# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

### Petition No. 417/TT/2014

#### Coram:

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

Date of Hearing : 20.01.2016 Date of Order : 23.02.2016

#### 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 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for (A) LILO of 400 kV Simhapuri and Meenakshi-Nellore D/C Quad line (B) Associated bays and common systems at Nellore Pooling station for ISGS projects in Krishnapatnam area of Andhra Pradesh in Southern Region under 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

- Karnataka Power Transmission Corporation Ltd., (KPTCL), Kaveri Bhawan, Bangalore – 560 009
- 2. Transmission Corporation of Andhra Pradesh Ltd., (APTRANSCO), Vidyut Soudha, Hyderabad- 500082
- Kerala State Electricity Board (KSEB) Vaidhyuthi Bhavanam Pattom, Thiruvananthapuram – 695 004



- Tamil Nadu Generation and Distribution Corporation Ltd., (Formerly Tamil Nadu Electricity Board – TNEB) NPKRR Maaligai, 800, Anna Salai Chennai – 600 002
- 5. Electricity Department Govt of Pondicherry, Pondicherry - 605001
- Eastern Power Distribution Company of Andhra Pradesh Limited APEPDCL, P&T Colony, Seethmmadhara, VISHAKHAPATNAM Andhra Pradesh
- Southern Power Distribution Company of Andhra Pradesh Limited Srinivasasa Kalyana Mandapam Backside, Tiruchanoor Road, Kesavayana Gunta, Tirupati – 517 501, Chitoor District, Andhra Pradesh
- Central Power Distribution Company of Andhra Pradesh Limited Corporate Office, Mint Compound, Hyderabad – 500 063 Andhra Pradesh
- Northern Power Distribution Company of Andhra Pradesh Limited Opp. NIT Petrol Pump Chaitanyapuri, Kazipet, Warangal – 506 004 Andhra Pradesh
- Bangalore Electricity Supply Company Ltd., (BESCOM), Corporate Office, K.R.Circle Bangalore – 560 001 Karnataka
- Gulbarga Electricity Supply Company Ltd., (GESCOM), Station Main Road, GULBARGA Karnataka
- Hubli Electricity Supply Company Itd., (HESCOM) Navanagar, PB Road, HUBLI, Karnataka
- 13. MESCOM Corporate Office, Paradigm Plaza, AB Shetty Circle



MANGALORE – 575 001 Karnataka

- Chamundeswari Electricity Supply Corporation Ltd.,(CESC) #927, L J Avenue Ground Floor, New Kantharaj Urs Road Saraswatipuram, Mysore – 570009 KARNATAKA
- Electricity Department Government of Goa Vidyuti Bhawan, Panaji Goa 403001

.....Respondents

The following were present:-

For Petitioner: Shri M.M. Mondal, PGCIL Shri S. K. Venkatesan, PGCIL Shri Y. K. Sehgal, Advocate, PGCIL Shri Nitish Kumar, PGCIL Shri G. C. Dhal, PGCIL Shri Amit Yadav, PGCIL Shri Rakesh Prasad, PGCIL Shri S.S. Raju, PGCIL Shri Anshul Garg, PGCIL Shri Jasbir Singh, PGCIL

For Respondent:

## <u>ORDER</u>

The present petition has been filed by Power Grid Corporation of India Ltd. ("the petitioner") for truing up of capital expenditure under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulation, 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) Regulation,



2014 (hereinafter referred to as "the 2014 Tariff Regulations") for the period from 1.4.2014 to 31.3.2019 for (A) LILO of 400 kV Simhapuri and Meenakshi-Nellore D/C Quad line, (B) Associated bays and common systems at Nellore Pooling station for ISGS projects in Krishnapatnam area of Andhra Pradesh in Southern Region (hereinafter referred to as "the transmission asset").

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

3. The petitioner has served the petition on the respondents and notice of this application has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003 ("the Act"). No comments have been received from the public in response to the notices published by the petitioner under Section 64 of the Act. None of the respondents have filed reply to the petition. The hearing in this matter was held on 20.1.2016. Reply has been filed by Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO), Respondent No. 4 vide affidavit dated 29.1.2016. The concerns expressed by the respondents have been addressed in the respondents and perused the material on record; we proceed to dispose of the petition.

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

(a) The investment approval for the project was accorded by Board of Directors of the petitioner company, vide Memorandum ref No. C/CP/ISGS Krishnapatnam dated 4.8.2011 at an estimated cost of ₹163734 lakh including IDC of ₹10228 lakh based on 1<sup>st</sup> Quarter, 2011 price level. The apportioned approved cost for the assets covered in the instant petition was ₹17794 lakh.

- (b) The transmission assets were put into commercial operation on 1.4.2013 ("COD"). The petitioner has commissioned the transmission assets within schedule commissioning date of 4.8.2014 i.e. 36 months from the date of investment approval dated 4.8.2011.
- (c) The petitioner's claim of additional return of 0.5% was not allowed in the order dated 4.3.2014 as the petitioner did not clearly submit that all the elements in scope of work were commissioned within the timeline specified in the 2009 Tariff Regulations.
- (d) The tariff from 1.4.2013 to 31.3.2014 was initially allowed vide order dated 4.3.2014 in Petition No. 224/TT/2013 considering the capital cost of ₹9284 lakh as on 1.4.2013 after accounting for additional capital expenditure of ₹2166 lakh on works for the period from 1.4.2013 to 31.3.2014.
- (e) The cut-off date of the assets falls beyond 31.3.2014. The admissible initial spares was worked out by considering capital cost upto 31.3.2014 excluding the capital cost of 2014-15. In order dated 4.3.2014, it was observed that the same be reviewed at the time of truing up on submission of actual capital expenditure. The petitioner has submitted actual capital expenditure of 2009-14 tariff period along with estimated capital expenditure during 2014-15 tariff period for determination of tariff in accordance with 2014 Tariff Regulations.

(f) The tariff for the 2013-14 was allowed vide order dated 4.3.2014 in Petition No. 224/TT/2013 in accordance with the 2009 Tariff Regulations. The tariff allowed for the 2013-14 is as under:-

	(₹ in lakh)
Approved in 2009-14	2013-14
Depreciation	397.25
Interest on Loan	655.29
Return on Equity	543.68
Interest on WC	50.52
O&M Expenses	270.65
Total	1917.39

- (g) 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.
- (h) The instant petition was filed by the petitioner on 16.10.2014.

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

- 5. Clause (3) of the Regulation 6 of the 2009 Tariff Regulations provides as under:-
  - "(3) The generating company or the transmission licensee, as the case may be, shall submit for the purpose of truing up, details of capital expenditure and additional capital expenditure incurred for the period from 1.4.2009 to 31.3.2014, duly audited and certified by the auditors".

6. The petitioner has submitted the information as required under the 2009 Tariff Regulations for truing up of annual fixed charges for 2009-14 tariff period. The tariff for 2009-14 tariff period has been trued up in the subsequent paragraphs.



## Capital Cost

7. The petitioner has claimed admitted capital cost of ₹9287 lakh as on COD 1.4.2013 for the purpose of tariff. However, the commission vide order dated 4.3.2014 approved capital cost of ₹9284 lakh as on COD.

- 8. Clause (1) of Regulation 7 of the 2009 Tariff Regulations provides as follows:-
  - "(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."

### Initial Spares

9. The petitioner has claimed initial spares of ₹18.18 lakh and ₹227.50 lakh

pertaining to the transmission line and sub-station respectively. In order dated 4.3.2014,

initial spares was allowed considering the capital cost as on the dated of COD and

additional capital expenditure upto the end of the tariff period 31.3.2014 and the intial

spares was to be reviewed at the time of truing up considering the additional capital

expenditure during the 2014-15 period. The relevant para is extracted as under:-

"14...... As per Regulation 8 of the 2009 Tariff Regulations, the initial spares are to be capitalised as a percentage of the original project cost at the rate of 2.5% and 0.75% of the sub-station and transmission line respectively. The petitioner has claimed the additional capital expenditure for the year 2014-15 which is within the cut-off date but beyond the current tariff block of 2009-14. In these calculations, the additional capital expenditure upto the end of the tariff period, i.e. 31.3.2014 is considered and accordingly



initial spares, as a percentage of total cost, is allowed excluding the additional capital expenditure during 2014-15. The balance initial spares shall be considered in the year 2014-15 taking into account the additional capital expenditure in the year 2014-15 in accordance with the 2009 Tariff Regulations. The same shall be reviewed at the time of truing up on the submission of actual capital expenditure incurred." (emphasis supplied)

10. 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 2014-15 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.

11. Regulation 8 of the 2009 tariff Regulations provides that:-

"Initial spares shall be capitalised as a percentage of the original project cost, subject to following ceiling norms:

### (i) Transmission system

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

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

(₹ in lakh)

Description	Capital cost as on cut-off date i.e. 31.3.2016	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)
Transmission Line	2469.82	18.28	0.75%	18.53	0.00
Sub-station (including PLCC)	9140.29	227.5	2.50%	228.53	0.00



13. The petitioner has submitted the Auditor's Certificate certifying the capital cost and additional capitalization claimed. As, the initial spares claimed by the petitioner is within the ceiling limit as specified in the 2009 Tariff Regulations, the revised capital cost of ₹9287.00 lakh as on COD has been considered for working out the tariff for 2013-14.

## Additional Capital Expenditure

14. With regard to additional capital expenditure, clause 9(1) of the 2009 Tariff Regulations provides as under:-

15. Clause 9(1) of Regulation 9 of the 2009 Tariff Regulations provides as follows:-

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

(i) Undischarged liabilities;

16. The petitioner has claimed additional capitalization of ₹779.78 lakh, during 201314 period, towards balance and retention payment for sub-station and transmission line
under Regulation 9(1) of the 2009 Tariff Regulations for the tariff period 2009-14.

17. The petitioner has also submitted the Auditor's Certificate to verify the actual additional capital expenditure incurred in 2009-14.

18. TANGEDCO vide affidavit dated 29.1.2016 has submitted that the petitioner in Petition No. 224/TT/2013 had over-estimated the additional capital expenditure for tariff period 2009-14. However, in the instant petition, the petitioner has claimed the

additional capitalization of ₹779.78 lakh in 2009-14 period which is lower than the approved additional capital expenditure by ₹1386.22 lakh, which resulted in beneficiaries paying an excess amount of ₹109.12 lakh per annum since COD. The respondents were overburdened due to the inefficiency of the petitioner in making such claims. Further, as per Regulation 6(6) of 2009 Tariff Regulations, the petitioner is liable to refund the excess amount of ₹245.52 lakh along with the interest. In response, the petitioner vide its affidavit dated 12.2.2016 submitted that the additional capitalization of ₹2166 lakh during the period 2013-14 in Petition No. 224/TT/2013 was on projected basis. Actual additional capitalization of ₹779.78 lakh incurred during 2009-14 has been submitted on actual basis.

19. We have considered the submissions of the petitioner and the respondent. The additional capitalisation incurred within cut-off date against balance and retention payment is allowed under Regulation 9(1)(i) of the 2009 Tariff Regulations. Excess tariff, if any, recovered from the beneficiaries shall be adjusted as provided under Regulation 6(6) of the 2009 Tariff Regulations.

				(₹ in lakh)
Approved Apportion	ed Cost: ₹17	794.00 lakh		
Particulars	Name of the asset	Capital cost up to COD	Total add cap	Total capital cost including additional capitalization as on 31.3.2014
Approved in order dated 4.3.2014	Asset	9284.00	2166.00	11450.00
Actual		9287.00	779.78	10066.78

## Debt: Equity

20. Clause 1 of Regulation 12 of the 2009 Tariff Regulations provides that:-



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

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff: Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment."

•••••

(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation."

21. The petitioner has claimed revised tariff based on debt-equity ratio of 70:30 as on COD as approved in order in Petition No. 224/TT/2013. The petitioner was directed to submit an undertaking on affidavit that actual equity infused for the additional capitalisation during 2009-14 period is not less than 30% for the given transmission asset. The petitioner, in response, vide affidavit dated 4.2.2016 has submitted that the actual equity infused during the tariff period 2009-14 is as per Form-13 of the petition, actual loan and equity deployed for funding the capital expenditure is as per Regulation 12 (1) of the 2009 Tariff Regulations and is tabulated in the table given below:-

					(₹ in lakh)
Particulars Cash		Actua	l Debt	Actual	Equity
	Expenditure/add cap during the year	Amount	%	Amount	%
2013-14	779.78	545.85	70.00	233.93	30.00

22. The debt:equity ratio of 70:30 as on COD has been considered as opening debt:equity ratio as on 1.4.2013 for the purpose of truing up of the tariff for the period 2009-14. The details are as follows:-

(₹ in lakh)

Funding	Amount (in ₹ lakh)		(%)
Debt		6500.90	70.00
Equity		2786.10	30.00
Capital Cost		9287.00	100.00

Further, the debt:equity ratio of 70:30 for the additional capital during the year 2013-14 has been allowed for tariff period 2014-19. The details of the debt:equity including additional capitalization as on 31.3.2014 is as follows:-

Particulars	Amount (in ₹ lakh)	(%)
Debt	7046.75	70.00
Equity	3020.03	30.00
Total	10066.78	100.00

## Interest on Loan ("IOL")

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

24. The petitioner has submitted the weighted average rate of interest on loan based on its actual loan portfolio and rate of interest.

25. The petitioner has submitted the weighted average rate of interest on loan based on its actual loan portfolio and rate of interest. 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".

26. 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	2013-14
Approved vide order dated 4.3.2014	655.29
As claimed by the petitioner	606.70
Allowed after trued up	606.70

### Return on Equity ("ROE")

27. The petitioner has claimed additional ROE of 0.50% for commissioning the instant assets within the timeline specified in the 2009 Tariff Regulations. However, the petitioner has considered ROE of 15.50% for arriving at the grossed up ROE at the rate of 19.610% in tariff forms.

28. Clause (2), (3), (4) and (5) of Regulation 15 of the 2009 Tariff Regulations

provide that:-

"(2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per clause (3) of this regulation:

Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in **Appendix-II**:

Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever."

"(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 year2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.

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

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



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

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

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

29. TANGEDCO vide its affidavit dated 29.1.2016 submitted that the petitioner should submit the details of actual tax paid as per the Finance Act, on year on year basis for due verification of grossed up tax claimed in the tariff petition for 2009-14 period. The petitioner in response vide its affidavit dated 12.2.2016 has submitted that the ROE has been calculated at 19.610% after grossing up the ROE with MAT rate of 20.961% based on the rate prescribed under regulation 25 (2) (i) of 2009 Tariff Regulations. Further, the petitioner has submitted that any under recovery or over recovery of grossed up rate on ROE shall be recovered or refunded to the respondents on year on year basis.

30. 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)) %
2013-14	20.961	19.610



31. TANGEDCO has submitted that the petitioner's claim for additional ROE of 0.5% was disallowed in order dated 4.3.2014 in Petition No. 224/TT/2014 and it should be allowed only if all the elements of the transmission system were commissioned within the timeline specified in the 2009 Tariff Regulations. In response, the petitioner vide affidavit dated 12.2.2016 has submitted that all the assets covered under in the instant transmission system were completed within the specified timeline and hence they are eligible for additional ROE of 0.5%. The details submitted by the petitioner are as follows:-

Inv	Investment Approval Date : 4.8.2011						
Α.	Asset Details	Petition No	Time line Schld in months as per 09-14 Regulations for addl RoE	Schld Completion Date as per CERC 09-14 Reg time line	Time lineSchld in months as per 14-19 Regulations for addl RoE	Schld Completion Date as per CERC 2014- 19 Reg time line	Actual DOCO Date
1	A) LILO of Simhapuri-Nellore 400kV D/C (Quad) line at Nellore B) Associated bays and common systems at Nellore Pooling station.	417/TT /2014	32	01.05.2014	Not Ap	plicable	01.04.13
2	765/400 KV NELLORE POOLING NEW SUBSTATION along with associated bays and 765 kV , 240 MVAR Bus Reactor at Nellore	37/TT/ 2014	30	01.03.2014	Not Ap	plicable	ICT-1: 01.02.14; ICT-2: 01.03.14
3	Nellore Pooling station-Kurnool 765kV D/C line along with associated bays and 765 kV 240 MVAR line reactor	245/TT /2014	Not Applicable		40	04.12.2014	01.11.14
4	Kurnool-Raichur 2nd 765kV S/C line along with associated bays	161/TT /2014	Not Applicable		36	04.08.2014	21.06.14



32. Accordingly in view of above justification, the Commission has allowed additional RoE of 0.5% for timely completion of transmission system. and has computed ROE as shown in the table below:-

	(₹ in lakh)
Particulars	2013-14
Approved vide order dated 4.3.2014	543.68
As claimed by the petitioner	587.67
Allowed after trued up	587.67

## **Depreciation**

. . . . . . .

33. 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"

34. 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."

35. The Commission, in its order dated 4.3.2014 in Petition No. 224/TT/2013, has worked out the depreciation in accordance with Regulation 17 of the 2009 Tariff Regulations considering useful life of the asset as 28 years. Accordingly, the same approach has been continued in the instant order.

36. 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	2013-14
Approved vide order dated 4.3.2014	397.25
As claimed by the petitioner	360.62
Allowed after trued up	360.61

37. The depreciation allowed in the instant order is less than the depreciation allowed vide order 4.3.2014 due to lower additional capitalization claimed for 2009-14.

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

38. The petitioner has computed O&M Expenses for the assets as specified in Regulation 19(g) of the 2009 Tariff Regulations. The O&M Expenses claimed by the petitioner for tariff period 2009-14 are same as that approved in the tariff order dated 4.3.2014 in Petition No. 224/TT/2013. Accordingly, the O&M Expenses claimed by the petitioner, allowed and trued up are the same, and they are as follows:-

	(₹ in lakh)
Particulars	2013-14
Approved vide order dated 4.3.2014	270.65
As claimed by the petitioner	270.65
Allowed after trued up	270.65

## Interest on working capital ("IWC")

39. 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.

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

41. The Commission, vide order dated 4.3.2014 in Petition No. 224/TT/2013, has approved rate of interest on working capital as 13.20% as applicable for 2013-2014. In accordance with clause (3) of Regulation 18 of the 2009 Tariff Regulations, as amended, rate of interest on working capital shall be on normative basis. The interest rate of 13.20% has been considered to work out the interest on working capital in the instant case.

42. The IWC trued up is as under:-

	(₹ in lakh)
Particulars	2013-14
Approved vide order dated 4.3.2014	50.52
As claimed by the petitioner	49.59
Allowed after trued up	49.59

43. The variation IWC in the instant order with respect to IWC allowed vide order 4.3.2014 is due to lower additional capitalization claimed for 2009-14 and variation in RoE due to MAT rate.



## ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

44. 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	2013-14
Gross Block	
Opening Gross Block	9287.00
Additional Capitalization	779.78
Closing Gross block	10066.78
Average Gross block	9676.89
Depreciation	
Rate of Depreciation (%)	3.727
Depreciable Value	6779.97
Elapsed Life of the assets at beginning of the year	0
Weighted Balance Useful life of the assets	28
Remaining Depreciable Value	6779.97
Depreciation	360.61
Interest on Loan	
Gross Normative Loan	6500.90
Cumulative Repayment upto Previous Year	0.00
Net Loan-Opening	6500.90
Additions	545.85
Repayment during the year	360.61
Net Loan-Closing	6686.13
Average Loan	6593.52
Weighted Average Rate of Interest on Loan (%)	9.2015
Interest	606.70
Return on Equity	
Opening Equity	2786.10
Additions	233.93
Closing Equity	3020.03
Average Equity	2903.07



Particulars	2013-14
Return on Equity (Base Rate) (%)	16.00
MAT rate for the respective year (%)	20.961
Rate of Return on Equity (Pre Tax) (%)	20.243
Return on Equity (Pre Tax)	587.67
Interest on Working Capital	
Maintenance Spares	40.60
O & M Expenses	22.55
Receivables	312.54
Total	375.69
Interest	49.59
Annual Transmission Charges	
Depreciation	360.61
Interest on Loan	606.70
Return on Equity	587.67
Interest on Working Capital	49.59
O & M Expenses	270.65
Total	1875.22

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

45. The petitioner has claimed the transmission charges as under:

				(₹	in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	396.54	437.49	463.98	463.98	463.98
Interest on Loan	610.63	621.93	612.65	570.14	527.91
Return on Equity	627.75	674.61	705.07	705.07	705.07
Interest on Working Capital	51.40	54.13	55.71	55.21	54.75
O&M Expenses	249.17	257.43	265.98	274.82	283.92
Total	1935.49	2045.59	2103.39	2069.22	2035.63

46. 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	37.38	38.61	39.90	41.22	42.59
O & M Expenses	20.76	21.45	22.17	22.90	23.66
Receivables	322.58	340.93	350.57	344.87	339.27
Total	380.72	400.99	412.64	408.99	405.52
Rate of Interest	51.40	54.13	55.71	55.21	54.75
Interest	13.50%	13.50%	13.50%	13.50%	13.50%

### Capital Cost

47. Clause (1) & (3) of Regulation 9 of the 2014 Tariff Regulations specify as

follows:-

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

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

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

48. The petitioner has claimed capital expenditure of ₹10066.78 lakh as on 31.3.2014.The trued up capital cost of ₹10066.78 lakh as on 31.3.2014 is considered to workout tariff for tariff period 2014-19.

### Additional Capital Expenditure

49. The petitioner has projected ₹540.17 lakh during 2014-15 and ₹1003.17 lakh

during 2015-16 as an additional capitalization for the tariff period 2014-19.



50. TANGEDCO vide its affidavit dated 29.1.2016 submitted that the petitioner has claimed projected additional capitalization of ₹540.17 lakh and ₹1003.17 lakh for 2014-15 and 2015-16, respectively, on account of balance and retention payment but petitioner has not furnished any details in evidence of balance and retention payment. Accordingly, the Commission has been requested to direct the petitioner to provide the relevant documents pertaining to balance/retention payment. The petitioner in response vide its affidavit dated 12.2.2016 has submitted the actual COD of asset is 1.4.2013 and accordingly the cut-off date is 31.3.2016. The projected additional capitalization of of ₹540.17 lakh and ₹1003.17 lakh for 2014-15 and 2015-16, respectively, is claimed under balance/retention payment in accordance with the provisions of Regulation 14(1)(i) of the 2014 Tariff Regulations.

51. The Commission vide its letter dated 18.1.2016 directed the petitioner to confirm the amount of balance and retention payment yet to be made along with the details of contract for which the payment has been retained. In response the petitioner vide its affidavit dated 4.2.2016 submitted that the amount of balance and retention payment incurred is ₹1543.34 lakh.

52. Accordingly, additional capitalization has been considered for the tariff computation as follows:-

(₹ in lakh)

Apportioned Approved Cost : ₹17794.00 lakh						
Particulars	Admitted capital cost as on	Additional capitalization projected	Additional capitalization projected	Total capital cost as on 31.3.2019		
	31.3.2014	2014-15	2015-16	31.3.2019		
Approved	10066.78	540.17	1003.17	11610.12		



## Debt:Equity Ratio

53. 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."

54. 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:-

Funding	Amount (in ₹ lakh)	(%)
Debt	7046.75	70.00
Equity	3020.03	30.00
Total	10066.78	100.00

55. Further the debt:equity ratio as on 31.3.2019 after taking into consideration the

additional capitalization during 2014-19 period is as shown below:

Funding	Amount (in ₹ lakh)	(%)
Debt	8127.08	70.00
Equity	3483.03	30.00
Total	11610.11	100.00

### Interest on Loan ("IOL")

56. 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."

57. 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	7046.75	7424.86	8127.08	8127.08	8127.08
Cumulative Repayment upto Previous Year	360.61	757.15	1194.63	1658.60	2122.57
Net Loan-Opening	6686.13	6667.71	6932.44	6468.48	6004.51
Additions	378.11	702.22	0.00	0.00	0.00
Repayment during the year	396.54	437.48	463.97	463.97	463.97
Net Loan-Closing	6667.71	6932.44	6468.48	6004.51	5540.54
Average Loan	6676.92	6800.08	6700.46	6236.49	5772.52
Weighted Average Rate of Interest on Loan (%)	9.1454	9.1459	9.1435	9.1421	9.1453
Interest	610.63	621.93	612.65	570.15	527.91

### Return on Equity ("ROE")

58. Clause (1)& (2) of Regulation 24 and Clause (2) of Regulation 25 of the 2014

Tariff Regulations specify as under:-

**"24. Return on Equity**: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system"



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

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

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

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

59. 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.

60. 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.

61. 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	3020.03	3182.08	3483.03	3483.03	3483.03
Addition due to Additional Capitalization	162.05	300.95	0.00	0.00	0.00
Closing Equity	3182.08	3483.03	3483.03	3483.03	3483.03
Average Equity	3101.06	3332.56	3483.03	3483.03	3483.03
Return on Equity (Base Rat ) (%)	16.00	16.00	16.00	16.00	16.00
Tax rate for the year (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax ) (%)	20.243	20.243	20.243	20.243	20.243
Return on Equity (Pre Tax)	627.75	674.61	705.07	705.07	705.07

# Depreciation

62. 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."

63. The petitioner has computed depreciation considering capital expenditure of

₹10066.78 lakh as on 31.3.2014.

64. We have considered the submission made by the petitioner with reference to depreciation. Depreciation is allowed as provided under Regulation 27 of the 2014 Tariff

Regulations. The details of the depreciation allowed is given here under:-

					(₹ in lakh)
Details of Depreciation	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	10066.78	10606.94	11610.11	11610.11	11610.11
Addition during the year due to projected additional capitalization	540.16	1003.17	0.00	0.00	0.00
Closing Gross block	10606.94	11610.11	11610.11	11610.11	11610.11
Rate of Depreciation (%)	3.836	3.938	3.996	3.996	3.996
Depreciable Value	7373.94	8068.44	8519.87	8519.87	8519.87
Remaining Depreciable Value	7013.33	7311.29	7325.23	6861.27	6397.30
Depreciation	396.54	437.48	463.97	463.97	463.97

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

65. 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 have been worked out as given hereunder:-



	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Actual	Double Circuit (Bundled conductor with four or more sub-conductors)	7.5	7.5	7.5	7.5	7.5
	400 kV Bays	4	4	4	4	4
Norms as per Regulation	Double Circuit (Bundled conductor with four or more sub-conductors)	1.062	1.097	1.133	1.171	1.21
Ŭ	400 kV Bays	60.30	62.30	64.37	66.51	68.71
Total (in Rs Lakh)		249.17	257.43	265.98	274.82	283.92

66. TANGEDCO vide its affidavit dated 29.1.2016 submitted that the actual impact of wage hike which will be effective from a future date and has not been factored in fixation of the normative O&M rates prescribed for the Tariff period 2014-19. Further the Respondent submitted that the petitioner has the right to approach for the suitable revision in the norms of O&M for claiming wage revision in front of the Commission.

67. In this regard, the respondent further submitted that there is no provision in Tariff Regulation for revising the norms. The commission fixed the O&M rates based on the past 5 years actual O&M expenses which include wage hike in the previous year and a 10% margin over and above effective CAGR. The respondent further submitted that the beneficiaries that is other respondents were overburdened due to this increase in the O&M rates and any further increase will severely effect the financial status of the respondents.

68. The petitioner vide its affidavit dated 12.2.2016, then submitted that the O&M norms for transmission system are specified under regulation 29 (3) (a) of the Tariff Regulation 2014-19. The norms are specified after considering the :-



- (i) Normalized actual O&M expense of the Petitioner on its various projects during 2008-09, 2009-10, 2010-11, 2011-12, and 2012-13.
- (ii) The scheme of wage revision is binding to the petitioner as the petitioner is a CPSU.

69. However the actual impact of wage hike has not been factored in fixation of the O&M norms for the tariff period 2014-19. 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 2009-14.

70. 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.

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

					(₹ in lakh)		
Particulars	Year						
	2014-15	2015-16	2016-17	2017-18	2018-19		
Allowed	249.17	257.43	265.98	274.82	283.92		

# Interest on Working Capital ("IWC")

72. 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;"

73. 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%.

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

					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	37.37	38.61	39.90	41.22	42.59
O & M expenses	20.76	21.45	22.16	22.90	23.66
Receivables	322.58	340.93	350.56	344.87	339.27
Total	380.72	401.00	412.62	409.00	405.52
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	51.40	54.13	55.70	55.21	54.74

### Annual Transmission Charges

75. 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	10066.78	10606.94	11610.11	11610.11	11610.11



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Additional Capitalization	540.16	1003.17	0.00	0.00	0.00
Closing Gross Block	10606.94	11610.11	11610.11	11610.11	11610.11
Average Gross Block	10336.86	11108.53	11610.11	11610.11	11610.11
Depreciation					
Rate of Depreciation	3.836	3.938	3.996	3.996	3.996
Depreciable Value	7373.94	8068.44	8519.87	8519.87	8519.87
Elapsed Life of the assets at beginning of the year	1	2	3	4	5
Weighted Balance Useful life of the assets	27	26	25	24	23
Remaining Depreciable Value	7013.33	7311.29	7325.23	6861.27	6397.30
Depreciation	396.54	437.48	463.97	463.97	463.97
Interest on Loan					
Gross Normative Loan	7046.75	7424.86	8127.08	8127.08	8127.08
Cumulative Repayment upto previous Year	360.61	757.15	1194.63	1658.60	2122.57
Net Loan-Opening	6686.13	6667.71	6932.44	6468.48	6004.51
Additions	378.11	702.22	0.00	0.00	0.00
Repayment during the year	396.54	437.48	463.97	463.97	463.97
Net Loan-Closing	6667.71	6932.44	6468.48	6004.51	5540.54
Average Loan	6676.92	6800.08	6700.46	6236.49	5772.52
Weighted Average Rate of Interest on Loan (%)	9.1454	9.1459	9.1435	9.1421	9.1453
Interest	610.63	621.93	612.65	570.15	527.91
Return on Equity					
Opening Equity	3020.03	3182.08	3483.03	3483.03	3483.03
Additions	162.05	300.95	0.00	0.00	0.00
Closing Equity	3182.08	3483.03	3483.03	3483.03	3483.03
Average Equity	3101.06	3332.56	3483.03	3483.03	3483.03
Return on Equity (Base Rate) (%)	16.00	16.00	16.00	16.00	16.00
MAT Rate for the year 2013-14 (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	20.243	20.243	20.243	20.243	20.243
Return on Equity (Pre Tax)	627.75	674.61	705.07	705.07	705.07



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Working Capital					
Maintenance Spares	37.37	38.61	39.90	41.22	42.59
O & M expenses	20.76	21.45	22.16	22.90	23.66
Receivables	322.58	340.93	350.56	344.87	339.27
Total	380.72	401.00	412.62	409.00	405.52
Interest	51.40	54.13	55.70	55.21	54.74
Annual Transmission Charges					
Depreciation	396.54	437.48	463.97	463.97	463.97
Interest on Loan	610.63	621.93	612.65	570.15	527.91
Return on Equity	627.75	674.61	705.07	705.07	705.07
Interest on Working Capital	51.40	54.13	55.70	55.21	54.74
O & M Expenses	249.17	257.43	265.98	274.82	283.92
Total	1935.48	2045.58	2103.37	2069.22	2035.61

76. 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. However, the COD of the asset is after 2009, hence the claim of the petitioner is not maintainable.

## Filing Fee and Publication Expenses

77. 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

78. 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

79. 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**

80. 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.

81. This Order disposes of Petition No. 417/TT/2014.

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



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

DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO						
		200	9-14			
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2013	Additions during the tariff period	Total		
Bond XXXIV - DOCO - Drawl on 1-Apr-2013	8.84	185.00	0.00	185.00		
Bond XXXVII - DOCO - Drawl on 1-Apr-2013	9.25	320.00	0.00	320.00		
Bond XXXIX - DOCO - Drawl on 1-Apr-2013	9.40	1410.00	0.00	1410.00		
SBI (21.3.2012) - DOCO - Drawl on 1-Apr-2013	0.00	1200.00	0.00	1200.00		
Bond-XLI - DOCO - Drawl on 1-Apr-2013	8.85	3385.90	0.00	3385.90		
Bond-XLIII - DOCO - Drawl on 1-Apr-2013	7.93	0.00	545.85	545.85		
Total		6500.90	545.85	7046.75		

	(₹ in lakh)
Particulars	2013-14
Gross Opening Loan	6500.90
Cumulative Repayments of Loans upto Previous Year	0.00
Net Loans Opening	6500.90
Add: Drawl(s) during the year	545.85
Less: Repayment(s) of Loan during the year	0.00
Net Closing Loan	7046.75
Average Net Loan	6773.83
Interest on Loan	623.30
Rate of Interest on Loan (%)	9.2015



(₹ in lakh)

#### Annexure –2

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

## (₹ in lakh)

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DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO						
	2014-19					
Particulars	Interest Rate (%)	Loan deploye d as on 1.4.2014	Additions during the tariff period	Total		
Bond XXXIV - DOCO - Drawl on 1-Apr-2013	8.84	185.00	0.00	185.00		
Bond XXXVII - DOCO - Drawl on 1-Apr-2013	9.25	320.00	0.00	320.00		
Bond XXXIX - DOCO - Drawl on 1-Apr-2013	9.40	1410.00	0.00	1410.00		
SBI (21.3.2012) - DOCO - Drawl on 1-Apr-2013	10.25	1200.00	0.00	1200.00		
Bond-XLI - DOCO - Drawl on 1-Apr-2013	8.85	3385.90	0.00	3385.90		
Bond-XLIII - DOCO - Drawl on 1-Apr-2013	7.93	545.85	0.00	545.85		
Total		7046.75	0.00	7046.75		

(₹ in lakh)

				•	,
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	7046.75	7046.75	7046.75	7046.75	7046.75
Cumulative Repayments of Loans upto Previous Year	0.00	15.42	57.51	490.85	969.68
Net Loans Opening	7046.75	7031.33	6989.24	6555.90	6077.07
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	15.42	42.09	433.34	478.83	478.83
Net Closing Loan	7031.33	6989.24	6555.90	6077.07	5598.24
Average Net Loan	7039.04	7010.29	6772.57	6316.49	5837.66
Interest on Loan	643.75	641.15	619.25	577.46	533.87
Rate of Interest on Loan (%)	9.1454	9.1459	9.1435	9.1421	9.1453



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