

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 504/TT/2014

Coram:

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

**Date of Hearing : 27.01.2016
Date of Order : 29.02.2016**

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 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for transmission assets under "System Strengthening-X in Southern Regional Grid" in Southern Region, under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

And in the matter of:

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

.....**Petitioner**

Versus

1. 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 Electricity Board
-



NPKRR Maaligai, 800, Anna Salai
Chennai- 600002

5. Electricity Department
Government of Pondicherry
Pondicherry- 605001
6. Eastern Power Distribution Company of Andhra Pradesh Ltd. (APEPDCL), P&T Colony, Seethmmadhara, Vishakhapatnam, Andhra Pradesh
7. Southern Power Distribution Company of Andhra Pradesh (APSPDCL)
Srinivasasa Kalyana Mandapam Backside
Tiruchanoor Road, Kesavayana Gunta
Tirupati- 517 501
8. Central Power Distribution Company of Andhra Pradesh (APCPDCL), Mint Compound, Hyderabad- 500 063
9. Northern Power Distribution Company of Andhra Pradesh Limited, Chaitanyapuri, Kazipet
Warangal- 506 004
10. Bangalore Electricity Supply Company Ltd. (BESCOM)
Corporate Office, 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, Karnataka
13. MESCOM Corporate Office
Paradigm Plaza, AB Shetty Circle
Mangalore- 575 001
14. Chamundeswari Electricity Supply Corporation Ltd. (CESC), 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 Piyush Awasthi, PGCIL
Shri A.M Pavgi, PGCIL
Shri P.V Nath, PGCIL
Mohd Mohsin, PGCIL
Shri M.M Mondal, PGCIL
Shri Rakesh Prasad, PGCIL
Smt. Sangeeta Edwards, PGCIL
Shri Subhash C Taneja, PGCIL
Shri S.K Venkatesan, PGCIL

For Respondent: None

ORDER

The present petition has been preferred by Power Grid Corporation of India Ltd. ("the petitioner"), for truing up of capital expenditure and tariff for transmission assets under "System Strengthening-X in Southern Regional Grid" 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 capital expenditure for the period from 1.4.2012 (COD) to 31.3.2014 for Asset-I(A), from 1.6.2012 (COD) to 31.3.2014 for Asset-I(B), 1.4.2012(COD) to 31.3.2014 for Asset-II(A) and 1.4.2013(COD) to 31.3.2014 for Asset-II(B) 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 for Combined Assets.

2. The respondents are mostly distribution licensees and transmission 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 newspapers in accordance with Section 64 of Electricity Act, 2003 (“the Act”). No comments have been received from the public in response to the notices published by the petitioner under Section 64 of the Act. The hearing in this matter was held on 27.1.2016. TANGEDCO (Tamil Nadu Generation and Distribution Corporation Limited), Respondent No.4 has filed a reply vide affidavit dated 19.1.2016. In response, the petitioner has not submitted the rejoinder to the reply filed by the respondents. The petitioner was directed to file certain information vide letter dated 20.1.2016 and Record of Proceedings (ROP) dated 2.2.2016. In response, the petitioner has submitted the information vide affidavit dated 29.2.2016. The concerns expressed by respondents are being addressed in the respective paras of this order. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

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

(a) The investment approval for the project was accorded by Board of Directors of the petitioner company vide letter dated 10.12.2009 at an



estimated cost of ₹27661 lakh, which included IDC of ₹1853 lakh. The petitioner has built the transmission asset in the Southern Region. The date of the commercial operation of the assets is as given below:

Asset	Actual DOCO
LILO of Neelamangala -Somanhalli 400 kV D/C Line at Bidadi (hereafter "Asset-I(A)")	1.4.2012
1X63 MVAR Bus Reactor at Bidadi (hereafter "Asset-I(B)")	1.6.2012
1X500 MVA ICTs with associated bays and equipments and downstream network at Bidadi GIS S/S(hereafter "Asset-II(A)")	1.4.2012
1X500 MVA ICTs with associated bays and equipments and downstream network at Bidadi GIS S/S (hereafter "Asset-II(B)")	1.4.2013

- (b) The approved apportioned cost of Asset-I(A) is ₹15551 lakh, Asset-I(B) is ₹611 lakh, Asset-II(A) is ₹9753 lakh and for Asset-II(B) is ₹1746 lakh.
- (c) As per investment approval, accorded on 10.12.2009, the transmission project was to be commissioned within 28 months from the date of investment approval i.e. by 1.5.2012. The Asset-I(B) was put under the commercial operation w.e.f 1.6.2012 with a delay of one month and Asset-II(B) w.e.f 1.4.2013 with delay of 11 months. Asset-I(A) and Asset-II(A) were commissioned within the schedule.
- (d) The time over-run of one month and 11 months in case of Asset-I(B) and Asset-II(B) was not condoned in order dated 13.5.2014.
- (e) The tariff from COD to 31.3.2014 the assets was allowed vide order dated 13.5.2014 in Petition No. 65/TT/2012 in accordance with the 2009 Tariff Regulations. The tariff allowed for the 2009-14 tariff period is as under:-



(₹ in lakh)

Asset-I(A)	2012-13	2013-14
Depreciation	412.23	465.31
Interest on Loan	628.64	670.53
Return on Equity	528.70	595.68
Interest on Working Capital	50.39	54.93
O&M Expenses	258.09	272.84
Total	1878.05	2059.28

(₹ in lakh)

Asset-I(B)	2012-13 (Pro-rata)	2013-14
Depreciation	19.75	27.77
Interest on Loan	23.23	30.57
Return on Equity	19.65	27.66
Interest on Working Capital	4.29	5.60
O&M Expenses	51.60	65.46
Total	118.52	157.06

Asset-II(A)	2012-13	2013-14
Depreciation	277.00	298.35
Interest on Loan	327.75	327.56
Return on Equity	276.34	297.69
Interest on Working Capital	40.46	42.59
O&M Expenses	365.30	386.20
Total	1286.85	1352.40

Asset-II(B)	2012-13	2013-14
Depreciation	0.00	86.98
Interest on Loan	0.00	101.89
Return on Equity	0.00	86.49
Interest on Working Capital	0.00	12.20
O&M Expenses	0.00	111.28
Total	0.00	398.84

- (f) The tariff for the assets was allowed vide order dated 13.5.2014 in Petition No. 65/TT/2012 considering the capital cost of ₹9373.40 lakh for Asset-



I(A), ₹379.94 lakh for Asset-I(B), ₹4934.66 lakh for Asset-II(A) and ₹1594.00 lakh for Asset-II(B) as on COD.

(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.

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

5. The truing up of tariff for the 2009-14 tariff period for Asset-I(A), Asset-I(B), Asset-II(A) and Asset-II(B) has been determined as discussed below:

Capital Cost

6. The Commission in its order dated 13.5.2014 in Petition No. 65-TT-2012 had approved the capital cost (including IDC/IEDC and excess initial spares) of ₹9525.19 lakh, ₹396.10 lakh, ₹5021.84 lakh and ₹1656.72 lakh for Asset-I(A), Asset-I(B), Asset-II(A) and Asset-II(B), respectively as on COD (1.4.2012, 1.6.2012, 1.4.2012 and 1.4.2013 for Asset-I(A), Asset-I(B), Asset-II(A) and Asset-II(B) for the purpose of tariff. The petitioner has claimed same capital cost of ₹9525.19 lakh, ₹396.10 lakh, ₹5021.84 lakh and ₹1656.72 lakh for Asset-I(A), Asset-I(B), Asset-II(A) and Asset-II(B), respectively as on COD (1.4.2012, 1.6.2012, 1.4.2012 and 1.4.2013 for Asset-I(A), Asset-I(B), Asset-II(A) and Asset-II(B) (as per Auditor's Certificate) for the purpose of tariff.



7. The petitioner was directed vide ROP dated 2.2.2016, to submit the reasons for variation in cost of the ICTs at Bidadi (i.e. between Asset-II(A) and Asset-II(B)). The petitioner in response vide affidavit dated 29.2.2016 submitted that as per form-5B submitted vide affidavit dated 28.5.2012 in Petition No. 65/TT/2012, the base cost booked for both the transformers were equal. However, common cost of the assets has been booked in ICT-1, i.e. Asset-II(A) as detailed below:

- i. ₹66 lakh for building and civil works for both ICTs
- ii. ₹2525 lakh for switchgear equipments for both the ICTs
- iii. ₹200 lakh for control, relay and protection panel for both the ICTs
- iv. ₹50 lakh for structure for switchyard
- v. ₹200 lakh for initial spares
- vi. ₹400 lakh for increase on account of taxes and duties

The above costs led to increase in price of ICT-1.

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

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

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

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

(c) additional capital expenditure determined under regulation 9:

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



9. The petitioner has submitted the Auditor's Certificate certifying the capital cost as on COD and additional capitalization claimed thereafter. Thus, the capital cost (including excess initial spares and IDC/IEDC) has been considered as ₹9525.19 lakh, ₹396.10 lakh, ₹5021.84 lakh and ₹1656.72 lakh for Asset-I(A), Asset-I(B), Asset-II(A) and Asset-II(B), respectively, as on COD.

IDC and IEDC

10. In accordance with the order dated 13.5.2014 in Petition No. 65/TT/2012, there is time over-run of one month for Asset-I(B) and 11 months for Asset-II(B). The same was not allowed in order dated 13.5.2014 and the IDC and IEDC in case of Asset-I(B) and Asset-II(B) were deducted from the capital cost. Details of IDC and IEDC disallowed by the Commission are as shown below:-

Asset	Particulars	IDC	IEDC
Asset-I(B)	Total IDC and IEDC claimed upto 31.5.2012	18.34	27.93
	Disallowed IDC and IEDC for 1 month	1.77	8.26
Asset-II(B)	Total IDC and IEDC claimed 31.3.2013	133.99	88.39
	Disallowed IDC and IEDC for 11 months	37.79	24.93

11. The petitioner in the instant petition has submitted the capital cost of Asset-I(B) as on COD is considered after deducting IDC and IEDC of ₹10.03 lakh and ₹62.72 lakh for Asset-II(B) as per order dated 13.5.2014.

12. We have considered the petitioner's submissions. Accordingly, we have disallowed the IDC and IEDC for 1 month and 11 months in case of Asset-I(B) and Asset-II(B) respectively. The IDC and IEDC disallowed are as follows:-



Asset	Particulars	IDC	IEDC	Total
Asset-I(B)	Total IDC and IEDC claimed upto 31.5.2012	18.34	27.93	46.27
	Disallowed IDC and IEDC for 1 month	1.77	8.26	10.03
Asset-II(B)	Total IDC and IEDC claimed 31.3.2013	133.99	88.39	222.38
	Disallowed IDC and IEDC for 11 months	37.79	24.93	62.72

Initial Spares

13. The petitioner has claimed initial spares of ₹468.41 lakh, ₹25.33, ₹288.39 lakh and ₹0.00 lakh pertaining to the sub-station for Asset-I(A), Asset-I(B), Asset-II(A) and Asset-II(B), respectively. In order dated 13.5.2014, initial spares of ₹151.79 lakh, ₹6.13, ₹87.18 lakh and ₹0.00 lakh pertaining to the sub-station for Asset-I(A), Asset-I(B), Asset-II(A) and Asset-II(B), respectively, was disallowed considering the capital cost as on COD and additional capital expenditure upto the end of the tariff period 31.3.2014 and the initial spares was to be reviewed at the time of true up considering the additional capital expenditure during the 2014-19 period.

14. The petitioner has submitted actual capital expenditure for true up of tariff during 2009-14 tariff period as per 2009 Tariff Regulations and also submitted the estimated capital expenditure for determination of tariff during 2014-19 tariff period in accordance with the 2014 Tariff Regulations. The initial spares have been worked out by considering the additional capital expenditure upto cut-off date which falls beyond 31.3.2014 period.

15. 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:



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

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

(₹ in lakh)

Description Sub-station (including PLCC)	Capital cost as on cut-off date i.e. 31.3.2015	Initial spares claimed	Ceiling limits as per Regulation 8 of the 2009 Tariff Regulation	Initial spares worked out and allowed	Excess initial spares claimed
	(a)	(b)	(c)	(d)=*((a- b)*c)/(100- c)%	(e)=(d)- (b)
Asset-I(A)	9309.59	468.41	3.50%	320.66	147.75
Asset-I(B)	516.38	25.33	3.50%	17.81	7.52
Asset-II(A)	5769.03	288.39	3.50%	198.78	89.61
Asset-II(B)	1619.00	0.00	3.50%	58.72	0.00

17. The petitioner has submitted the Auditor’s Certificate certifying the capital cost and additional capitalization claimed. Accordingly, the Commission has considered the capital cost of ₹9377.44 lakh, ₹378.55 lakh, ₹4932.23 lakh and ₹1594.00 lakh (excluding excess initial spares of ₹147.75 lakh, ₹7.52 lakh, ₹89.61 lakh and ₹0.00 lakh) for Asset-I(A), Asset-I(B), Asset-II(A) and Asset-II(B), respectively, as on COD (1.4.2012, 1.6.2012, 1.4.2012 and 1.4.2013 for Asset-I(A), Asset-I(B), Asset-II(A) and Asset-II(B) for the purpose of tariff for tariff period 2009-14.



Additional Capital Expenditure

18. The petitioner has claimed additional capitalization of ₹1105.59 lakh, ₹30.31 lakh, ₹722.19 lakh and ₹0.00 lakh for Asset-I(A), Asset-I(B), Asset-II(A) and Asset-II(B), respectively, on account of balance and retention payment within cut-off date under Regulation 9(1) of the 2009 Tariff Regulations.

19. Clause (1), sub-clause(i) of Regulation 9 of the 2009 Tariff Regulations provides that:-

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

(i) Undischarged liabilities...;”

20. The total capital cost of ₹10483.03 lakh, ₹408.86 lakh, ₹5654.42 lakh and ₹1594.00 lakh for Asset-I(A), Asset-I(B), Asset-II(A) and Asset-II(B), respectively, including actual additional capitalization claimed by the petitioner is within the overall approved cost of ₹15551.00 lakh, ₹611.00 lakh, ₹9753.00 lakh and ₹1746.00 lakh Asset-I(A), Asset-I(B), Asset-II(A) and Asset-II(B), respectively, and additional capitalisation claimed is lower than the additional capitalization allowed in order dated 13.5.2014 in Petition No. 65/TT/2012. Hence, considering the submissions made by the petitioner, we have allowed total capital cost including additional capitalization under Regulation 9(1)(i) of the 2009 Tariff Regulations as shown in the table below:-



(₹ in lakh)

Asset	Particulars	Approved Apportioned Cost	Admitted capital cost as on COD (after deduction of initial spares & IDC/IEDC)	Additional capitalization		Total additional capitalization	Total capital cost including additional capitalization
				2012-13	2013-14		
Asset-I(A)	Approved in order dated 13.5.2014	15551.00	9373.40 (9525.19-151.79-0.00)	1416.13	1138.00	2554.13	11927.53
	Actual		9377.44 (9525.19-147.45-0.00)	749.32	356.27	1105.59	10483.03
Asset-I(B)	Approved in order dated 13.5.2014	611.00	379.94 (396.10-6.13-10.03)	139.55	16.02	155.57	535.51
	Actual		378.55 (396.10-7.52-10.03)	20.28	10.03	30.31	408.86
Asset-II(A)	Approved in order dated 13.5.2014	9753.00	4934.66 (5021.84-87.18-0.00)	669.20	145.00	814.20	5748.86
	Actual		4932.23 (5021.84-89.61-0.00)	669.20	52.99	722.19	5654.42
Asset-II(B)	Approved in order dated 13.5.2014	1746.00	1594.00 (1656.72-0.00-62.72)	0.00	110.53	110.53	1704.53
	Actual		1594.00 (1656.72-0.00-62.72)	0.00	0.00	0.00	1594.00

Debt: Equity

21. Clause 1 & 3 of Regulation 12 of the 2009 Tariff Regulations provide that:-

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

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



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

.....

(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.”

22. The petitioner has claimed true up Annual Fixed Charge based on debt-equity ratio of 70:30 admitted as on COD in order dated 13.5.2014 in Petition No. 65/TT/2012 for Asset-IA, Asset-IB, Asset-IIA and Asset-IIB.

23. The admitted debt:equity ratio of 70:30 as on COD for the Assets have been considered for the purpose of trueing up of the approved tariff of tariff period 2009-14, as given under:-

(₹ in lakh)		
Asset-I(A)	Amount	(%)
Debt	6564.21	70.00
Equity	2813.23	30.00
Total	9377.44	100.00

(₹ in lakh)		
Asset- I(B)	Amount	(%)
Debt	264.99	70.00
Equity	113.57	30.00
Total	378.55	100.00

(₹ in lakh)		
Asset- II(A)	Amount	(%)
Debt	3452.56	70.00
Equity	1479.67	30.00
Total	4932.23	100.00

(₹ in lakh)		
Asset- II(B)	Amount	(%)
Debt	1115.80	70.00
Equity	478.20	30.00
Total	1594.00	100.00



24. With respect to additional capitalization, the petitioner has claimed the debt:equity ratio of 70:30 as on COD for the instant assets . The petitioner was directed to confirm that the actual equity infused for additional capitalization during the 2009-14 tariff period is not less than 30%. In response the petitioner vide affidavit dated 29.2.2016 submitted the actual equity infused during the tariff period 2009-14 as follows:

	Year	Total Addcap	Actual debt	Actual equity	Debt: Equity
Asset-IA	2012-13	749.32	524.42	224.80	70.00:30.00
	2013-14	356.27	249.39	106.88	70.00:30.00
Asset-IB	2012-13	20.28	0.00	20.28	0.00:100.00
	2013-14	10.03	7.02	3.01	70.00:30.00
Asset-IIA	2012-13	669.20	200.89	468.31	69.98:30.02
	2013-14	52.99	37.09	15.90	70.00:30.00

In Asset-IB, for actual additional capitalization of ₹20.28 lakh in 2012-13, no loan has been deployed. Further, the petitioner has submitted the funding of remaining additional capitalization in tariff period 2009-14 in debt equity ratio of 70:30. However, it is observed that in Asset-IIA, for actual additional capitalization of ₹669.20 lakh in 2012-13, debt equity ratio is 69.98:30.02. As per Regulation 12(3) of the 2009 Tariff Regulations, equity deployed more than 30% shall be treated as deemed loan. Accordingly, ROE has been claimed upto 30% of additional capitalization as normative equity in Asset-IB and Asset-IIA in 2012-13.

25. The overall debt equity ratio as on 31.3.2014 for the Asset including additional capitalization is as under:-



(₹ in lakh)		
Asset-I(A)	Amount	(%)
Debt	7338.12	70.00
Equity	3144.91	30.00
Total	10483.03	100.00

(₹ in lakh)		
Asset- I(B)	Amount	(%)
Debt	286.20	70.00
Equity	122.66	30.00
Total	408.86	100.00

(₹ in lakh)		
Asset- II(A)	Amount	(%)
Debt	3958.09	70.00
Equity	1696.33	30.00
Total	5654.42	100.00

(₹ in lakh)		
Asset- II(B)	Amount	(%)
Debt	1115.80	70.00
Equity	478.20	30.00
Total	1594.00	100.00

Interest on Loan (“IOL”)

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

27. The petitioner has submitted the weighted average rate of interest on loan based on its actual loan portfolio and rate of interest. 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)		
Asset-I (A)	2012-13	2013-14
Approved vide order dated 13.5.2014	628.64	670.53



Asset-I (A)	2012-13	2013-14
As claimed by the petitioner	609.96	606.05
Allowed after trued up	607.70	603.97

(₹ in lakh)

Asset-I(B)	2012-13 (Pro-rata)	2013-14
Approved vide order dated 13.5.2014	23.23	30.57
As claimed by the petitioner	20.29	23.58
Allowed after trued up	20.22	23.49

(₹ in lakh)

Asset-II(A)	2012-13	2013-14
Approved vide order dated 13.5.2014	327.75	327.56
As claimed by the petitioner	330.63	328.19
Allowed after trued up	329.31	326.98

(₹ in lakh)

Asset-II(B)	2013-14
Approved vide order dated 13.5.2014	101.89
As claimed by the petitioner	98.61
Allowed after trued up	98.61

28. There is variation in interest on loan due to variation in Capital Cost as on COD and variation in actual additional capitalization during 2012-14 tariff period.

Return on Equity (“ROE”)

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

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



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

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

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

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

30. The petitioner has submitted that MAT rate of 11.330% applicable for 2008-09 was considered in the order dated 13.5.2014. 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 for Asset-IB and Asset-IIB. Further, the petitioner has taken the MAT rate of 18.044% for Asset-IA and Asset-IIA. The petitioner has submitted the variation in the MAT rate during 2009-14 as per the Finance Act of the relevant year for the purpose of grossing up of ROE, as below:-

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

31. We have considered the revised MAT rate of 20.961% for grossing up ROE and the approved ROE is as shown in the table below:-



(₹ in lakh)		
Asset-I (A)	2012-13	2013-14
Approved vide order dated 13.5.2014	528.70	595.68
As claimed by the petitioner	529.83	559.75
Allowed after trued up	566.90	606.24

(₹ in lakh)		
Asset-I(B)	2012-13 (Pro-rata)	2013-14
Approved vide order dated 13.5.2014	19.65	27.66
As claimed by the petitioner	18.90	23.84
Allowed after trued up	18.83	23.76

(₹ in lakh)		
Asset-II(A)	2012-13	2013-14
Approved vide order dated 13.5.2014	276.34	297.69
As claimed by the petitioner	286.24	305.79
Allowed after trued up	306.17	331.09

(₹ in lakh)	
Asset-II(B)	2013-14
Approved vide order dated 13.5.2014	86.49
As claimed by the petitioner	93.78
Allowed after trued up	93.78

32. The variation in return on equity is on account of increase in the applicable MAT rate for the purpose of grossing up of base rate of return on equity, variation in capital cost and actual additional capitalization.

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. Depreciation was worked out in order dated 13.5.2014 in Petition No. 65/TT/2012 in accordance with Regulation 17 of the 2009 Tariff Regulations.

36. The weighted average useful life of the transmission asset has been considered as per Regulations 3 (42) and 17 (4) of the 2009 Tariff Regulations. For the purpose of calculation, the weighted average useful life of the asset as on COD has been considered as 28 years for Asset-IA and 25 years for Asset-IB, Asset-IIA & Asset-IIB. The depreciation for the tariff period 2009-14 has been worked out in accordance with Regulation 17 of the 2009 Tariff Regulations based on admitted capital expenditure as under.

	(₹ in lakh)	
Asset-I (A)	2012-13	2013-14
Approved vide order dated 13.5.2014	412.23	465.31
As claimed by the petitioner	400.36	425.18



Asset-I (A)	2012-13	2013-14
Allowed after trued up	398.44	423.27

(₹ in lakh)

Asset-I(B)	2012-13 (Pro-rata)	2013-14
Approved vide order dated 13.5.2014	19.75	27.77
As claimed by the petitioner	17.12	21.32
Allowed after trued up	17.06	21.24

(₹ in lakh)

Asset-II(A)	2012-13	2013-14
Approved vide order dated 13.5.2014	277.00	298.35
As claimed by the petitioner	277.97	296.91
Allowed after trued up	276.87	295.80

(₹ in lakh)

Asset-II(B)	2013-14
Approved vide order dated 13.5.2014	86.98
As claimed by the petitioner	84.10
Allowed after trued up	84.10

37. The variation in depreciation is on account of reduction in Capital Cost as on COD and reduction in additional capitalization vis-à-vis that approved in the Order.

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

38. The petitioner has computed O&M expenses for the assets mentioned in the petition and in accordance with the O&M norms for lines and bays specified in Regulation 19(g) of the 2009 Tariff Regulations. The O&M Expenses claimed by the petitioner for tariff period 2009-14 are same as that approved in the tariff



order dated 13.5.2014 in Petition No. 65/TT/2012. Accordingly, the O&M Expenses claimed by the petitioner, allowed and trued up are the same, and are as follows:-

(₹ in lakh)

Asset-I (A)	2012-13	2013-14
Approved vide order dated 13.5.2014	258.09	272.84
As claimed by the petitioner	258.09	272.84
Allowed after trued up	258.09	272.84

(₹ in lakh)

Asset-I(B)	2012-13 (Pro-rata)	2013-14
Approved vide order dated 13.5.2014	51.60	65.46
As claimed by the petitioner	51.60	65.46
Allowed after trued up	51.60	65.46

(₹ in lakh)

Asset-II(A)	2012-13	2013-14
Approved vide order dated 13.5.2014	365.30	386.20
As claimed by the petitioner	365.30	386.20
Allowed after trued up	365.30	386.20

(₹ in lakh)

Asset-II(B)	2013-14
Approved vide order dated 13.5.2014	111.28
As claimed by the petitioner	111.28
Allowed after trued up	111.28

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 submitted the rate of interest on working capital as 13.50% for Asset-IA, Asset-IB and Asset-IIA for the period 1.4.2012 to 31.3.2014 and 13.20% for Asset-IIB for the period 1.4.2013 to 31.3.2014 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. Rate of interest in working capital is considered on normative basis in accordance with Clause (3) of Regulation 18 of the 2009 Tariff Regulations. It is calculated equal to State Bank of India Base Rate as applicable as on 1.4.2012 and 1.4.2013 plus 350 basis points. State Bank of India Base Rate on 1.4.2012 was 10.00% and as on 1.4.2013 was 9.70%. Therefore, interest rate of 13.50% (10.00% plus 350 basis points) for Asset-I(A), Asset-I(B) and Asset-II(A) and 13.20% (9.70% plus 350 basis points) for Asset-II(B) 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)	
Asset-I(A)	2012-13	2013-14
Maintenance Spares	38.71	40.93
O & M expenses	21.51	22.74
Receivables	313.60	326.50
Total	373.82	390.16
Rate of Interest (%)	13.50	13.50



Asset-I(A)	2012-13	2013-14
Interest	50.47	52.67

(₹ in lakh)

Asset-I(B)	2012-13 (Pro-rata)	2013-14
Maintenance Spares	7.74	9.82
O & M expenses	4.30	5.46
Receivables	18.64	23.19
Total	30.68	38.46
Rate of Interest (%)	13.50	13.50
Interest	4.14	5.19

(₹ in lakh)

Asset-II(A)	2012-13	2013-14
Maintenance Spares	54.80	57.93
O & M expenses	30.44	32.18
Receivables	219.80	230.56
Total	305.04	320.67
Rate of Interest (%)	13.50	13.50
Interest	41.18	43.29

(₹ in lakh)

Asset-II(B)	2013-14
Maintenance Spares	16.69
O & M expenses	9.27
Receivables	66.67
Total	92.63
Rate of Interest (%)	13.20%
Interest	12.23

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



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 Asset for the tariff period 2009-14 is summarised below:-

(₹ in lakh)		
Asset-IA		
Particulars	2012-13	2013-14
Gross Block		
Opening Gross Block	9377.44	10126.76
Additional Capitalization	749.32	356.27
Closing Gross block	10126.76	10483.03
Average Gross block	9752.10	10304.90
Depreciation		
Rate of Depreciation (%)	4.086	4.107
Depreciable Value	6976.89	7474.41
Elapsed Life of the assets at beginning of the year	0	1
Weighted Balance Useful life of the assets	28	27
Remaining Depreciable Value	6976.89	7075.97
Depreciation	398.44	423.27
Interest on Loan		
Gross Normative Loan	6564.21	7088.74
Cumulative Repayment upto Previous Year	0.00	398.44
Net Loan-Opening	6564.21	6690.29
Additions	524.52	249.39
Repayment during the year	398.44	423.27
Net Loan-Closing	6690.29	6516.41
Average Loan	6627.25	6603.35
Weighted Average Rate of Interest on Loan (%)	9.1697	9.1465
Interest	607.70	603.97
Return on Equity		
Opening Equity	2813.23	3038.03



Asset-IA		
Particulars	2012-13	2013-14
Additions	224.80	106.88
Closing Equity	3038.03	3144.91
Average Equity	2925.63	3091.47
Return on Equity (Base Rate) (%)	15.50	15.50
MAT rate for the respective year (%)	20.008	20.961
Rate of Return on Equity (Pre Tax) (%)	19.377	19.610
Return on Equity (Pre Tax)	566.90	606.24
Interest on Working Capital		
Maintenance Spares	38.71	40.93
O & M Expenses	21.51	22.74
Receivables	313.60	326.50
Total	373.82	390.16
Interest	50.47	52.67
Annual Transmission Charges		
Depreciation	398.44	423.27
Interest on Loan	607.70	603.97
Return on Equity	566.90	606.24
Interest on Working Capital	50.47	52.67
O & M Expenses	258.09	272.84
Total	1881.60	1958.99

(₹ in lakh)

Asset-IB		
Particulars	2012-13 (Pro-rata)	2013-14
Gross Block		
Opening Gross Block	378.55	398.83
Additional Capitalization	20.28	10.03
Closing Gross block	398.83	408.86
Average Gross block	388.69	403.85



Asset-IB		
Particulars	2012-13 (Pro-rata)	2013-14
Depreciation		
Rate of Depreciation (%)	5.267	5.260
Depreciable Value	349.82	363.46
Elapsed Life of the assets at beginning of the year	0	1
Weighted Balance Useful life of the assets	25	24
Remaining Depreciable Value	349.82	346.40
Depreciation	17.06	21.24
Interest on Loan		
Gross Normative Loan	264.99	279.18
Cumulative Repayment upto Previous Year	0.00	17.06
Net Loan-Opening	264.99	262.12
Additions	14.20	7.02
Repayment during the year	17.06	21.24
Net Loan-Closing	262.12	247.90
Average Loan	263.55	255.01
Weighted Average Rate of Interest on Loan (%)	9.2046	9.2120
Interest	20.22	23.49
Return on Equity		
Opening Equity	113.57	119.65
Additions	6.08	3.01
Closing Equity	119.65	122.66
Average Equity	116.61	121.15
Return on Equity (Base Rate) (%)	15.50	15.50
MAT rate for the respective year (%)	20.008	20.961
Rate of Return on Equity (Pre Tax) (%)	19.377	19.610
Return on Equity (Pre Tax)	18.83	23.76
Interest on Working Capital		



Asset-IB		
Particulars	2012-13 (Pro-rata)	2013-14
Maintenance Spares	7.74	9.82
O & M Expenses	4.30	5.46
Receivables	18.64	23.19
Total	30.68	38.46
Interest	4.14	5.19
Annual Transmission Charges		
Depreciation	17.06	21.24
Interest on Loan	20.22	23.49
Return on Equity	18.83	23.76
Interest on Working Capital	4.14	5.19
O & M Expenses	51.60	65.46
Total	111.85	139.14

(₹ in lakh)

Asset-IIA		
Particulars	2012-13	2013-14
Gross Block		
Opening Gross Block	4932.23	5601.43
Additional Capitalization	669.20	52.99
Closing Gross block	5601.43	5654.42
Average Gross block	5266.83	5627.92
Depreciation		
Rate of Depreciation (%)	5.257	5.256
Depreciable Value	4740.15	5065.13
Elapsed Life of the assets at beginning of the year	0	1
Weighted Balance Useful life of the assets	25	24
Remaining Depreciable Value	4740.15	4788.26
Depreciation	276.87	295.80
Interest on Loan		
Gross Normative Loan	3452.56	3921.00



Asset-IIA		
Particulars	2012-13	2013-14
Cumulative Repayment upto Previous Year	0.00	276.87
Net Loan-Opening	3452.56	3644.13
Additions	468.44	37.09
Repayment during the year	276.87	295.80
Net Loan-Closing	3644.13	3385.43
Average Loan	3548.35	3514.78
Weighted Average Rate of Interest on Loan (%)	9.2808	9.3030
Interest	329.31	326.98
Return on Equity		
Opening Equity	1479.67	1680.43
Additions	200.76	15.90
Closing Equity	1680.43	1696.33
Average Equity	1580.05	1688.38
Return on Equity (Base Rate) (%)	15.50	15.50
MAT rate for the respective year (%)	20.008	20.961
Rate of Return on Equity (Pre Tax) (%)	19.377	19.610
Return on Equity (Pre Tax)	306.17	331.09
Interest on Working Capital		
Maintenance Spares	54.80	57.93
O & M Expenses	30.44	32.18
Receivables	219.80	230.56
Total	305.04	320.67
Interest	41.18	43.29
Annual Transmission Charges		
Depreciation	276.87	295.80
Interest on Loan	329.31	326.98
Return on Equity	306.17	331.09
Interest on Working Capital	41.18	43.29



Asset-IIA		
Particulars	2012-13	2013-14
O & M Expenses	365.30	386.20
Total	1318.83	1383.36

(₹ in lakh)

Asset-IIB	
Particulars	2013-14
Gross Block	
Opening Gross Block	1594.00
Additional Capitalization	0.00
Closing Gross block	1594.00
Average Gross block	1594.00
Depreciation	
Rate of Depreciation (%)	5.276
Depreciable Value	1434.60
Elapsed Life of the assets at beginning of the year	0
Weighted Balance Useful life of the assets	25
Remaining Depreciable Value	1434.60
Depreciation	84.10
Interest on Loan	
Gross Normative Loan	1115.80
Cumulative Repayment upto Previous Year	0.00
Net Loan-Opening	1115.80
Additions	0.00
Repayment during the year	84.10
Net Loan-Closing	1031.70
Average Loan	1073.75
Weighted Average Rate of Interest on Loan (%)	9.1841
Interest	98.61
Return on Equity	



Asset-IIB	
Particulars	2013-14
Opening Equity	478.20
Additions	0.00
Closing Equity	478.20
Average Equity	478.20
Return on Equity (Base Rate) (%)	15.50
MAT rate for the respective year (%)	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610
Return on Equity (Pre Tax)	93.78
Interest on Working Capital	
Maintenance Spares	16.69
O & M Expenses	9.27
Receivables	66.67
Total	92.63
Interest	12.23
Annual Transmission Charges	
Depreciation	84.10
Interest on Loan	98.61
Return on Equity	93.78
Interest on Working Capital	12.23
O & M Expenses	111.28
Total	400.00

DETERMINATION OF ANNUAL TRANSMISSION CHARGES FOR 2014-19

45. The petitioner has claimed the transmission charges for Combined Asset for the 2014-19 tariff period as under:-

	(₹ in lakh)				
Combined Assets	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	866.14	895.91	895.91	895.91	895.91
Interest on Loan	1043.12	1014.47	932.01	849.60	767.29



Combined Assets	2014-15	2015-16	2016-17	2017-18	2018-19
Return on equity	1117.79	1164.94	1164.94	1164.94	1164.94
Interest on Working Capital	112.20	114.72	114.28	113.89	113.55
O & M Expenses	769.71	795.25	821.68	848.93	877.09
Total	3908.96	3985.29	3928.82	3873.27	3818.78

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	115.46	119.29	123.25	127.34	131.56
O & M expenses	64.14	66.27	68.47	70.74	73.09
Receivables	651.49	664.22	654.80	645.55	636.46
Total	831.09	849.78	846.52	843.63	841.11
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	112.20	114.72	114.28	113.89	113.55

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 cost of ₹10519.29 lakh, ₹410.35 lakh, ₹5675.39 lakh and ₹1594.00 lakh as on 31.3.2014 and additional capitalization of



₹1452.71 lakh, ₹100.00 lakh, ₹25.00 lakh and ₹25.00 lakh for Asset-IA, Asset-IB, Asset-IIA and Asset-IIB, respectively for the 2014-15 tariff period.

49. The trued up capital cost of ₹10483.03 lakh, ₹408.86 lakh, ₹5654.42 lakh and ₹1594.00 lakh for Asset-IA, Asset-IB, Asset-IIA and Asset-IIB, respectively, as on 31.3.2014 is considered to work out tariff for tariff period 2014-19.

Additional Capital Expenditure

50. The petitioner has proposed additional capitalization of ₹1452.71 lakh, ₹100.00 lakh, ₹25.00 lakh and ₹25.00 lakh for Asset-IA, Asset-IB, Asset-IIA and Asset-IIB, respectively, towards balance and retention payments under Clause 1 of Regulation 14 of the 2014 Tariff Regulations.

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

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

.....

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

52. TANGEDCO vide affidavit dated 19.1.2016 submitted that the petitioner should claim additional capitalization for the 2014-19 tariff period in accordance to Regulation 14(1) of the 2014 Tariff Regulations. Further, TANGEDCO submitted that, petitioner has:-



- Not furnished any details to justify that expenditure claimed is within the original scope and the same is deferred for execution due to unforeseen circumstances.
- Enclosed only extract of Auditor's certificate in support of its claim which could not be considered as a reasonable justification as expenditure is not within original scope of works.
- Cut-off dates of Asset-I(A), Asset-I(B) and Asset- II(A) is 31.3.2014, hence additional capitalization claimed beyond cut-off date should be under Regulation 14(1) of the 2014 Tariff Regulations.
- Not furnished Form-9 and Form- 9A as required to be filed.

53. Hence, the claim of additional capitalization for 2014-19 should be disallowed and petitioner should be directed to incur the same out of O&M Expenses if not supported by necessary documents and proper justification.

54. In this regard, the Commission vide its letter dated 20.1.2016 sought 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 affidavit dated 29.2.2016 submitted the contractor wise details of balance and retention payments.

55. The total capital cost of the transmission asset including additional capitalization incurred during the 2014-19 tariff period works out to ₹18140.31 lakh for Combined Assets-IA, IB, IIA and IIB. The Commission has considered the submissions of petitioner and respondent. It is observed that the additional



capitalization proposed is mainly towards balance and retention payments due to undischarged liabilities for works executed within cut-off date. Further, the total completion cost is within the approved apportioned cost of the Asset. Accordingly, the capital cost claimed by the petitioner is allowed in accordance with Clause 1, sub-clause (i) of Regulation 14 of the 2014 Tariff Regulations. The additional capitalisation for tariff period 2014-19 shall be finally approved after the detailed scrutiny of additional capitalisation while carrying out the true up for 2014-19 tariff period.

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

(₹ in lakh)

Particulars	Approved Apportioned Cost	Admitted capital cost as on 31.3.2014	Additional capitalization	Total additional capitalization	Total capital cost including additional capitalization
			2014-15		
Asset-I	1551.00	10483.03	1452.71	1452.71	11935.74
Asset-IB	611.00	408.86	100.00	100.00	508.86
Asset-IIA	9753.00	5654.42	25.00	25.00	5679.42
Asset-IIB	1746.00	1594.00	25.00	25.00	1619.00
Combined Asset	13661.00	18140.31	1602.71	1602.71	19743.02

Debt:Equity Ratio

57. Clause 3 of Regulation 19 of the 2014 Tariff Regulations specifies as under:-

“(3) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2014, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered.”



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

(₹ in lakh)		
Particulars	Amount	(%)
Debt	12698.22	70.00
Equity	5442.09	30.00
Total	18140.31	100.00

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

(₹ in lakh)		
Funding	Amount	(%)
Debt	13820.12	70.00
Equity	5922.91	30.00
Total	19743.02	100.00

Interest on Loan (“IOL”)

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

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

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



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

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

61. TANGEDCO vide affidavit dated 19.1.2016, submitted that, the petitioner has not taken any efforts to refinance the high cost of loans, which in turn burdens the beneficiaries at large. Further, TANGEDCO submitted that in accordance to Regulation 26(7), of the 2014 Tariff Regulations, the Commission is requested to restrict the rate of interest on loans to the actuals for the year 2014-15 and the petitioner should be directed to furnish steps taken for reducing the loans. We have considered the submissions of petitioner and respondent. Accordingly we have considered the weighted average rate of IOL 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 loan opening	12698.22	13820.12	13820.12	13820.12	13820.12
Cumulative Repayment up to previous year	1516.78	2379.82	3272.63	4165.44	5058.25
Net Loan-Opening	11181.44	11440.30	10547.49	9654.68	8761.86
Additions during the year	1121.90	0.00	0.00	0.00	0.00
Repayment during the year	863.04	892.81	892.81	892.81	892.81
Net Loan-Closing	11440.30	10547.49	9654.68	8761.86	7869.05
Average Loan	11310.87	10993.89	10101.08	9208.27	8315.46



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Rate of Interest (%)	9.1952	9.2022	9.2021	9.2024	9.2041
Interest	1040.05	1011.68	929.51	847.39	765.37

Return on Equity (“ROE”)

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

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

“25. Tax on Return on Equity:

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

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

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

63. The petitioner has submitted ROE at the rate of 20.243% after grossing up the ROE of 15.50% with MAT rate as per the above Regulation. The petitioner has further submitted that the grossed up ROE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial year. Any under-



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

64. 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.

65. TANGEDCO vide affidavit dated 19.1.2016 submitted that, effective tax rate shall be considered on the basis of actual tax paid in respect of financial year in line with the provisions of the relevant acts by the concerned generating company or transmission licensee, as the case maybe under Regulation 25(1) of the 2014 Tariff Regulations. Further, TANGEDCO submitted that, the petitioner cannot claim differential tax from beneficiaries and is entitled for grossing up of ROE only on the actual tax paid during the respective financial year. Hence, difference in tax liabilities should not be passed to beneficiaries unless there is any amendment in the provisions in Income Tax Act.

66. We have considered the submissions made by the petitioner and respondent. 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	5442.09	5922.91	5922.91	5922.91	5922.91
Additional Capitalization	480.81	0.00	0.00	0.00	0.00
Closing Equity	5922.91	5922.91	5922.91	5922.91	5922.91
Average Equity	5682.50	5922.91	5922.91	5922.91	5922.91
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT rate for the year (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity (Pre Tax)	1114.34	1161.48	1161.48	1161.48	1161.48

Depreciation

67. 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.”

68. The petitioner has computed depreciation considering capital expenditure of ₹18140.31 lakh as on 31.3.2014 with additional capitalization of ₹1602.71 lakh for the 2014-19 tariff period. The effective date of commercial operation (June, 2012) has been considered in accordance to Regulation 26 of the 2014 Tariff Regulations considering actual COD and capital cost of all the elements of the transmission system for working out the depreciation of for Combined Asset-IA, IB, IIA & IIB.

69. We have considered the submissions of the petitioner and have allowed depreciation considering capital expenditure of ₹18140.31 lakh as on 31.3.2014 under Regulation 27 of the 2014 Tariff Regulations. The details of the depreciation allowed are given hereunder:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross block	18140.31	19743.02	19743.02	19743.02	19743.02
Additional Capitalization	1602.71	0.00	0.00	0.00	0.00
Gross block at the end of the year	19743.02	19743.02	19743.02	19743.02	19743.02
Average gross block	18941.67	19743.02	19743.02	19743.02	19743.02
Rate of Depreciation (%)	4.556	4.522	4.522	4.522	4.522
Depreciable Value	15247.50	15968.72	15968.72	15968.72	15968.72
Elapsed Life of the assets at beginning of the year	1	2	3	4	5



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Weighted Balance Useful life of the assets	26	25	24	23	22
Remaining Depreciable Value	13730.73	13588.90	12696.09	11803.28	10910.47
Depreciation	863.04	892.81	892.81	892.81	892.81

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

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

		(₹ in lakh)				
Particulars		2014-15	2015-16	2016-17	2017-18	2018-19
Actual	Double Circuit (Twin & Triple Conductor) (kms)	14.048	14.048	14.048	14.048	14.048
	400 kV Bays (Nos.)	7	7	7	7	7
	220 kV Bays (Nos.)	8	8	8	8	8
Norms as per Regulation	Double Circuit (Twin & Triple Conductor) (₹lakh/km)	0.707	0.731	0.755	0.78	0.806
	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)		769.71	795.25	821.68	848.93	877.09

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



the wage revision of the employees of the petitioner Company is due during the 2014-19 tariff period and actual impact of wage hike, which will be effective at a future date, has not been factored in fixation of the normative O&M rate specified for the tariff period 2014-19. The petitioner has prayed to be allowed to approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase.

72. TANGEDCO vide affidavit dated 19.1.2016, submitted that there should not be any further increase in claim of O&M Expenses on account of wage revision, as the expenses already allowed is in the higher side. Further, TANGEDCO submitted that, there cannot be any petition for power to relax norms determined by the Commission.

73. We have considered the submissions made by the petitioner and respondent. 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.

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

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses Allowed	769.71	795.25	821.68	848.93	877.09



Interest on Working Capital (“IWC”)

75. 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;”

76. 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%.

77. 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 worked is shown in the table below:-

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	115.46	119.29	123.25	127.34	131.56
O & M Expenses	64.14	66.27	68.47	70.74	73.09
Receivables	649.85	662.62	653.26	644.05	635.02
Total	829.45	848.18	844.98	842.13	839.67
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	111.98	114.50	114.07	113.69	113.36



Annual Transmission Charges

78. 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	18140.31	19743.02	19743.02	19743.02	19743.02
Additional Capitalization	1602.71	0.00	0.00	0.00	0.00
Closing Gross Block	19743.02	19743.02	19743.02	19743.02	19743.02
Average Gross Block	18941.67	19743.02	19743.02	19743.02	19743.02
Depreciation					
Rate of Depreciation	4.556	4.522	4.522	4.522	4.522
Depreciable Value	15247.50	15968.72	15968.72	15968.72	15968.72
Elapsed Life of the assets at beginning of the year	1	2	3	4	5
Weighted Balance Useful life of the assets	26	25	24	23	22
Remaining Depreciable Value	13730.73	13588.90	12696.09	11803.28	10910.47
Depreciation	863.04	892.81	892.81	892.81	892.81
Interest on Loan					
Gross Normative Loan	12698.22	13820.12	13820.12	13820.12	13820.12
Cumulative Repayment upto Previous Year	1516.78	2379.82	3272.63	4165.44	5058.25
Net Loan-Opening	11181.44	11440.30	10547.49	9654.68	8761.86
Additions	1121.90	0.00	0.00	0.00	0.00
Repayment during the year	863.04	892.81	892.81	892.81	892.81
Net Loan-Closing	11440.30	10547.49	9654.68	8761.86	7869.05
Average Loan	11310.87	10993.89	10101.08	9208.27	8315.46
Weighted Average Rate of Interest on Loan (%)	9.1952	9.2022	9.2021	9.2024	9.2041



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest	1040.05	1011.68	929.51	847.39	765.37
Return on Equity					
Opening Equity	5442.09	5922.91	5922.91	5922.91	5922.91
Additions	480.81	0.00	0.00	0.00	0.00
Closing Equity	5922.91	5922.91	5922.91	5922.91	5922.91
Average Equity	5682.50	5922.91	5922.91	5922.91	5922.91
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for the year 2013-14 (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity (Pre Tax)	1114.34	1161.48	1161.48	1161.48	1161.48
Interest on Working Capital					
Maintenance Spares	115.46	119.29	123.25	127.34	131.56
O & M expenses	64.14	66.27	68.47	70.74	73.09
Receivables	649.85	662.62	653.26	644.05	635.02
Total	829.45	848.18	844.98	842.13	839.67
Interest	111.98	114.50	114.07	113.69	113.36
Annual Transmission Charges					
Depreciation	863.04	892.81	892.81	892.81	892.81
Interest on Loan	1040.05	1011.68	929.51	847.39	765.37
Return on Equity	1114.34	1161.48	1161.48	1161.48	1161.48
Interest on Working Capital	111.98	114.50	114.07	113.69	113.36
O & M Expenses	769.71	795.25	821.68	848.93	877.09
Total	3899.12	3975.73	3919.56	3864.30	3810.11



Filing Fee and Publication Expenses

79. 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.

80. The petitioner is 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

81. The petitioner has requested to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents.

82. We have considered the submissions of the petitioner and respondent submissions. 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

83. 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.

84. TANGEDCO vide affidavit dated 19.1.2016, submitted that, service tax claimed by the petitioner, is premature and further taxes if any paid by the beneficiaries is not reasonable.



85. We are of the view that the petitioner's prayer of Service Tax is premature.

Sharing of Transmission Charges

86. 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.

87. This Order disposes of Petition No. 504/TT/2014.

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

Sd/-
(A.S. Bakshi)
Member



ANNEXURE-I**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO 2009-14**

(₹ in lakh)

2009-14	Asset-IA				Asset-IB			
Particulars	Interest Rate (%)	Loan deployed as on COD (1.4.2012)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.6.2012)	Additions during the tariff period	Total
BOND XXXI-Effective date 01-MAY-2012-	8.90	967.00	0.00	967.00	8.90	33.00	0.00	33.00
BOND XXXIII-Effective date 01-MAY-2012-	8.64	116.00	0.00	116.00	8.64	4.00	0.00	4.00
BOND-XXXIV-Effective date 01-MAY-2012-	8.84	2742.00	0.00	2742.00	8.84	93.00	0.00	93.00
BOND-XXXV-Effective date 01-MAY-2012-	9.64	2665.80	0.00	2665.80	9.64	100.00	0.00	100.00
BOND XXXVII-ADDCAP FOR Effective date 01-MAY-2012-	9.25	0.00	77.83	77.83	9.25	0.00	0.00	0.00
BOND XXXVII-Effective date 01-MAY-2012-	9.25	99.00	0.00	99.00	9.25	15.00	0.00	15.00
SBI (21.3.2012)-ADDCAP FOR Effective date 01-MAY-2012-	10.61% (2012-13) & 10.29% (2013-14)	0.00	25.11	25.11	10.61% (2012-13) & 10.29% (2013-14)	0.00	0.00	0.00
BOND XL-ADDCAP FOR Effective date 01-MAY-2012-	9.30	0.00	52.18	52.18	9.30	0.00	0.00	0.00
BOND XL-Effective date 01-MAY-2012-	9.30	0.00	0.00	0.00	9.30	21.04	0.00	21.04
BOND - XLI-ADDCAP FOR Effective date 01-MAY-2012-	8.85	0.00	330.20	330.20	8.85	0.00	0.00	0.00
BOND - XLI-Effective date 01-MAY-2012-	8.85	0.00	0.00	0.00	8.85	0.00	0.00	0.00
BOND - XLII-ADDCAP FOR	8.80	0.00	39.20	39.20	8.80	0.00	0.00	0.00



2009-14	Asset-IA				Asset-IB			
Particulars	Interest Rate (%)	Loan deployed as on COD (1.4.2012)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.6.2012)	Additions during the tariff period	Total
Effective date 01-MAY-2012-								
BOND - XLIII-ADDCAP FOR Effective date 01-MAY-2012-	7.93	0.00	226.00	226.00	7.93	0.00	0.00	0.00
BOND - XLV-ADDCAP FOR Effective date 01-MAY-2012-	9.65	0.00	23.39	23.39	9.65	0.00	7.02	7.02
Total		6589.80	773.91	7363.71		266.04	7.02	273.06

(₹ in lakh)

2009-14	Asset-IIA				Asset-IIB			
Particulars	Interest Rate (%)	Loan deployed as on COD (1.4.2012)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.6.2012)	Additions during the tariff period	Total
BOND XXXI-Effective date 01-MAY-2012-	8.90	346.00	0.00	346.00	8.90	88.00	0.00	88.00
BOND XXXIII-Effective date 01-MAY-2012-	8.64	42.00	0.00	42.00	8.64	11.00	0.00	11.00
BOND-XXXIV-Effective date 01-MAY-2012-	8.84	948.00	0.00	948.00	8.84	241.00	0.00	241.00
BOND-XXXV-Effective date 01-MAY-2012-	9.64	1240.00	0.00	1240.00	9.64	319.20	0.00	319.20
BOND XXXVII-ADDCAP FOR Effective date 01-MAY-2012-	9.25	0.00	0.00	0.00	9.25	0.00	0.00	0.00
BOND XXXVII-Effective date 01-MAY-2012-	9.25	393.17	0.00	393.17	9.25	48.00	0.00	48.00



2009-14	Asset-IIA				Asset-IIB			
Particulars	Interest Rate (%)	Loan deployed as on COD (1.4.2012)	Additions during the tariff period	Total	Interest Rate (%)	Loan deployed as on COD (1.6.2012)	Additions during the tariff period	Total
SBI (21.3.2012)- ADDCAP FOR Effective date 01-MAY-2012-	10.61% (2012-13) & 10.29% (2013-14)	0.00	200.89	200.89	10.61% (2012-13) & 10.29% (2013-14)	0.00	0.00	0.00
BOND XL- ADDCAP FOR Effective date 01-MAY-2012-	9.30	0.00	0.00	0.00	9.30	0.00	0.00	0.00
BOND XL- Effective date 01-MAY-2012-	9.30	498.00	0.00	498.00	9.30	223.78	0.00	223.78
BOND - XLI- ADDCAP FOR Effective date 01-MAY-2012-	8.85	0.00	0.00	0.00	8.85	0.00	0.00	0.00
BOND - XLI- Effective date 01-MAY-2012-	8.85	0.00	0.00	0.00	8.85	184.80	0.00	184.80
BOND - XLII- ADDCAP FOR Effective date 01-MAY-2012-	8.80	0.00	0.00	0.00	8.80	0.00	0.00	0.00
BOND - XLIII- ADDCAP FOR Effective date 01-MAY-2012-	7.93	0.00	0.00	0.00	7.93	0.00	0.00	0.00
BOND - XLV- ADDCAP FOR Effective date 01-MAY-2012-	9.65	0.00	37.09	37.09	9.65	0.00	0.00	0.00
Total		3467.17	237.98	3705.15		1115.78	0.00	1115.78



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

Asset-IA

	(₹ in lakh)	
	2012-13	2013-14
Gross Opening Loan	6589.80	7114.32
Cumulative Repayments of Loans upto Previous Year	0.00	0.00
Net Loans Opening	6589.80	7114.32
Add: Drawl(s) during the year	524.52	249.39
Less: Repayment(s) of Loan during the year	0.00	80.58
Net Closing Loan	7114.32	7283.13
Average Net Loan	6852.06	7198.73
Interest on Loan	628.31	658.43
Rate of Interest on Loan (%)	9.1697	9.1465

Asset-IB

	(₹ in lakh)	
	2012-13	2013-14
Gross Opening Loan	266.04	266.04
Cumulative Repayments of Loans upto Previous Year	0.00	0.00
Net Loans Opening	266.04	266.04
Add: Drawl(s) during the year	0.00	7.02
Less: Repayment(s) of Loan during the year	0.00	2.75
Net Closing Loan	266.04	270.31
Average Net Loan	266.04	268.18
Interest on Loan	24.49	24.70
Rate of Interest on Loan (%)	9.2046	9.2120

Asset-IIA

	(₹ in lakh)	
	2012-13	2013-14
Gross Opening Loan	3467.17	3668.06
Cumulative Repayments of Loans upto Previous Year	0.00	0.00
Net Loans Opening	3467.17	3668.06
Add: Drawl(s) during the year	200.89	37.09
Less: Repayment(s) of Loan during the year	0.00	28.83
Net Closing Loan	3668.06	3676.32



	2012-13	2013-14
Average Net Loan	3567.62	3672.19
Interest on Loan	331.10	341.62
Rate of Interest on Loan (%)	9.2808	9.3030

Asset-IIB

	(₹ in lakh)
	2013-14
Gross Opening Loan	1115.78
Cumulative Repayments of Loans upto Previous Year	0.00
Net Loans Opening	1115.78
Add: Drawl(s) during the year	0.00
Less: Repayment(s) of Loan during the year	7.33
Net Closing Loan	1108.45
Average Net Loan	1112.12
Interest on Loan	102.14
Rate of Interest on Loan (%)	9.1841



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

(₹ in lakh)

2014-19	Combined Asset-IA, IB, IIA & IIB			
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND XXXI-Effective date 01-MAY-2012-	8.90	1434.00	0.00	1434.00
BOND XXXIII-Effective date 01-MAY-2012-	8.64	173.00	0.00	173.00
BOND-XXXIV-Effective date 01-MAY-2012-	8.84	4024.00	0.00	4024.00
BOND-XXXV-Effective date 01-MAY-2012-	9.64	4325.00	0.00	4325.00
BOND XXXVII-ADDCAP FOR Effective date 01-MAY-2012-	9.25	77.83	0.00	77.83
BOND XXXVII-Effective date 01-MAY-2012-	9.25	555.17	0.00	555.17
SBI (21.3.2012)-ADDCAP FOR Effective date 01-MAY-2012-	10.25	226.00	0.00	226.00
BOND XL-ADDCAP FOR Effective date 01-MAY-2012-	9.30	52.18	0.00	52.18
BOND XL-Effective date 01-MAY-2012-	9.30	742.82	0.00	742.82
BOND - XLI-ADDCAP FOR Effective date 01-MAY-2012-	8.85	330.20	0.00	330.20
BOND - XLI-Effective date 01-MAY-2012-	8.85	184.80	0.00	184.80
BOND - XLII-ADDCAP FOR Effective date 01-MAY-2012-	8.80	39.20	0.00	39.20
BOND - XLIII-ADDCAP FOR Effective date 01-MAY-2012-	7.93	226.00	0.00	226.00
BOND - XLV-ADDCAP FOR Effective date 01-MAY-2012-	9.65	67.50	0.00	67.50
Total		12457.70	0.00	12457.70



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

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	12457.70	12457.70	12457.70	12457.70	12457.70
Cumulative Repayments of Loans upto Previous Year	119.49	588.74	1471.16	2483.30	3519.90
Net Loans Opening	12338.21	11868.96	10986.54	9974.40	8937.80
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	469.25	882.42	1012.14	1036.60	1036.60
Net Closing Loan	11868.96	10986.54	9974.40	8937.80	7901.20
Average Net Loan	12103.59	11427.75	10480.47	9456.10	8419.50
Interest on Loan	1112.94	1051.61	964.43	870.19	774.94
Rate of Interest on Loan (%)	9.1952	9.2022	9.2021	9.2024	9.2041

