tariff for 2009-14 tariff period and determination of tariff for the 2014-19 tariff period. The petitioner vide affidavit dated 29.1.2016, has submitted revised tariff forms for the truing up of 2009-14 tariff period and determination of tariff for the 2014-19 tariff period for the asset.
- (c) The AFC (Annual Fixed Charges) from COD (1.7.2012) to 31.3.2014 for the Asset was allowed vide order dated 23.1.2012 in Petition No. 132/TT/2011 based on anticipated COD of 1.11.2011 in accordance with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The tariff allowed for the tariff period 2009-14 is as under:-

Particulars	(₹ in lakh)		
	2011-12 (Pro-rata)	2012-13	2013-14
Depreciation	43.46	108.05	108.05
Interest on Loan	50.13	118.02	108.47
Return on equity	43.16	107.32	107.32



Particulars	2011-12 (Pro-rata)	2012-13	2013-14
Interest on Working Capital	4.72	11.71	11.80
O & M Expenses	41.48	105.26	111.28
Total	182.95	450.36	446.93

(d) The Commission, vide order dated 23.1.2012 in Petition No. 132/TT/2011, has determined the tariff for the tariff period 2009-14 based on admitted capital cost of ₹1903.98 lakh as on COD of the asset.

(e) The MAT rate applicable as on 2008-09 was considered to arrive at rate of return on equity for the tariff period 2009-14, which is required to be adjusted as per the actual MAT rate applicable for the respective year at the time of truing up of tariff for the 2009-14 tariff period.

(f) The petitioner submitted the CEA Energisation Certificate and Single Line diagram for the Asset vide affidavit dated 18.1.2016.

(g) The instant petition was filed on 18.9.2014.

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

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

Capital Cost

6. The petitioner has claimed capital cost of ₹1852.60 lakh as on COD (1.7.2012) for the purpose of tariff vide affidavit dated 29.1.2016.



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

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

(a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan - (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;

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

(c) additional capital expenditure determined under regulation 9:

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

8. The capital cost considered as on COD vide order dated 23.1.2012 in Petition No. 132/TT/2011 is ₹1903.98 lakh was based on anticipated COD of 1.11.2011. The petitioner vide affidavit dated 29.1.2016 has submitted revised capital cost of ₹1852.60 lakh as on actual COD (1.7.2012), after adjusting IDC on cash basis. In the instant petition, the petitioner has submitted the actual capital cost based on audited accounts. The petitioner has claimed the following capital cost and additional capital expenditure for the instant assets:-

Cost as per Investment Approval is : 3015.76 lakh						
Particulars	Capital cost as on COD	Additional capitalization			Total additional capitalization	Total capital cost including additional capitalization
		2011-12	2012-13	2013-14		
Asset	1852.60	-	188.25	80.47	268.72	2121.32



Cost Variation

9. The petitioner vide affidavit dated 29.1.2016, submitted the capital cost as on COD as ₹1852.60 lakh and claimed additional capitalization of ₹268.72 lakh for the 2014-19 tariff period, which is well within the approved apportioned cost of ₹3015.76 lakh. The variation in the cost is due to the price discovered through competitive bidding. As such, there is no cost over run for the said asset and hence accordingly, the capital cost as capital cost as on COD as ₹1852.60 lakh and claimed additional capitalization of ₹268.72 lakh has been considered for the purpose of tariff.

Time Over-run

10. The petitioner was directed to submit the reasons for time over-run. The petitioner, vide affidavit dated 29.1.2016, has submitted that, as per Investment approval dated 27.2.2009, the schedule completion is within 54 months for Part-A and 48 months for Part-B & C of the transmission system progressively from the date of investment approval. The transmission asset is covered in Part-B of the scheme therefore, the scheduled date of commissioning (SCOD) of the asset works out to be 27.2.2013 (i.e. COD: 1.3.2013), against which the transmission asset was put under commercial operation with effect from 1.7.2012. Hence, there is an early commissioning by 8 months against SCOD i.e., there is no time over run for the instant asset.



IDC/IEDC

11. The petitioner was also directed vide affidavit dated 18.1.2016 to submit the break-up of IDC/IEDC upto SCOD and from SCOD to actual COD, along with IDC/IEDC discharged upto COD and scheduled to discharge the balance amount. In response, the petitioner vide affidavit dated 29.1.2016 submitted that, since there is an early commissioning by 8 months for the asset, hence break up of IDC/IEDC is not required. Further, the petitioner submitted that, out of total IDC of ₹300.82 lakh, ₹248.97 lakh has been discharged as on COD. The balance IDC of ₹51.05 lakh has been discharged in 2012-13. We have considered the IDC discharged upto COD to work out the capital cost as on COD and balance IDC accrued upto COD in the additional capitalization of 2012-13. The tariff for 2012-13 is claimed considering the accrued IDC as part of additional capitalization of 2012-13. The petitioner also submitted that, IEDC has been discharged upto COD, accordingly, same has been considered to work out the capital cost as on COD.

12. We have considered the petitioner's submissions. There is no time overrun for the said asset. Accordingly IDC/IEDC has been capitalized as on COD on cash basis in the instant order.

Initial Spares

13. The petitioner has claimed initial spares of ₹65.33 lakh pertaining to sub-station for the Asset. The petitioner submitted that, initial spares has been claimed based on estimated completion cost of ₹2518.41 lakh as on 31.3.2019,



which is 2.59% approximately, i.e. marginally higher as per provision 8, Chapter-2 of the 2009 Tariff Regulations. The same should be allowed as numbers of elements in the projects are yet to be commissioned. Hence, the petitioner requested that after completion of whole project, view towards cost of spares should be taken.

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

“Transmission line:	0.75%
Transmission sub-station	2.50%
Series compensation devices& HVDC Station:	3.50%”

15. In order dated 23.1.2016, initial spares of ₹44.88 lakh, pertaining to sub-station for the Asset was disallowed considering the capital cost as on COD and additional capital expenditure upto the end of the tariff period 31.3.2014. Further, in order dated 23.1.2012 it was provided that, some more assets were yet to be commissioned under transmission system associated with East West Transmission Corridor in Western Region, the ceiling limit of initial spares was to be recalculated as per Regulation 8 of the 2009 Tariff Regulations at the time of commissioning of the last asset of the project or at time of trueing up whichever was earlier.

16. The petitioner has submitted actual capital expenditure for true up of tariff during 2009-14 tariff period as per 2009 Tariff Regulations and also submitted



the estimated capital expenditure for determination of tariff during 2014-19 tariff period in accordance with the 2014 Tariff Regulations. The initial spares have been worked out by considering the additional capital expenditure upto cut-off date which falls beyond 31.3.2014 period.

17. The calculation for the treatment of initial spares for sub-station has been shown in the table given below:-

Description Sub-station	Capital cost as on cut-off date i.e. 31.3.2015	Initial spares claimed	Ceiling limits as per Regulation 8 of the 2009 Tariff Regulation	Initial spares worked out and allowed	Excess initial spares claimed
	(a)	(b)	(c)	$(d)=*((a-b)*c)/(100-c)\%$	$(e)=(d)-(b)$
Asset	2518.41	65.33	2.50%	62.90	2.43

18. The petitioner has submitted the Auditor's Certificate certifying the capital cost and additional capitalization claimed. Accordingly, the Commission has considered the capital cost of ₹1850.17 lakh (excluding excess initial spares) for the Asset as on COD (1.7.2012), for the purpose of tariff for the 2009-14 tariff period.

Additional Capital Expenditure

19. The petitioner has claimed additional capitalization under Regulation 9 (1)(i) on account of un-discharged liabilities towards balance and retention payments within cut-off date.

20. Clause (1)(i) of Regulation 9 of the 2009 Tariff Regulations provides that:-



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

(i) Undischarged liabilities;...”.

21. The petitioner has claimed additional capitalization of ₹188.25 lakh and ₹80.47 lakh for 2012-13 and 2013-14, respectively, on account of un-discharged liabilities towards Sub-station and building and civil works.

22. We have considered the submissions of the petitioner. We are of the view that the additional capitalization claimed is on account of balance and retention payments for works done within the cut-off date. Further, the total capital cost of ₹2118.89 lakh including actual additional capitalisation as worked out (excluding excess initial spares) is well within the overall approved cost of ₹3015.76 lakh. Hence, considering the submissions made by the petitioner, the total capital cost including additional capitalization under of Regulation 9 (1)(i) of the 2009 Tariff Regulations as shown in the table below:-

(₹ in lakh)

Cost as per Investment Approval is 3015.76 lakh						
Particulars	Admitted capital cost as on COD	Additional capitalization			Total additional capitalization	Total capital cost including additional capitalization
		2011-12	2012-13	2013-14		
Approved in order dated 23.1.2012	1903.98	142.51	-	-	142.51	2046.49
As submitted by Petitioner	1852.60	-	188.25	80.47	268.72	2121.32
As approved in this order	1850.17	-	188.25	80.47	268.72	2118.89



Debt: Equity

23. 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.”

24. The petitioner has claimed trued up Annual Fixed Charge based on debt-equity ratio of 70:30 as on COD admitted by the Commission in its order dated 23.1.2012 in Petition No. 132/TT/2011 as opening debt:equity ratio as on COD (1.7.2012).

25. The normative debt:equity ratio of 70:30 as on COD has been considered as opening debt:equity ratio as on 1.7.2012 for the purpose of truing up of the approved tariff of tariff period 2009-14, as given under:-

(₹ in lakh)		
Funding	Amount	(%)
Debt	1295.12	70.00
Equity	555.05	30.00
Total	1850.17	100.00

26. With respect to additional capitalization, the petitioner has submitted the debt:equity ratio of 70:30 for 2012-13 to 2013-14. The petitioner vide affidavit dated 18.1.2016, asked the petitioner to submit an undertaking on affidavit that actual equity infused for the additional capitalization during the 2009-14 tariff period is not less than 30%. The petitioner vide affidavit dated 29.1.2016 submitted that during 2012-13 and 2013-14 actual additional capitalization of ₹188.25 lakh (Additional capitalization of ₹137.20 lakh and accrued IDC of



₹51.05 lakh) and ₹80.47 lakh, loan deployed is 70% respectively. Hence, 30% equity has been deployed as per Clause 12(3) of the 2009 Tariff Regulations.

The actual equity infused is as follows:

Particulars	Cash expenditure/ Additional Capitalization	Actual Funding/Debt		Actual equity	
Net Additional Capitalization 2012-13	188.25	131.77	70.00%	56.48	30.00%
Net Additional Capitalization 2013-14	80.47	56.33	70.00%	24.14	30.00%

27. Debt: equity ratio is allowed in accordance with Clause 2 of Regulation 12 of the 2009 Tariff Regulations. The overall debt equity as on 31.3.2014 including additional capitalization is as under:-

(₹ in lakh)		
Funding	Amount	(%)
Debt	1483.22	70.00
Equity	635.67	30.00
Total	2118.89	100.00

Interest on Loan (“IOL”)

28. Regulation 16 of the 2009 Tariff Regulations provides the methodology for working out weighted average rate of interest on loan. The petitioner has submitted the weighted average rate of interest on loan based on its actual loan portfolio and rate of interest.



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

(₹ in lakh)

Particulars	2011-12 (Pro-rata)	2012-13 (Pro-rata)	2013-14
Approved vide order dated 23.1.2012	50.13	118.02*	108.47
As claimed by petitioner	-	89.76	119.65
Allowed after true up	-	89.65	119.51

* Approved figure is for full year

30. The interest on loan has increased in 2013-14 on account of increase in additional capitalization incurred during the year.

Return on Equity (“ROE”)

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

“(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.

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

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

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

(5) The generating company or the transmission licensee, as the case maybe, shall recover the shortfall or refund the excess Annual Fixed Charge on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to



time) of the respective financial year directly without making any application before the Commission:

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

32. The petitioner has submitted that MAT rate of 11.330% applicable for 2008-09 was considered in the order dated 23.1.2012. However, for truing up purpose, the computation of ROE for the tariff period 2009-14 has been done on the basis of actual MAT rate applicable during 2009-14. The petitioner has submitted the variation in the MAT rate during 2009-14 as per the Finance Act of the relevant year for the purpose of grossing up of ROE, as below:-

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

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

Particulars	(₹ in lakh)		
	2011-12 (Pro-rata)	2012-13 (Pro-rata)	2013-14
Approved vide order dated 23.1.2016	43.16	107.32*	107.32
As claimed by petitioner	-	84.87	122.43
Allowed after true up	-	84.77	122.29

* Approved figure is for full year



34. The variation in return on equity is on account of increase in the applicable MAT rate for the purpose of grossing up of base rate of return on equity in accordance with the 2009 Tariff Regulations and variation in Capital Cost as on COD and additional capitalisation.

Depreciation

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

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

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

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

"17. Depreciation:

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

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

37. The Commission, in its order dated 23.1.2012 in Petition No. 132/TT/2011, has worked out the depreciation in accordance with Regulation 17 of the 2009 Tariff Regulations.

38. The weighted average useful life of the transmission asset has been considered as per Regulations 3 (42) and 17 (4) of the 2009 Tariff Regulations.



For the purpose of calculation, the weighted average useful life of the asset as on COD has been considered as 25 years. The depreciation for the tariff period 2009-14 has been worked out in accordance with Regulation 17 of the 2009 Tariff Regulations based on admitted capital expenditure as under. There is slight variation in allowed depreciation after true up with respect to petitioner's submission due to rounding off.

(₹ in lakh)			
Particulars	2011-12 (Pro-rata)	2012-13 (Pro-rata)	2013-14
Approved vide order dated 23.1.2012	43.56	108.05*	108.05
As claimed by petitioner	-	76.20	108.43
Allowed after true up	-	76.10	108.30

* Approved figure is for full year

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

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

Particulars		2012-13 (Pro-rata)	2013-14
Actual No of Sub-stations (nos.)	400 kV Sub-stations	1	1
Actual No of Sub-stations (nos.)	220 kV Sub-stations	1	1
Norms as per Regulation	400 kV Sub-stations (₹lakh/bay)	61.92	65.46
	220 kV Sub-stations (₹lakh/bay)	43.34	45.82
Total (₹in lakh)		78.95	111.28



40. The O&M Expenses claimed by the petitioner for tariff period 2009-14 are same as that approved in the tariff order dated 23.1.2012 in Petition No. 132/TT/2011. Accordingly, the O&M Expenses claimed by the petitioner, allowed and trued up are the same, and are as follows:-

(₹ in lakh)			
Particulars	2011-12 (Pro-rata)	2012-13 (Pro-rata)	2013-14
Approved vide order dated 23.1.2012	41.48	105.26*	111.28
As claimed by petitioner	-	78.95	111.28
Allowed after true up	-	78.95	111.28

* Approved figure is for full year

Interest on working capital("IWC")

41. 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.

42. The petitioner has submitted that the rate of interest on working capital has been considered as 13.50% 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.

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



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

44. The IWC trued up is as under:-

(₹ in lakh)		
Particulars	2012-13 (Pro-rata)	2013-14
Maintenance Spares	11.84	16.69
O & M expenses	6.58	9.27
Receivables	56.60	79.26
Total	75.02	105.23
Rate of Interest (%)	13.50	13.50
Interest	10.13	14.21

(₹ in lakh)			
Particulars	2011-12 (Pro-rata)	2012-13 (Pro-rata)	2013-14
Approved vide order dated 23.1.2012	4.72	11.71*	11.80
As claimed by petitioner	-	10.13	14.21
Allowed after true up	-	10.13	14.21

* Approved figure is for full year

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



ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

46. 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:-

(₹ in lakh)		
Particulars	2012-13 (pro-rata)	2013-14
Gross Block		
Opening Gross block	1850.17	2038.42
Additional Capitalization	188.25	80.47
Closing Gross block	2038.42	2118.89
Average Gross block	1944.29	2078.65
Depreciation		
Rate of Depreciation(%)	5.219	5.210
Depreciable Value	1749.87	1870.79
Elapsed Life (Beginning of the year)	0	1
Weighted Balance Useful life of the assets	25	24
Remaining Depreciable Value	1749.87	1794.69
Depreciation	76.10	108.30
Cumulative Depreciation		
Interest on Loan	1295.12	1426.89
Gross Normative Loan	0.00	76.10
Cumulative Repayment upto Previous Year	1295.12	1350.79
Net Loan-Opening	131.78	56.33
Addition due to Additional Capitalization	76.10	108.30
Repayment during the year	1350.79	1298.82
Net Loan-Closing	1322.96	1324.81
Average Loan	9.0354	9.0209
Weighted Average Rate of Interest on Loan(%)	89.65	119.51
Interest		
Return on Equity	555.05	611.53



Particulars	2012-13 (pro-rata)	2013-14
Opening Equity	56.48	24.14
Additions	611.53	635.67
Closing Equity	583.29	623.60
Average Equity	15.500	15.500
Return on Equity (Base Rate) (%)	20.008	20.961
MAT Rate for respective year (%)	19.377	19.610
Return on Equity (Pre-Tax) (%)	84.77	122.29
Return on Equity (Pre-Tax)		
Interest on Working Capital	11.84	16.69
Maintenance Spares	6.58	9.27
O & M expenses	56.60	79.26
Receivables	75.02	105.23
Total	10.13	14.21
Interest		
Annual Transmission Charges		
Depreciation	76.10	108.30
Interest on Loan	89.65	119.51
Return on Equity	84.77	122.29
Interest on Working Capital	10.13	14.21
O & M Expenses	78.95	111.28
Total	339.59	475.58

DETERMINATION OF ANNUAL TRANSMISSION CHARGES FOR 2014-19

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

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	120.58	130.66	130.66	130.66	130.66
Interest on Loan	123.80	124.46	112.68	100.90	89.14
Return on equity	136.48	148.16	148.16	148.16	148.16
Interest on Working Capital	14.43	15.13	15.06	14.99	14.92
O & M Expenses	102.51	105.91	109.43	113.06	116.81
Total	497.80	524.32	515.99	507.77	499.69



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

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	15.38	15.89	16.41	16.96	17.52
O & M expenses	8.54	8.83	9.12	9.42	9.73
Receivables	82.97	87.39	86.00	84.63	83.28
Total	106.89	112.11	111.53	111.01	110.53
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	14.43	15.13	15.06	14.99	14.92

Capital Cost

49. Clause (1) & (3) of Regulation 9 of the 2014 Tariff Regulations specifies 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.”

50. The petitioner has claimed capital cost of ₹2121.32 lakh as on 31.3.2014 and additional capitalization of ₹397.09 lakh for the Asset for the 2014-15 tariff period.

51. The trued up capital cost of ₹2118.89 lakh (after adjustment of initial spares) is considered for the Asset as on 31.3.2014 to work out tariff for tariff period 2014-19.



Additional Capital Expenditure

52. The petitioner has proposed additional capitalization of ₹397.09 lakh for the Asset towards balance and retention payments under Clause 1(i) of Regulation 14 of the 2014 Tariff Regulations.

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

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

.....

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

54. The petitioner was directed vide affidavit dated 18.1.2016, to submit the amount of balance and retention payment to be made along with details of contract for which payment has been retained along with the amount retained. In response, the petitioner submitted that amount of ₹397.09 lakh is undischarged on account of balance and retention payments.

55. The total capital cost of the transmission asset including additional capitalization incurred during the 2014-19 tariff period works out to ₹2515.98 lakh for the Asset. The Commission has considered the petitioner’s submission and observes that the additional capitalization proposed is mainly towards balance and retention payments due to undischarged liabilities for works executed within cut-off date. Further, the total completion cost is within the approved apportioned cost of the Asset. Accordingly, the additional capitalisation claimed by the



petitioner for 2014-2019 period is allowed in accordance with Clause 1, sub-clause (i) of Regulation 14 of the 2014 Tariff Regulations. The additional capitalisation for tariff period 2014-19 shall be finally approved after the detailed scrutiny of additional capitalisation while carrying out the true up for 2014-19 tariff period.

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

(₹ in lakh)

Particulars	Approved Apportioned Cost	Admitted capital cost as on 31.3.2014	Additional capitalization	Total additional capitalization	Total capital cost including additional capitalization
			2014-15		
Asset	3015.76	2118.89	397.09	397.09	2515.98

Debt:Equity Ratio

57. 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.”

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



(₹ in lakh)		
Particulars	Amount	(%)
Debt	1483.22	70.00
Equity	635.67	30.00
Total	2118.89	100.00

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

(₹ in lakh)		
Particulars	Amount	(%)
Debt	1761.19	70.00
Equity	754.79	30.00
Total	2515.98	100.00

Interest on Loan ("IOL")

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

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

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

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

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

61. The weighted average rate of IOL has been considered on the basis of rate prevailing as on 1.4.2014. The IOL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of weighted average



rate of interest are placed at **Annexure-II** and the IOL has been worked out and allowed as follows:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	1483.22	1761.19	1761.19	1761.19	1761.19
Cumulative Repayment upto Previous Year	184.40	304.84	435.38	565.91	696.45
Net Loan-Opening	1298.82	1456.34	1325.81	1195.27	1064.74
Addition due to Additional Capitalization	277.96	0.00	0.00	0.00	0.00
Repayment during the year	120.45	130.53	130.53	130.53	130.53
Net Loan-Closing	1456.34	1325.81	1195.27	1064.74	934.20
Average Loan	1377.58	1391.07	1260.54	1130.00	999.47
Weighted Average Rate of Interest on Loan(%)	8.9776	8.9388	8.9306	8.9207	8.9104
Interest	123.67	124.35	112.57	100.80	89.06

Return on Equity("ROE")

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

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

"25. Tax on Return on Equity:

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

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

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



63. 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.

64. 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.

65. As discussed above, 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 given below:-



(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	635.67	754.79	754.79	754.79	754.79
Addition due to Additional Capitalization	119.13	-	-	-	-
Closing Equity	754.79	754.79	754.79	754.79	754.79
Average Equity	695.23	754.79	754.79	754.79	754.79
Return on Equity Base Rate (%)	15.50	15.50	15.50	15.50	15.50
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)	136.33	148.02	148.02	148.02	148.02

Depreciation

66. 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."

67. The petitioner in the instant petition has submitted that the assets will complete 12 years after 2014-19 tariff period. The petitioner has computed



depreciation considering capital expenditure of ₹2121.32 lakh as on 31.3.2014 and additional capitalization of ₹397.09 lakh during the 2014-19 tariff period.

68. We have considered the submission made by the petitioner considering capital cost of ₹2118.89 lakh(excluding excess initial spares) as on 31.3.2014 with reference to depreciation. Depreciation is allowed as provided under Regulation 27 of the 2014 Tariff Regulations. The details of the depreciation allowed is given hereunder:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross block	2118.89	2515.98	2515.98	2515.98	2515.98
Additional capitalization	397.09	0.00	0.00	0.00	0.00
Closing Gross block	2515.98	2515.98	2515.98	2515.98	2515.98
Average Gross block	2317.43	2515.98	2515.98	2515.98	2515.98
Rate of Depreciation(%)	5.197	5.188	5.188	5.188	5.188
Elapsed Life of the assets at beginning of the year	2085.69	2264.38	2264.38	2264.38	2264.38
Weighted Balance Useful life of the assets	2	3	4	5	6
Depreciable Value	23	22	21	20	19
Remaining Depreciable Value	1901.29	1959.54	1829.00	1698.47	1567.93
Depreciation	120.45	130.53	130.53	130.53	130.53

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

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



		(₹ in lakh)				
Particulars		2014-15	2015-16	2016-17	2017-18	2018-19
Actual No of Sub-stations (nos.)	400 kV Sub-stations	1	1	1	1	1
Actual No of Sub-stations (nos.)	220 kV Sub-stations	1	1	1	1	1
Norms as per Regulation	400 kV Sub-stations (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71
	220 kV Sub-stations (₹ lakh/bay)	42.21	43.61	45.06	46.55	48.1
	Total (₹ in lakh)	102.51	105.91	109.43	113.06	116.81

70. The petitioner has submitted that norms for O&M Expenses for the tariff period 2014-19 have been arrived on the basis of normalized actual O&M Expenses during the period 2008-13. The petitioner has further submitted that the wage revision of the employees of the petitioner 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.

71. With respect to the revision in O&M norms due to wage revision, UPPCL has submitted that in case the amount exceeds the normative O&M charges the petitioner has to show the amount that exceeds the normative O&M Expenses.

72. 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.

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

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses Allowed	102.51	105.91	109.43	113.06	116.81

Interest on Working Capital (“IWC”)

74. 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;”

75. 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%.



76. 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 is considered as 13.50% (SBI Base Rate of 10% plus 350 basis points) as per 2014 Tariff Regulations. The interest on working capital as determined by the Commission is shown in the table below:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	15.38	15.89	16.41	16.96	17.52
O & M expenses	8.54	8.83	9.12	9.42	9.73
Receivables	82.90	87.32	85.93	84.57	83.22
Total	106.82	112.03	111.47	110.95	110.48
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	14.42	15.12	15.05	14.98	14.91

Annual Transmission Charges

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

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Block					
Opening Gross Block	2118.89	2515.98	2515.98	2515.98	2515.98
Additional Capitalization	397.09	-	-	-	-
Closing Gross Block	2515.98	2515.98	2515.98	2515.98	2515.98
Average Gross Block	2317.43	2515.98	2515.98	2515.98	2515.98
Depreciation					
Rate of Depreciation (%)	5.197	5.188	5.188	5.188	5.188
Depreciable Value	2085.69	2264.38	2264.38	2264.38	2264.38
Elapsed Life of the assets at beginning of the year	2	3	4	5	6



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Weighted Balance Useful life of the assets	23	22	21	20	19
Remaining Depreciable Value	1901.29	1959.54	1829.00	1698.47	1567.93
Depreciation	120.45	130.53	130.53	130.53	130.53
Interest on Loan					
Gross Normative Loan	1483.22	1761.19	1761.19	1761.19	1761.19
Cumulative Repayment upto Previous Year	184.40	304.84	435.38	565.91	696.45
Net Loan-Opening	1298.82	1456.34	1325.81	1195.27	1064.74
Additions	277.96	0.00	0.00	0.00	0.00
Repayment during the year	120.45	130.53	130.53	130.53	130.53
Net Loan-Closing	1456.34	1325.81	1195.27	1064.74	934.20
Average Loan	1377.58	1391.07	1260.54	1130.00	999.47
Weighted Average Rate of Interest on Loan (%)	8.9776	8.9388	8.9306	8.9207	8.9104
Interest	123.67	124.35	112.57	100.80	89.06
Return on Equity					
Opening Equity	635.67	754.79	754.79	754.79	754.79
Additions	119.13	0.00	0.00	0.00	0.00
Closing Equity	754.79	754.79	754.79	754.79	754.79
Average Equity	695.23	754.79	754.79	754.79	754.79
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for the year 2013-14 (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity (Pre Tax)	136.33	148.02	148.02	148.02	148.02
Interest on Working Capital					
Maintenance Spares	15.38	15.89	16.41	16.96	17.52
O & M expenses	8.54	8.83	9.12	9.42	9.73
Receivables	82.90	87.32	85.93	84.57	83.22
Total	106.82	112.03	111.47	110.95	110.48
Interest	14.42	15.12	15.05	14.98	14.91



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Transmission Charges					
Depreciation	120.45	130.53	130.53	130.53	130.53
Interest on Loan	123.67	124.35	112.57	100.80	89.06
Return on Equity	136.33	148.02	148.02	148.02	148.02
Interest on Working Capital	14.42	15.12	15.05	14.98	14.91
O & M Expenses	102.51	105.91	109.43	113.06	116.81
Total	497.39	523.93	515.60	507.39	499.33

Filing Fee and Publication Expenses

78. 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.

79. 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

80. The petitioner has requested to be allowed to bill and recover Licence 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

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

Sharing of Transmission Charges

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

83. This Order disposes of Petition No. 391/TT/2014.

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

Sd/-
(A.S. Bakshi)
Member



ANNEXURE-I**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO 2009-14****(₹ in lakh)**

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2013	Additions during the tariff period	Total
BOND XXVIII-DOCO Funding-	9.33	310.00	0.00	310.00
BOND XXIX-DOCO-Funding-	9.20	170.00	0.00	170.00
BOND XXX-DOCO FUNDING-	8.80	100.00	0.00	100.00
BOND XXXII-DOCO Funding-	8.64	60.00	0.00	60.00
BOND XXXII-DOCO-Funding-	8.84	440.00	0.00	440.00
BOND XXXIV-DOCO Funding-	8.84	110.00	0.00	110.00
BOND XXXV-DOCO Funding-	9.64	50.00	0.00	50.00
BOND XXXVI-DOCO Funding-	9.35	30.00	0.00	30.00
BOND XXXVII- DOCO Funding-	9.25	15.00	0.00	15.00
BOND XXXVIII-ADDCAP FOR 2012-13 Add cap for 2012-13	9.25	0.00	35.73	35.73
BOND XXXVIII-DOCO Funding-	9.25	11.82	0.00	11.82
BOND-XLI-ADD CAP FOR 2013-14 Add cap Funding-	8.85	0.00	96.04	96.04
BOND XLIV- ADD CAP FOR 2013-14 Add Cap Funding-	8.70	0.00	56.33	56.33
BOND XLVIII-ADD CAP FOR 2014-15 Add cap for 2014-15-	8.20	0.00	0.00	0.00
Total		1296.82	188.10	1484.92

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

Particulars	2012-13	2013-14
Gross Opening Loan	1296.82	1428.59
Cumulative Repayments of Loans upto Previous Year	0.00	40.00
Net Loans Opening	1296.82	1388.59
Add: Drawl(s) during the year	131.77	56.33
Less: Repayment(s) of Loan during the year	40.00	85.00
Net Closing Loan	1388.59	1359.92
Average Net Loan	1342.71	1374.26
Interest on Loan	121.32	123.97
Rate of Interest on Loan (%)	9.0354	9.0209



ANNEXURE-II

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

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND XXVIII-DOCO Funding-	9.33	310.00	0.00	310.00
BOND XXIX-DOCO-Funding-	9.20	170.00	0.00	170.00
BOND XXX-DOCO FUNDING-	8.80	100.00	0.00	100.00
BOND XXXII-DOCO Funding-	8.64	60.00	0.00	60.00
BOND XXXII-DOCO-Funding-	8.84	440.00	0.00	440.00
BOND XXXIV-DOCO Funding-	8.84	110.00	0.00	110.00
BOND XXXV-DOCO Funding-	9.64	50.00	0.00	50.00
BOND XXXVI-DOCO Funding-	9.35	30.00	0.00	30.00
BOND XXXVII- DOCO Funding-	9.25	15.00	0.00	15.00
BOND XXXVIII-ADDCAP FOR 2012-13 Add cap for 2012-13	9.25	35.73	0.00	35.73
BOND XXXVIII-DOCO Funding-	9.25	11.82	0.00	11.82
BOND-XLI-ADD CAP FOR 2013-14 Add cap Funding-	8.85	96.04	0.00	96.04
BOND XLIV- ADD CAP FOR 2013-14 Add Cap Funding-	8.70	56.33	0.00	56.33
BOND XLVIII-ADD CAP FOR 2014-15 Add cap for 2014-15-	8.20	0.00	121.80	121.80
Total		1484.92	121.80	1606.72

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	1484.92	1606.72	1606.72	1606.72	1606.72
Cumulative Repayments of Loans upto Previous Year	125.00	224.17	328.76	443.35	557.94
Net Loans Opening	1359.92	1382.55	1277.96	1163.37	1048.78
Add: Drawl(s) during the year	121.80	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	99.17	104.59	114.59	114.59	133.37
Net Closing Loan	1382.55	1277.96	1163.37	1048.78	915.41
Average Net Loan	1371.24	1330.26	1220.67	1106.08	982.10
Interest on Loan	123.10	118.91	109.01	98.67	87.51
Rate of Interest on Loan (%)	8.9776	8.9388	8.9306	8.9207	8.9104

