

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 216/TT/2014

Coram:

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

**Date of Hearing : 02.12.2015
Date of Order : 30.12.2015**

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 Neelamangala - Mysore 400 kV D/C Transmission Line along with 2 x 315 MVA, 400/220 kV ICTs at Mysore Substation (COD: 01.05.2006) in Southern 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.
Kaveri Bhawan, Bangalore-560009
2. 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 Generation and Distribution Corporation Ltd.
(Formerly Tamilnadu Electricity Board (TNEB))
NPKRR Maaligai, 800, Anna Salai



Chennai- 600002

5. Electricity Department
Government of Pondicherry
Pondicherry- 605001
6. Eastern Power Distribution Company of Andhra Pradesh Ltd.
P&T Colony, Seethmmadhara, Vishakhapatnam
Andhra Pradesh
7. Southern Power Distribution Company of Andhra Pradesh
Tiruchanoor Road, Kesavayana Gunta
Tirupati- 517 501
8. Central Power Distribution Company of Andhra Pradesh
Mint Compound,
Hyderabad- 500 063
9. Northern Power Distribution Company of Andhra Pradesh
Chaitanyapuri, Kazipet
Warangal- 506 004
10. Bangalore Electricity Supply Company Ltd. (BESCOM)
K.R.Circle
Bangalore- 560 001
11. Gulbarga Electricity Supply Company Ltd. (GESCOM)
Station Main Road, Gulbarga
12. Hubli Electricity Supply Company Ltd. (HESCOM)
Navanagar, P B Road
Hubli
13. MESCOM Corporate Office
Paradigm Plaza, AB Shetty Circle
Mangalore- 575 001
14. Chamundeswari Electricity Supply Corporation Ltd.
New Kantharaj Urs Road, Saraswatipuram,
Mysore-570 009
15. Electricity Department
Government of Goa
Vidyuti Bhawan, Panaji
Goa- 403001

.....**Respondents**



The following were present:

For Petitioner: Shri Anshul Garg, PGCIL
Shri Angaru Naresh Kumar, PGCIL
Shri Jasbir Singh, PGCIL
Shri S. K. Venkatesan, PGCIL
Shri M.M. Mondal, PGCIL
Shri Sashi Bhushan, PGCIL
Shri J. Mazumder, PGCIL
Shri R. Prasad, PGCIL
Shri Sunil Kumar, PGCIL
Shri S.S. Raju, PGCIL

For Respondent: Shri S. Vallinayagam, Advocate, TANGEDCO
Shri R. Jayaprakash, TANGEDCO

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 Neelamangala - Mysore 400 kV D/C Transmission Line along with 2 x 315 MVA, 400/220 kV ICTs at Mysore Substation (COD: 01.05.2006) in Southern 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 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 transmission and distribution licensees who are procuring transmission service from the petitioner, mainly beneficiaries of Southern 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. None of the respondents have filed any reply to the petition. The hearing in this matter was held on 2.12.2015. 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 administrative approval and expenditure sanction for the transmission assets was accorded by Government of India vide letter dated 22.8.2003 at an estimated cost of ₹15493 lakh (which included IDC of ₹1488 lakh (2nd quarter 2002 price level)). The asset was put under commercial operation w.e.f. 1.5.2006.
- b. The tariff for the period from 1.5.2006 to 31.3.2009 was allowed vide order dated 19.2.2008 in Petition No. 127/2007 in accordance with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 by considering the gross block of ₹14020.14 lakh as on COD and ₹14414.82 lakh as on 31.3.2007.



- c. The tariff for the period from 1.4.2007 to 31.3.2009 was revised vide order dated 25.6.2009 in Petition No. 51/2009 in accordance with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 due to additional capital expenditure for the year 2007-08.
- d. The tariff for tariff period 2009-14 was allowed vide order dated 21.2.2011 in Petition No. 200/2010 in accordance with the 2009 Tariff Regulations. The tariff allowed vide order dated 21.2.2011 for the tariff period 2009-14 is as under:-

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	757.76	757.90	758.33	758.75	758.75
Interest on Loan	699.25	643.68	588.16	532.58	476.54
Return on Equity	702.76	702.90	703.32	703.74	703.74
Interest on Working Capital	75.92	76.54	77.27	78.10	79.02
O & M Expenses	617.81	653.19	690.58	730.04	771.74
Total	2853.50	2834.21	2817.66	2803.21	2789.79

- e. The Commission, in its order dated 21.2.2011 in Petition No. 200/2010, has determined the tariff based on admitted capital cost of ₹14927.29lakh as on 31.3.2009 and additional capital expenditure of ₹5.50 lakh and ₹16.00 lakh proposed during 2009-10 and 2011-12, respectively, for the tariff period 2009-14.
- f. The MAT rate applicable as on 2008-09 was considered to arrive at rate of return on equity for the tariff period 2009-14, which is required to be adjusted as per the actual MAT rate applicable for the respective year at the time of truing up of tariff for 2009-14 tariff period.



g. The instant petition was filed on 8.8.2014.

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 admitted capital cost of ₹14927.29 lakh as on 31.3.2009 for the purpose of tariff. In addition to this, the petitioner has claimed additional capitalization of ₹172.60 lakh, ₹334.43 lakh and ₹874.62 lakh during 2011-12, 2012-13 and 2013-14, respectively, on account of final payment/withheld payment and liabilities to meet award of arbitration or for compliance of the order of decree of court under clause 9(2)(i) of the 2009 Tariff Regulations.

7. Last proviso to Clause (2) of Regulation 7 of the 2009 Tariff Regulations provides that:-

“Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2009 duly trued up by excluding un-discharged liability, if any, as on 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14, as may be admitted by the Commission, shall form the basis for determination of tariff”.

8. The capital cost as on 31.3.2009 admitted vide order dated 21.2.2011 in Petition No. 200/2010 has been considered as the opening capital cost as on 1.4.2009 for determination of tariff in accordance with Regulation 7 of the 2009 Tariff Regulations. The admitted capital cost of ₹14927.29 lakh as on 1.4.2009 has been considered to work out the trued up tariff for the tariff period 2009-14.



Additional Capital Expenditure

9. The petitioner has claimed additional capitalization of ₹172.60 lakh, ₹334.43 lakh and ₹874.62 lakh during 2011-12, 2012-13 and 2013-14, respectively, on account of final payment/withheld payment and liabilities to meet award of arbitration or for compliance of the order of decree of court under clause 9(2)(i) of the 2009 Tariff Regulations.

10. The Commission vide order dated 21.2.2011 in Petition No. 200/2010 had approved the additional capital expenditure of ₹5.50 lakh and ₹16.00 lakh proposed during 2009-10 and 2011-12, respectively, totalling to ₹21.50 lakh in the tariff period 2009-14, on account of balance and retention payment under Regulation 9(2)(i) of the 2009 Tariff Regulations. In this regard, the Commission vide its letter dated 27.11.2015 asked the petitioner to clarify the status of the balance/retention payment approved vide order dated 21.2.2011 in Petition No. 200/2010. The petitioner in response vide its affidavit dated 4.12.2015 submitted that against the additional capitalization of ₹21.50 lakh approved by the Commission on account of balance and retention payments, actual expenditure incurred by the petitioner towards balance and retention payment is nil. Further, no expenditure on account of balance and retention payments has been claimed by the petitioner during the tariff period 2014-19.

11. The petitioner in the instant petition has claimed actual additional capitalization of ₹1.26 lakh during 2012-13 in accordance with the Court order for compensation under transmission line and additional capitalization of ₹172.60



lakh, ₹333.17lakh and ₹874.62 lakh during 2011-12, 2012-13 and 2013-14, respectively, totaling to ₹1381.65 lakh in accordance with the court order for land compensation. The compensation of ₹1381.65 lakh for transmission line and freehold was paid in accordance with the court orders given below:

S. No.	Particulars/Court	Ref No./ LAC No.	Court order date	Total amount deposited (in ₹)
1	Transmission line compensation	PGCIL Ref No. SR-II/MYS/TLM/2011/1745/30/140/292 dated 21.11.2011	PGCIL letter dated 21.11.2011	126435
	Freehold land compensation:-			
2	I Addl. Sr. Civil Judge, Mysore	LAC 275/2002 (4A 21G)	18.3.2013	11524548
3	I Addl. Sr. Civil Judge, Mysore	LAC 276/2002 (3A 32G)	18.3.2013	9702715
4	IV Addl. Sr. Civil Judge, Mysore	LAC 162/2002 (5A 04G)	23.8.2012	16067311
5	IV Addl. Sr. Civil Judge, Mysore	LAC 163/2002 (1A 01G)	23.8.2012	3230013
6	IV Addl. Sr. Civil Judge, Mysore	LAC 164/2002 (4A 18G)	23.8.2012	14019645
7	III Addl. Sr. Civil Judge, Mysore	LAC 65/2002 (2A 00G)	11.3.2013	5402406
8	III Addl. Sr. Civil Judge, Mysore	LAC 66/2002 (5A 00G)	11.3.2013	13505266
9	III Addl. Sr. Civil Judge, Mysore	LAC 67/2002 (4A 03G)	11.3.2013	11006884
10	III Addl. Sr. Civil Judge, Mysore	LAC 68/2002 (5A 33G)	11.3.2013	15733553
11	III Addl. Sr. Civil Judge, Mysore	LAC 69/2002 (2A 02G)	11.3.2013	5537455
12	IV Addl. Sr. Civil Judge, Mysore	LAC 179/2004 (9A 02G)	16.8.2013	24799726
13	Prl. Sr. Civil Judge & CIM, Mysore	LAC 273/2012 (2A 29G)	20.9.2013	7509444
Total (₹)				138165401
Total (₹ in lakh)				1381.65

12. Clause 2(i) 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:

.....

(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;"

13. During the hearing held on 2.12.2015, the petitioner submitted that the payment of ₹1381.65 lakh in 2009-14 tariff period was made on account of court orders towards land compensation for Mysore Sub-station. As the actual capital expenditure has exceeded the approved cost estimate of ₹15493 lakh, the petitioner requested the Commission to consider the actual capital expenditure. In this regard, the Commission vide its letter dated 2.12.2015 directed the petitioner to submit the approval by Board of Directors/Competent Authority (as per delegation of powers) for such increase in capital expenditure along with Revised Cost Estimate approving such increase in capital expenditure. The petitioner in response vide its affidavit dated 18.12.2015 submitted that after paying the compensation for free hold land and transmission line in 2013-14, the completion cost exceeded the apportioned approved cost by ₹815.94 lakh. As the payment was made in accordance with the court direction, the petitioner did not submit the RCE in the instant petition dated 8.8.2014. However, in accordance with the direction of Commission, the petitioner has started the process of preparation of RCE and requested the Commission to grant two months' time for submission of RCE.

14. The total capital cost of the transmission asset including additional capitalisation incurred during tariff period 2009-14 works out to ₹16308.94 lakh, which is more than the approved cost of ₹15493.00 lakh given in the investment



approval dated 22.8.2003. As the additional capitalisation is on account of court directions, therefore, the Commission has considered the petitioner's submissions towards additional capital expenditure. However, as the petitioner is yet to submit the approval of RCE by competent authority, the Commission in this Order has restricted the allowed additional capitalization to the original cost estimate dated 22.8.2003 and provides a liberty to approach the Commission for approval of balance additional capital expenditure once RCE is approved. Accordingly, the additional capitalisation of ₹172.60 lakh, ₹334.43 lakh (addition of ₹1.26 lakh towards transmission line compensation and ₹333.17 lakh towards land compensation) and ₹58.68 lakh during 2011-12, 2012-13 and 2013-14, respectively, is allowed in accordance with Clause 2(i) of Regulation 9 of the 2009 Tariff Regulations. The summary of capital cost including additional capitalization is shown in table below:-

(₹ in lakh)

Cost as per Revised Cost Estimate dated 22.8.2003: ₹15493.00 lakh								
Particulars	Admitted capital cost as on 31.3.2009	Additional capitalisation					Total additional capitalisation	Total capital cost including additional capitalisation
		2009-10	2010-11	2011-12	2012-13	2013-14		
Approved vide order dated 21.2.2011	14927.29	5.50	0.00	16.00	0.00	0.00	21.50	14948.79
Approved in this Order	14927.29	0.00	0.00	172.60	334.43	58.68	565.71	15493.00

Debt: Equity

15. 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.”

16. The petitioner has claimed true up Annual Fixed Charge based on debt:equity ratio of 73.07:26.93 considered by the Commission in its order dated 21.2.2011 in Petition No. 200/2010. The transmission assets covered in the instant petition were commissioned prior to 1.4.2009. In Petition No.200/2010, the Commission has considered admitted debt:equity ratio as on 31.3.2009 vide order dated 23.2.2010. The admitted debt:equity ratio of 73.07:26.93 as on 31.3.2009 has been considered as opening debt:equity ratio as on 1.4.2009 for the purpose of true up of the approved tariff for tariff period 2009-14, as given under:-

Funding	Amount (₹ in lakh)	(%)
Debt	10908.01	73.07
Equity	4019.29	26.93
Total	14927.29	100.00

17. With respect to additional capitalization, the petitioner has submitted the debt:equity ratio of 70:30 for tariff period 2009-14. 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:-

Funding	Amount (in ₹ lakh)	(%)
Debt	11304.00	72.96
Equity	4189.00	27.04
Total	15493.00	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 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 – 1** and the IOL has been worked out and allowed as follows:-

	(₹ in lakh)				
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 21.2.2011	699.25	643.68	588.16	532.58	476.54
As claimed by the petitioner	699.11	643.41	592.05	549.45	525.39
Allowed after trued up	699.12	643.41	592.05	549.45	503.89

Return on Equity (“ROE”)

21. Clause (3), (4) and (5) of the 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 may be, shall recover the shortfall or refund the excess Annual Fixed Charge on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission:

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

22. The petitioner has submitted that MAT rate of 11.330% applicable for 2008-09 was considered in the order dated 21.2.2011. 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	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:-

Particulars	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 21.2.2011	702.76	702.90	703.32	703.74	703.74
As claimed by the petitioner	750.56	778.05	783.83	798.57	843.74



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Allowed after trued up	750.56	778.05	783.83	798.57	819.74

24. The return on equity allowed in the instant order is more than the return on equity allowed vide order dated 21.2.2011 due to additional capitalisation and increase in the applicable MAT rate for the purpose of grossing up of base rate of return on equity.

Depreciation

25. 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”

26. Further, Clause (4) of Regulation 17 of the 2009 Tariff Regulations provide 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.”

27. The Commission, in its order dated 21.2.2011, has worked out the depreciation in accordance with Regulation 17 of the 2009 Tariff Regulations.



28. As per Regulations 3(42) and 17 (4) of the 2009 Tariff Regulations, useful life for transmission line and sub-station is 35 years and 25 years, respectively. In the present case, weighted average value of asset as on COD (1.5.2006) has been considered to work out the weighted average life of the transmission system as 32 years.

29. 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 capitalisation as under:-

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 21.2.2011	757.76	757.90	758.33	758.75	758.75
As claimed by the petitioner	757.62	757.62	757.62	757.65	757.68
Allowed after trued up	757.61	757.61	757.61	757.65	757.68

30. The depreciation allowed in the instant order is less than depreciation allowed vide order dated 21.2.2011 for the tariff period 2009-14 as the actual additional capitalization is towards payment of free hold land compensation and ₹1.26 lakh against payment of transmission line compensation during tariff period 2009-14. Further, the Commission vide its order dated 21.2.2011 had approved the additional capitalization of ₹21.50 lakh on account of balance and retention payment for tariff period 2009-14 and as against the same, the actual expenditure on account of balance & retention payment is nil.

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

31. The petitioner has computed O&M Expenses for the assets mentioned in the petition, in accordance with the O&M norms for 400 kV D/C twin conductor



Neelamangala - Mysore transmission line of 132.897 km, 400 kV bay and 220 kV bay specified in Regulation 19(g) of the 2009 Tariff Regulations. Accordingly, the O&M Expenses have been worked out as given below:-

Particulars		(₹ in lakh)				
		2009-10	2010-11	2011-12	2012-13	2013-14
Actual line length (km)	400 kV D/C (Twin conductor)	132.897	132.897	132.897	132.897	132.897
Actual (No. of bays)	400 kV Bays	6	6	6	6	6
	220 kV Bays	6	6	6	6	6
Norms as per Regulation	400 kV D/C (Twin & Triple Conductor) (₹ lakh/km)	0.627	0.663	0.701	0.741	0.783
	400 kV Bays (₹ lakh/bay)	52.40	55.40	58.57	61.92	65.46
	220 kV Bays (₹ lakh/bay)	36.68	38.78	41.00	43.34	45.82
Total (₹ in lakh)		617.81	653.19	690.58	730.04	771.74

32. The O&M Expenses claimed by the petitioner for tariff period 2009-14 are same as that approved in the tariff order dated 21.2.2011 in Petition No. 200/2010. Accordingly, the O&M Expenses claimed by the petitioner, allowed and trued up are the same, and are as follows:-

		(₹ in lakh)				
Particulars		2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 21.2.2011		617.81	653.19	690.58	730.04	771.74
As claimed by the petitioner		617.81	653.19	690.58	730.04	771.74
Allowed after trued up		617.81	653.19	690.58	730.04	771.74



Interest on working capital (“IWC”)

33. 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.

34. 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 Regulations.

35. The Commission in its order dated 21.2.2011 in Petition No. 200/2010 approved rate of interest on working capital of 12.25% applicable for 2008-09. In accordance with clause (3) of Regulation 18 of the 2009 Tariff Regulations, rate of interest on working capital shall be on normative basis and in case of transmission assets declared under commercial operation 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 on 1.4.2009 was 12.25%. Therefore, interest rate of 12.25% has been considered to workout the interest on working capital in the instant case.

36. The IWC trued up is as under:-

(₹ in lakh)

Interest on Working Capital	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	92.67	97.98	103.59	109.51	115.76



Interest on Working Capital	2009-10	2010-11	2011-12	2012-13	2013-14
O & M Expenses	51.48	54.43	57.55	60.84	64.31
Receivables	483.67	485.06	483.85	486.02	489.17
Total	627.82	637.47	644.98	656.36	669.24
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	76.91	78.09	79.01	80.40	81.98

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

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 21.2.2011	75.92	76.54	77.27	78.10	79.02
As claimed by the petitioner	76.91	78.09	79.01	80.41	82.93
Allowed after true up	76.91	78.09	79.01	80.40	81.98

38. The IWC has increased on account of increase in receivables due to variation in IOL and ROE on account of higher additional capital expenditure and variation in ROE due to applicable MAT rate during the 2009-14 tariff period.

ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

39. 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	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Block					
Opening Gross Block	14927.29	14927.29	14927.29	15099.89	15434.32
Additional Capitalization	0.00	0.00	172.60	334.43	58.68
Closing Gross block	14927.29	14927.29	15099.89	15434.32	15493.00
Average Gross block	14927.29	14927.29	15013.59	15267.11	15463.66
Depreciation					



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Rate of Depreciation (%)	5.075	5.075	5.046	4.963	4.900
Depreciable Value	13189.46	13189.46	13189.46	13190.03	13190.60
Elapsed Life of the assets at beginning of the year	2	3	4	5	6
Weighted Balance Useful life of the assets	30	29	28	27	26
Remaining Depreciable Value	12007.45	11249.84	10492.22	9735.18	8978.10
Depreciation	757.61	757.61	757.61	757.65	757.68
Interest on Loan					
Gross Normative Loan	10908.01	10908.01	10908.01	11028.83	11262.93
Cumulative Repayment upto Previous Year	1182.01	1939.62	2697.24	3454.85	4212.50
Net Loan-Opening	9726.00	8968.39	8210.77	7573.98	7050.43
Additions	0.00	0.00	120.82	234.10	41.08
Repayment during the year	757.61	757.61	757.61	757.65	757.68
Net Loan-Closing	8968.39	8210.77	7573.98	7050.43	6333.82
Average Loan	9347.19	8589.58	7892.37	7312.20	6692.13
Weighted Average Rate of Interest on Loan (%)	7.4794	7.4906	7.5015	7.5142	7.5296
Interest	699.12	643.41	592.05	549.45	503.89
Return on Equity					
Opening Equity	4019.29	4019.29	4019.29	4071.07	4171.40
Additions	0.00	0.00	51.78	100.33	17.60
Closing Equity	4019.29	4019.29	4071.07	4171.40	4189.00
Average Equity	4019.29	4019.29	4045.18	4121.23	4180.20
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT rate for the respective year (%)	16.995	19.931	20.008	20.008	20.961
Rate of Return on Equity (Pre Tax) (%)	18.674	19.358	19.377	19.377	19.610
Return on Equity (Pre Tax)	750.56	778.05	783.83	798.57	819.74
Interest on Working Capital					
Maintenance Spares	92.67	97.98	103.59	109.51	115.76
O & M Expenses	51.48	54.43	57.55	60.84	64.31



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Receivables	483.67	485.06	483.85	486.02	489.17
Total	627.82	637.47	644.98	656.36	669.24
Interest	76.91	78.09	79.01	80.40	81.98
Annual Transmission Charges					
Depreciation	757.61	757.61	757.61	757.65	757.68
Interest on Loan	699.12	643.41	592.05	549.45	503.89
Return on Equity	750.56	778.05	783.83	798.57	819.74
Interest on Working Capital	76.91	78.09	79.01	80.40	81.98
O & M Expenses	617.81	653.19	690.58	730.04	771.74
Total	2902.01	2910.36	2903.09	2916.11	2935.03

DETERMINATION OF ANNUAL TRANSMISSION CHARGES FOR 2014-19

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

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	757.68	757.68	757.68	757.68	757.68
Interest on Loan	492.85	437.66	383.35	331.71	284.21
Return on Equity	869.46	869.46	869.46	869.46	869.46
Interest on Working Capital	87.97	88.00	88.09	88.29	88.63
O&M Expenses	709.02	732.61	756.92	782.02	807.98
Total	2916.98	2885.41	2855.50	2829.16	2807.96

41. 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	106.35	109.89	113.54	117.30	121.20
O & M Expenses	59.09	61.05	63.08	65.17	67.33
Receivables	486.16	480.90	475.92	471.53	467.99
Total	651.60	651.84	652.54	654.00	656.52
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	87.97	88.00	88.09	88.29	88.63



Capital Cost

42. 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.”

43. The petitioner has claimed capital expenditure of ₹16308.94 lakh as on 31.3.2014 including additional capitalisation during tariff period 2009-14. Further, the petitioner has not projected any additional capital expenditure during the tariff period 2014-19.

44. The trued up capital cost of ₹15493.00 lakh as on 1.4.2014 is considered for the purpose of tariff for tariff period 2014-19.

Additional Capital Expenditure

45. The petitioner has not claimed any additional expenditure for the tariff period 2014-19. Accordingly, no additional capital expenditure has been considered for the tariff period 2014-19.

Debt: Equity Ratio

46. Clause 3 of Regulation 19 of the 2014 Tariff Regulations specifies as follows:-



“(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.”

47. The admitted debt:equity ratio of 72.96:27.04 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:-

Particulars	Amount (in ₹lakh)	(%)
Debt	11304.00	72.96
Equity	4189.00	27.04
Total	15493.00	100.00

Interest on Loan (“IOL”)

48. 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.”

49. The weighted average rate of IOL has been considered on the basis of rate prevailing as on 1.4.2014.

50. 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 – 2** 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 loan opening	11304.00	11304.00	11304.00	11304.00	11304.00
Cumulative Repayment upto COD/previous year	4970.18	5727.86	6485.54	7243.23	8000.91
Net Loan-Opening	6333.82	5576.14	4818.46	4060.77	3303.09
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	757.68	757.68	757.68	757.68	757.68
Net Loan-Closing	5576.14	4818.46	4060.77	3303.09	2545.41
Average Loan	5954.98	5197.30	4439.61	3681.93	2924.25
Rate of Interest (%)	7.5519	7.5871	7.6505	7.7993	8.1310
Interest	449.72	394.32	339.65	287.17	237.77

Return on Equity (“ROE”)

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

“25. Tax on Return on Equity:

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:
Rate of pre-tax return on equity = Base rate / (1-t)
Where “t” is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.”

52. The petitioner has computed ROE at the rate of 19.610% after grossing up the ROE with MAT rate as per the above Regulations. 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.

53. 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.

54. 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 given below:-



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	4189.00	4189.00	4189.00	4189.00	4189.00
Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Equity	4189.00	4189.00	4189.00	4189.00	4189.00
Average Equity	4189.00	4189.00	4189.00	4189.00	4189.00
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 on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity (Pre Tax)	821.46	821.46	821.46	821.46	821.46

Depreciation

55. 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."

56. The petitioner has computed depreciation considering capital expenditure of ₹16308.94 lakh as on 31.3.2014.



57. We have considered the submission made by the petitioner with reference to depreciation. Depreciation is allowed on admitted capital cost as provided under Regulation 27 of the 2014 Tariff Regulations. The details of the depreciation allowed are given hereunder:-

(₹ in lakh)					
Details of Depreciation	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross block	15493.00	15493.00	15493.00	15493.00	15493.00
Additions during the year due to projected additional capitalization	0.00	0.00	0.00	0.00	0.00
Closing Gross block	15493.00	15493.00	15493.00	15493.00	15493.00
Rate of Depreciation (%)	4.890	4.890	4.890	4.890	4.890
Depreciable Value	13190.60	13190.60	13190.60	13190.60	13190.60
Elapsed Life of the assets at beginning of the year	7	8	9	10	11
Weighted Balance Useful life of the assets	25	24	23	22	21
Remaining Depreciable Value	8220.42	7462.73	6705.05	5947.37	5189.69
Depreciation	757.68	757.68	757.68	757.68	757.68

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

58. 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:-

Particulars		(₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19
Actual line length (km)	400 kV D/C (Twin conductor)	132.897	132.897	132.897	132.897	132.897
Actual (No. of bays)	400 kV Bays	6	6	6	6	6
	220 kV Bays	6	6	6	6	6
Norms as per Regulation	400 kV D/C (Twin & Triple Conductor)	0.707	0.731	0.755	0.780	0.806



Particulars		2014-15	2015-16	2016-17	2017-18	2018-19
	(₹ lakh/km)					
	400 kV Bays (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71
	220 kV Bays (₹ lakh/bay)	42.21	43.61	45.06	46.55	48.10
Total (₹ in lakh)		709.02	732.61	756.92	782.02	807.97

59. 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.

60. 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.

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

Particulars	Year				
	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses allowed	709.02	732.61	756.92	782.02	807.97



Interest on Working Capital (“IWC”)

62. 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;”

63. The petitioner has submitted that it has computed IWC 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 for the purpose of computation of tariff is 13.50%.

64. 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 is shown in the table below:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	106.35	109.89	113.54	117.30	121.20
O & M expenses	59.08	61.05	63.08	65.17	67.33
Receivables	470.62	465.33	460.28	455.75	451.89
Total	636.06	636.27	636.90	638.22	640.42
Rate of Interest	13.500%	13.500%	13.500%	13.500%	13.500%
Interest	85.87	85.90	85.98	86.16	86.46



Annual Transmission Charges

65. The Annual Transmission Charges allowed for the transmission asset is given hereunder:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	757.68	757.68	757.68	757.68	757.68
Interest on Loan	449.72	394.32	339.65	287.17	237.77
Return on Equity	821.46	821.46	821.46	821.46	821.46
Interest on Working Capital	85.87	85.90	85.98	86.16	86.46
O & M Expenses	709.02	732.61	756.92	782.02	807.97
Total	2823.75	2791.97	2761.69	2734.49	2711.35

66. The detailed computation of various components of annual fixed charges for the tariff period 2014-19 is summarized below:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Block					
Opening Gross Block	15493.00	15493.00	15493.00	15493.00	15493.00
Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	15493.00	15493.00	15493.00	15493.00	15493.00
Average Gross Block	15493.00	15493.00	15493.00	15493.00	15493.00
Depreciation					
Rate of Depreciation	4.890	4.890	4.890	4.890	4.890
Depreciable Value	13190.60	13190.60	13190.60	13190.60	13190.60
Elapsed Life of the assets at beginning of the year	7	8	9	10	11
Weighted Balance Useful life of the assets	25	24	23	22	21
Remaining Depreciable Value	8220.42	7462.73	6705.05	5947.37	5189.69
Depreciation	757.68	757.68	757.68	757.68	757.68
Interest on Loan					
Gross Normative Loan	11304.00	11304.00	11304.00	11304.00	11304.00
Cumulative Repayment upto Previous Year	4970.18	5727.86	6485.54	7243.23	8000.91



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Net Loan-Opening	6333.82	5576.14	4818.46	4060.77	3303.09
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	757.68	757.68	757.68	757.68	757.68
Net Loan-Closing	5576.14	4818.46	4060.77	3303.09	2545.41
Average Loan	5954.98	5197.30	4439.61	3681.93	2924.25
Weighted Average Rate of Interest on Loan (%)	7.5519	7.5871	7.6505	7.7993	8.1310
Interest	449.72	394.32	339.65	287.17	237.77
Return on Equity					
Opening Equity	4189.00	4189.00	4189.00	4189.00	4189.00
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	4189.00	4189.00	4189.00	4189.00	4189.00
Average Equity	4189.00	4189.00	4189.00	4189.00	4189.00
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
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)	821.46	821.46	821.46	821.46	821.46
Interest on Working Capital					
Maintenance Spares	106.35	109.89	113.54	117.30	121.20
O & M expenses	59.08	61.05	63.08	65.17	67.33
Receivables	470.62	465.33	460.28	455.75	451.89
Total	636.06	636.27	636.90	638.22	640.42
Interest	85.87	85.90	85.98	86.16	86.46
Annual Transmission Charges					
Depreciation	757.68	757.68	757.68	757.68	757.68
Interest on Loan	449.72	394.32	339.65	287.17	237.77
Return on Equity	821.46	821.46	821.46	821.46	821.46
Interest on Working Capital	85.87	85.90	85.98	86.16	86.46
O & M Expenses	709.02	732.61	756.92	782.02	807.97
Total	2823.75	2791.97	2761.69	2734.49	2711.35



Filing Fee and Publication Expenses

67. 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

68. 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

69. 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

70. 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 Regulations 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.

Sharing of Transmission Charges

71. 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.

72. This order disposes of Petition No. 216/TT/2014.

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

Sd/-
(A.S. Bakshi)
Member



**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO DURING TARIFF
PERIOD 2009-14**

(₹ in lakh)

Particulars	2009-14			
	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
Bond XVI - DOCO	7.10	4240.00	0.00	4240.00
Bond XVII – DOCO	7.39	4550.00	0.00	4550.00
Bond XVIII – DOCO	8.15	1385.00	0.00	1385.00
Bond XIX – DOCO	9.25	98.00	0.00	98.00
Bond XXII - Addcap for 2008-2009	8.68	360.00	0.00	360.00
Bond XXIX - Addcap for 2008-2009 drawal on 12 March 2009	9.20	150.00	0.00	150.00
Total		10783.00	0.00	10783.00

**WEIGHTED AVERAGE RATE OF INTEREST ON LOAN DURING TARIFF
PERIOD 2009-14**

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	10783.00	10783.00	10783.00	10783.00	10783.00
Cumulative Repayments of Loans upto Previous Year	424.00	1418.42	2451.01	3483.60	4528.69
Net Loans Opening	10359.00	9364.58	8331.99	7299.40	6254.31
Add: Drawal(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	994.42	1032.59	1032.59	1045.09	1045.09
Net Closing Loan	9364.58	8331.99	7299.40	6254.31	5209.22
Average Net Loan	9861.79	8848.29	7815.70	6776.86	5731.77
Interest on Loan	737.60	662.79	586.29	509.22	431.58
Rate of Interest on Loan (%)	7.4794	7.4906	7.5015	7.5142	7.5296



DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO DURING TARIFF PERIOD 2014-19

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
Bond XVI - DOCO	7.10	4240.00	0.00	4240.00
Bond XVII - DOCO	7.39	4550.00	0.00	4550.00
Bond XVIII - DOCO	8.15	1385.00	0.00	1385.00
Bond XIX - DOCO	9.25	98.00	0.00	98.00
Bond XXII - Addcap for 2008-2009	8.68	360.00	0.00	360.00
Bond XXIX - Addcap for 2008-2009 drawal on 12 March 2009	9.20	150.00	0.00	150.00
Total		10783.00	0.00	10783.00

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

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	10783.00	10783.00	10783.00	10783.00	10783.00
Cumulative Repayments of Loans upto Previous Year	5573.78	6618.87	7663.96	8709.05	9754.14
Net Loans Opening	5209.22	4164.13	3119.04	2073.95	1028.86
Add: Drawal(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	1045.09	1045.09	1045.09	1045.09	621.09
Net Closing Loan	4164.13	3119.04	2073.95	1028.86	407.77
Average Net Loan	4686.68	3641.59	2596.50	1551.41	718.31
Interest on Loan	353.93	276.29	198.64	121.00	58.41
Rate of Interest on Loan (%)	7.5519	7.5871	7.6505	7.7993	8.1310

