

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO.549/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 of transmission assets under System Strengthening–VII in Southern Regional Grid in Southern Region for 2009-14 tariff block under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 and determination of transmission tariff for 2014-19 tariff block under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

And in the Matter of:

Power Grid Corporation of India Ltd,
SAUDAMINI, Plot No.-2, Sector-29,
Gurgaon-122001 (Haryana)

.....Petitioner

Versus

1. Karnataka Power Transmission Corporation Ltd.,(KPTCL),
Kaveri Bhavan,
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 (TNEB)
NPKRR Maaligai, 800, Anna Salai
Chennai-600002



5. Electricity Department,
Government of Pondicherry,
Pondicherry - 605001.
6. Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL),
APEPDCL, P & T Colony
Seethmmadhara, Vishakhapatnam
Andhra Pradesh
7. Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL),
Srinivasasa Kalyana Mandapam Backside,
Tiruchanorr Road, Kesavayana Gunta
Tirupati 517501
Chittoor District, Andhra Pradesh
8. Central Power distribution Company of Andhra Pradesh Limited (APCPDCL).,
Corporate Office , Mint Compound,
Hyderabad - 500063.
9. Northern Power Distribution Company of Andhra Pradesh Limited (APNPDCL)
Opp. NIT Petrol Pump,
Chaitanyapuri, Kazipet, Warangal-506004
Andhra Pradesh
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
Karnataka.
12. Hubli Electricity Supply Company Ltd. (HESCOM),
Navanagar, PB Road,
Hubli, Karnataka
13. MESCOM Corporate Office,
Paradigm Plaza, AB Shetty Circle
Mangalore-575001
Karnataka
14. Chamundeswari Electricity Supply Corporation. (CESC),
#927, L J Avenue,
Ground Floor, New Kantharaj Urs Road
Saraswatipuram, Mysore-570009
Karnataka
15. Electricity Department,
Government of Goa

Vidyuti Bhawan, Panaji,
Goa - 403001.

.....Respondent(s)

The following were present:

For Petitioner: Shri M.M. Mondal, PGCIL
Shri S.K Venkatesan, PGCIL
Shri S.S. Raju, PGCIL
Shri Jasbir Singh, PGCIL
Shri Rakesh Prasad, PGCIL
Shri AnshulGarg, PGCIL
Shri Y.K. Sehgal, PGCIL
Shri Nitish Kumar, PGCIL
Shri AmitYadav, PGCIL
Shri G.C. Dhal, PGCIL

For Respondent: None

ORDER

The petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as “the petitioner”) for revision of tariff 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 truing up of capital expenditure for the period COD to 31.3.2014 and for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) for the period from 1.4.2014 to 31.3.2019 in respect of Transmission Assets under System Strengthening–VII in Southern Regional Grid in Southern Region (hereinafter collectively referred to as “the transmission assets”).

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



3. The assets covered under the under the instant petition are follows:-

Assets	COD	Description
Asset 1*	1.8.2009	LILO of circuit one 400 kV Trichy-Madurai at Karaikudi along with 1x 80 MVAR Bus Reactor and associated bays and equipments at 400/230 kV Karaikudi Sub-station
Asset 2	1.8.2009	2X315 MVA Auto Transformers and 230 kV Down Stream System along with associated bays and equipments at 400 kV/ 230 kV Karaikudi Sub-station
Asset 3*	1.6.2010	LILO of one circuit of existing Talaguppa-Neelamangala 400 kV D/C line along with 1x80 MVAR Line Reactor at Hassan
Asset 4	1.7.2010	400/220 kV, 2X315 MVA Transformers & Downstream System with associated bays and equipment at Hassan S/S

*The Asset 1 and 3 are combined with notional COD of 1.6.2010 and are referred to as "Combined Asset 1 & 3"

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

a) The administrative approval and expenditure sanction of the transmission scheme was accorded by the Board of Directors of petitioner Company vide Memorandum ref: C/CP/S47-00 dated 31.5.2005 at an estimated cost ₹27930 lakh, including IDC of ₹1730 lakh (based on 4th quarter, 2004 price level). Further, revised cost estimates were approved vide Memorandum ref. C/CP/RCE-SR-VII dated 20.12.2010 for ₹32509 lakh including IDC of ₹2854 lakh based on 2nd quarter, 2010 price level.

b) The annual transmission charges from respective COD to 31.3.2014 based on admitted capital cost of the transmission asset and debt:equity as on COD were determined through various orders as follows:-

Assets	Date of Order	Petition No	Description
Asset-I	Order dated 1.6.2011. Revised vide Order dated 20.2.2013	72/2010 (revised in order dated 19.8.2011 in Petition No. 310/2010)	Capital cost of ₹8766.88 lakh on COD and ₹652.13 lakh and ₹89.66 lakh as additional capital expenditure for 2009-10 and 2010- 11 respectively was approved.
Asset-II		72/2010	Capital cost of ₹4372.56 lakh on COD and ₹453.15 lakh and ₹100 lakh, as additional capital expenditure during for 2009-10 and 2010-11 respectively was approved.
Combined Asset I & III	Order dated 19.8.2011. Revised vide Order dated 1.3.2013	310/2010	Capital cost of ₹21899.71 lakh on COD and ₹428.40 lakh, ₹33.00 lakh, as additional capital expenditure for 2010-11 and 2011-12 respectively was approved.
Asset-IV	Order dated 19.8.2011	310/2010	Capital cost of ₹4458.95 lakh on COD and ₹199.00 lakh, as additional capital expenditure for 2010-11 was approved.

c) The annual transmission charges were determined based on the following approved capital cost on respective COD's and estimated additional capital expenditure towards the balance and retention payments from COD to 31.3.2014, as depicted below:-

(₹ in lakh)					
Asset	COD	Approved apportioned cost	Admitted cost as on COD	Additional capital expenditure allowed during 2009-14	Estimated total cost up to 31.3.2014
Asset-I	1.8.2009	9921.67	8766.88	741.79	9508.67
Asset-II	1.8.2009	5052.20	4372.56	553.15	4925.71
Combined Asset I & III	1.6.2010	22768.41	21899.71	461.40	22361.11
Asset-IV	1.7.2010	4688.67	4458.95	199.00	4657.95

d) The IEDC & IDC in respect Asset 1 and 2 for 14 months was disallowed in order dated 1.6.2011 in Petition No. 72/2010. The petitioner filed Appeal No. 104

of 2011 against the said order dated 1.6.2011 in Petition No. 72/2010 before Hon'ble Appellate Tribunal for Electricity, contending that the Commission wrongly reckoned the period of the execution of the project from 31.5.2005 i.e. date of the approval of the project instead of 23.8.2006 i.e. date of first letter of award, for considering the scheduled commissioning for a period of 36 months. The APTEL has issued its judgement in this matter stating:-

"19. (b) Para 13 12 of the Statement of Objects and Reasons to the Tariff Regulations 2009 would not apply to the present case as it deals with additional burden on equity to be allowed as 0.5% and did not deal with the basic Return on Equity or the capital cost to be calculated Therefore, the period of execution of the project i e. 36 months should be calculated only from the date of Letter of Award for the purpose of calculating interest During Construction and Incidental Expenditure During Construct on and not from the date of the Investment Approval.

In view of our finding, we find that the impugned order suffers from the infirmity and therefore, the same is set aside. The Central Commission's directed to pass the consequential Orders in terms of the findings rendered by this Tribunal as referred to above as expeditiously as possible"

e) The tariff was revised after considering the updated capital cost in respect of Asset 1 & 2 vide order dated 20.2.2013 in Petition No. 72/2010.

f) The Commission determined the tariff for 2009-14 tariff period, based on the above capital cost and estimated additional capital expenditure for the transmission assets during 2009-14 as given below:-

For Asset-I vide revised order dated 1.3.2013

Particulars	2009-10	(₹in lakh)
		2010-11 (Pro-rata upto COD of Asset III)
Depreciation	279.58	72.95
Interest on Loan	385.05	94.60
Return on Equity	317.89	82.71
Interest on Working Capital	26.74	6.87
O & M Expenses	125.13	33.08
Total	1134.38	290.21

For Assets-II vide revised order dated 20.2.2013

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	161.89	257.44	260.08	260.08	260.08
Interest on Loan	194.41	290.16	269.37	245.13	220.94
Return on Equity	160.77	255.66	258.28	258.28	258.28
Interest on Working Capital	20.26	33.92	34.58	35.12	35.71
O & M Expenses	216.59	343.48	363.14	383.88	405.84
Total	753.92	1180.66	1185.45	1182.49	1180.85

For Combined Assets-I & III vide order dated 1.3.2013

(₹ in lakh)

Particulars	2010-11 (Pro-rata)	2011-12	2012-13	2013-14
Depreciation	901.50	1093.18	1094.05	1094.05
Interest on Loan	1132.49	1281.16	1180.10	1078.34
Return on Equity	966.33	1171.70	1172.56	1172.56
Interest on Working Capital	76.47	91.81	91.03	90.26
O & M Expenses	344.95	437.64	462.66	489.06
Total	3421.74	4075.49	4000.41	3924.28

For Asset - IV vide revised order dated 19.8.2011

Particulars	2010-11 (Pro-rata)	2011-12	2012-13	2013-14
Depreciation	180.87	246.41	246.41	246.41
Interest on Loan	215.16	273.47	250.46	227.55
Return on Equity	179.28	244.25	244.25	244.25
Interest on Working Capital	22.29	30.55	31.05	31.60
O & M Expenses	257.61	363.14	383.88	405.84
Total	855.21	1157.82	1156.05	1155.66

5. As per Regulation 6 of the 2009 Tariff Regulations, the Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing

up. Further, as per Regulation 15 of the 2009 Tariff Regulations, the petitioner is required to adjust the yearly impact of MAT rate in the truing up petition for 2009-14 tariff period.

6. In this context, the petitioner has filed the instant petition for revision of tariff for the tariff period 2009-14 in accordance with Regulation 6 of the 2009 Tariff Regulations.

7. The petitioner has served the petition to the respondents and notice of this application has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003 ('the Act'). No comments/objections have been received from the public in response to the notice in newspaper. Kerala State Electricity Board (KSEB), Respondent No. 3, has filed the reply in this matter vide affidavit dated 11.2.2015. In response, the petitioner has filed a rejoinder vide affidavit dated 24.2.2015.

8. The hearing in this matter was held on 20.1.2016. During the hearing, the petitioner was directed to submit the reconciliation statement of the capital cost as on notional COD claimed towards Combined Asset-I & III vis-à-vis capital cost in order dated 1.3.2013 in Petition No. 310/2010 along with the reasons for difference, details depicting the un-discharged liabilities, if any, to be recovered in future respect of the assets covered in the instant petition and an undertaking/certificate depicting that the actual equity infused during the tariff period 2009-14 and 2014-19. In response, the petitioner has submitted the information vide affidavit dated 1.2.2016.

9. Having heard the representatives of the parties and perused the material on record, we proceed to dispose of the petition.

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

10. 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”.

11. 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

12. The petitioner has claimed the following opening capital in respect of each of the transmission asset for the purpose of tariff determination. The details of capital cost claimed is as follows:-

Asset	COD	Actual capital cost claimed in the instant petition
Asset1	1.8.2009	8766.88
Asset 2	1.8.2009	4372.56
Combined Asset 1 & 3	1.6.2010	21884.43
Asset 4	1.7.2010	4458.95

13. The capital cost of ₹8766.88 lakh, ₹4372.56 lakh, ₹21884.43 lakh and ₹4458.95 lakh for Asset I, Asset II, Combined Asset I & III and Asset V respectively are certified by the Auditor's Certificates dated 15.9.2013. Accordingly, the same is considered for truing up tariff in accordance with Regulation 7 of the 2009 Tariff Regulations.

Additional Capital Expenditure

14. Regulation 6(1) of the 2009 Regulations provides that:-

“...The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014...”

15. The petitioner has claimed additional capitalization for expenditure incurred before cut-off date against the transmission asset under Clause (1) (i) of Regulation 9 of the 2009 Tariff Regulations.

16. Clause 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;”

17. The petitioner has submitted that it has incurred following additional capital expenditure for all of the assets during 2010-14 period towards balance and retention payments as certified vide Auditor’s Certificate dated 15.9.2013 as depicted below:-

(₹ in lakh)

Name of Asset	Capital Cost as on COD	Approved Cost	Additional Capital Expenditure					Total cost as on 31.3.2014
			2009-10	2010-11	2011-12	2012-13	2013-14	
Asset-I	Approved by the Commission	8766.88	652.13	89.66	-	-	-	9508.67
	Claimed by the Petitioner	8766.88	605.81	186.22*	29.69*	-	-	9588.60
Asset-II	Approved by the Commission	4372.56	453.15	100.00	-	-	-	4925.71
	Claimed by the Petitioner	4372.56	415.11	41.38	7.50	-	-	4836.55
Combined Asset-I & III	Approved by the Commission	21899.71	-	428.40	33.00	-	-	22361.11
	Claimed by the Petitioner	21884.43	-	369.38 [#]	106.68*	24.51	-	22385.00

Name of Asset	Capital Cost as on COD	Approved Cost	Additional Capital Expenditure					Total cost as on 31.3.2014
			2009-10	2010-11	2011-12	2012-13	2013-14	
Asset-IV	Approved by the Commission	4458.95	-	199.00	-	-	-	4657.95
	Claimed by the Petitioner	4458.95	-	15.45	50.50	5.49	-	4530.39

*The actual additional capital expenditure claimed by the petitioner in respect of Asset 1 is ₹186.22 lakh which consists of ₹31.04 lakh (from 1.4.2010 to 31.5.2010) and ₹155.18 (1.6.2010 to 31.3.2011) claimed as part of ₹369.38 lakh for Combined Asset 1 & 3. The additional capital expenditure claimed by the petitioner during 2011-12 for Asset 1 is ₹29.69 lakh and is included in ₹106.68 lakh.

18. The petitioner was directed vide letter dated 16.1.2016 to submit reconciliation statement of the capital cost as on notional COD claimed towards Combined Asset-I & III vis-à-vis capital cost in order dated 1.3.2013 in Petition No. 310/2010 along with the reasons for difference. In response, the petitioner vide affidavit dated 1.2.2016, has submitted that the capital cost of the Combined Asset 1 and 3 as on notional COD admitted by Commission in its order dated 1.3.2013 in Petition No. 310/2010 amounts to ₹21899.71 lakh (Asset-I COD cost: ₹ 8766.88 lakh, Add Cap (Asset-I) in 2009-10: ₹652.13 lakh, Asset-III COD cost: ₹ 12480.70 lakh). Further, the petitioner has submitted that as per the order dated 1.3.2013, additional capital expenditure upto 31.3.2010 in case of Asset-I was only considered while computing the COD cost of the Combined Asset 1 and 3 as against considering additional capital expenditure upto 31.5.2010 (DOCO of Asset-III is 1.6.2010). Additional capital expenditure admitted during 2010-11 and 2011-12 was based on projected expenditure. Accordingly, actual additional capital expenditure during 2009-10 and 2010-11 in case of Asset-I amounts to ₹605.81 lakh and ₹186.22 lakh respectively. Further, additional capital expenditure of Asset-I during 2009-10 and 2010-11 (upto 31.5.2010) considered for computation of COD cost of Combined Asset 1 and 3 is ₹605.81 lakh and ₹31.04 lakh. Thus, COD cost



of the combined asset amounts to ₹21884.43 lakh (Asset-I COD cost: ₹8766.88 Lakh, Add cap (Asset-I) in 2009-10: ₹605.81 Lakh, Add Cap (Asset-I) in 2010-11 (upto 31.5.2010): ₹31.04 lakh and Asset- 3 DOCO cost: ₹12480.70 lakh). Accordingly, earlier approved COD cost of ₹21899.71 lakh is reduced to ₹21884.43 Lakh.

19. We have considered the submissions of the petitioner with regard to the actual capital expenditure incurred during 2009-14 period. The capital addition is based on actual capital expenditure incurred as per the Auditor's Certificate dated 15.9.2013 submitted by the petitioner, we allow the same for the purpose of revision of tariff in accordance with Regulation 6 of the 2009 Tariff Regulations. Accordingly, the additional capital expenditure during 2009-14, considered for truing up is as follows:-

(₹ in lakh)

Asset	Capital Cost as on COD	Actual additional capital expenditure in 2009-14						Total completed cost as on 31.3.2014
		2009-10	2010-11	2011-12	2012-13	2013-14	Total	
Asset-I	8766.88	605.81	186.22	29.69	-	-	821.72	9588.60
Asset-II	4372.56	415.11	41.38	7.5	-	-	463.99	4836.55
Combined Asset I & III	21884.43	-	369.38 (214.20+ 155.18)	106.68 (76.99+2 9.69)	24.51	-	500.57	22385.00
Asset-I	4458.95	-	15.45	50.5	5.49	-	71.44	4530.39

Debt: Equity

20. Regulation 12 of the 2009 Tariff Regulations provides as under:-

“12. Debt-Equity Ratio. (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:

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

(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 admitted debt:equity ratio in revised order dated 20.2.2013 in Petition No. 72/2010 as on COD for Asset I & Asset II and revised order dated 1.3.2013 in Petition No. 310/2010 as on COD for Combined Asset I & III and Asset IV, has been considered for determination of tariff in accordance with the Regulation 12 of the 2009 Tariff Regulations.

22. The petitioner was directed vide letter dated 16.1.2016 to submit an undertaking/certificate depicting that the actual equity infused in the project is not less than 30% during the tariff period 2009-14 and 2014- 19. The petitioner vide affidavit dated 1.2.2016 has submitted that as per Form-13 of all the assets in the instant petition, actual loans deployed for funding the capital cost is 70%. Accordingly, actual equity infused in the project is 30% as per Regulation 12 (1) & (3) of the Tariff Regulation 2009. The KSEB has submitted that opening equity and debt considered for the Combined Asset 1 & 3 is incorrect. The petitioner in its reply has submitted the revised Form 1A.

23. The details of the debt:equity considered for the purpose of tariff for 2009-14 tariff period is as follows:-

Funding	Capital cost as on DOCO	(%)	Additional capital expenditure during 2009-14	(%)	Total Cost as on 31.3.2014	(%)
Asset 1						
Debt	6137.00	70.00	554.42	70.00	6691.42	70.00
Equity	2629.88	30.00	237.61	30.00	2867.49	30.00
Total	8766.88	100.00	792.03	100.00	9558.91	100.00
Asset 2						
Debt	3061.00	70.00	324.79	70.00	3385.79	70.00
Equity	1311.56	30.00	139.20	30.00	1450.76	30.00
Total	4372.56	100.00	463.99	100.00	4836.55	100.00
Combined Asset 1 & 3						
Debt	15319.80	70.00	350.40	70.00	15670.20	70.00
Equity	6564.63	30.00	150.17	30.00	6714.80	30.00
Total	21884.43	100.00	500.57	100.00	22385.00	100.00
Asset 4						
Debt	3121.40	70.00	50.01	70.00	3171.41	70.00
Equity	1337.55	30.00	21.43	30.00	1358.98	30.00
Total	4458.95	100.00	71.44	100.00	4530.39	100.00

Return on Equity (“ROE”)

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

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

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

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 may be, shall recover the shortfall or refund the excess Annual Fixed Charge on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax Rate as

per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission:

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

25. The KSEB has submitted that the ROE carried over to the Form 1 is different from the figures in the computation of ROE in Form 1A. The petitioner in its reply has submitted that it had submitted inadvertently incorrect Form 1A and revised the Form 1A in its submission. Further the KSEB has submitted that the petitioner may be directed to true up the grossed up rate of ROE at the end of every financial year strictly in line with Regulation 25 (3). The petitioner in its rejoinder has submitted that the true up is done considering the grossed up rate of ROE at the end of every year. However, the petition for transmission tariff based on the grossed up rate of ROE and floating interest rate is being filed once every tariff block as per the prevalent tariff regulations. Further, the petitioner has submitted that it is paying MAT which is the minimum amount of tax after availing all the benefits including 801A. We have considered the submissions of the KSEB and the petitioner.

26. The variation in the tax rate during the 2009-14 tariff period applicable to the petitioner as per the Finance Act of the relevant year for the purpose of grossing up of return on equity (ROE) has been furnished as follows:-

Year	MAT Rate claimed in the current petition (%)	Grossed up ROE (Base Rate/(1-t)) claimed in the current petition (%)
2009-10	16.995	18.674
2010-11	19.931	19.358
2011-12	20.008	19.377
2012-13	20.008	19.377
2013-14	20.961	19.610

27. The ROE as trued up and allowed is shown below:-

For Asset I

(₹ in lakh)

Return on Equity	2009-10 (pro-rata)	2010-11 (pro-rata)
Approved vide revised order dated 1.3.2013 in 310/2010	317.89	82.71
Claimed by the petitioner	338.72	91.61
Allowed after trued up in this order	338.71	91.61

For Asset II

(₹ in lakh)

Return on Equity	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
Approved vide revised order dated 20.2.2013 in 72/2010	160.77	255.66	258.28	258.28	258.28
Claimed by the petitioner	171.03	279.2	280.89	281.11	284.49
Allowed after trued up in this order	171.03	279.20	280.89	281.11	284.50

For Combined Asset I & III

(₹ in lakh)

Return on Equity	2010-11 (Pro-rata)	2011-12	2012-13	2013-14
Approved in revised order dated 1.3.2013 in 310/2010	966.33	1,171.70	1,172.56	1,172.56
Claimed by the petitioner	1067.92	1296.6	1300.41	1316.77
Allowed after trued up in this order	1067.94	1296.60	1300.41	1316.80

For Asset IV

(₹ in lakh)

Return on Equity	2010-11 (Pro-rata)	2011-12	2012-13	2013-14
Approved vide order dated 19.8.2011 in 310/2010	179.28	244.25	244.25	244.25
Claimed by the petitioner	194.53	261.54	263.17	266.5
Allowed after trued up in this order	194.53	261.54	263.17	266.50

The difference in the approved ROE and that allowed after truing up is on account of actual grossed up ROE based on actual MAT rate and increase due to actual additional capital expenditure.



Interest on Loan (“IoL”)

28. Regulation 16 of the 2009 Tariff Regulations provide the methodology for working out weighted average rate of IoL. The Commission in its earlier order dated 8.6.2011 in Petition No. 238/2010 has dealt with similar issue and 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”.

29. The petitioner has submitted the weighted average rate of IoL, based on its actual loan portfolio and rate of interest. Accordingly, the IoL has been calculated based on actual interest rate submitted by the petitioner, in accordance with the Regulation 16 of the 2009 Tariff Regulations. The details of weighted average rate of interest are placed in Annexure-1. The IoL worked out is as follows:-

For Asset I

Interest on Loan	(₹ in lakh)	
	2009-10 (pro-rata)	2010-11 (pro-rata)
Approved vide revised order dated 1.3.2013 in 310/2010	385.05	94.60
Claimed by the petitioner	384.13	97.44
Allowed after trued up in this order	384.13	97.44

For Asset II

Interest on Loan	(₹ in lakh)				
	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
Approved vide revised order dated 20.2.2013 in 72/2010	194.41	290.16	269.37	245.13	220.94
Claimed by the petitioner	193.24	284.89	262.80	239.3	215.6
Allowed after trued up in this order	193.24	284.88	262.80	239.29	215.60

For Asset I & III

(₹ in lakh)

Interest on Loan	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Approved vide revised order dated 1.3.2013 in 310/2010	1,132.49	1,281.16	1,180.10	1,078.34
Claimed by the petitioner	1129.83	1277.96	1180.07	1079.12
Allowed after trued up in this order	1129.83	1277.96	1180.07	1079.12

For Asset IV

(₹ in lakh)

Interest on Loan	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Approved vide order dated 19.8.2011 in 310/2010	215.16	273.47	250.46	227.55
Claimed by the petitioner	210.82	263.82	243.27	221.16
Allowed after trued up in this order	210.82	263.82	243.26	221.16

The difference in the approved IoL and that allowed after truing up is on account of change in the weighted average rate of interest which is computed based on actual loan portfolio and rate of interest.

Depreciation

30. The depreciation has been worked out as per the methodology provided in the Regulation 17 of the 2009 Tariff Regulations. The KSEB in its submission has highlighted certain anomalies in the computation of cumulative depreciation by the petitioner, and has prayed to direct the petitioner to clarify the same. The petitioner in its rejoinder has submitted that it has submitted inadvertently incorrect Form 12 for Combined Asset 1 & 3, and has duly revised the same in its submission. We have considered the submissions of KSEB and the petitioner. The depreciation allowed is as follows:-

For Asset I

(₹ in lakh)

Depreciation	2009-10 (pro-rata)	2010-11 (pro-rata)
Approved vide revised order dated 1.3.2013 in 310/2010	279.58	72.95
Claimed by the petitioner	278.25	72.64
Allowed after trued up in this order	278.25	72.64

For Asset II

(₹ in lakh)

Depreciation	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
Approved vide revised order dated 20.2.2013 in 72/2010	161.89	257.44	260.08	260.08	260.08
Claimed by the petitioner	161.22	253.88	255.17	255.37	255.37
Allowed after trued up in this order	161.22	253.88	255.17	255.37	255.37

For Combined Asset I & III

(₹ in lakh)

Depreciation	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Approved vide revised order dated 1.3.2013 in 310/2010	901.50	1,093.18	1,094.05	1,094.05
Claimed by the petitioner	898.36	1090.09	1093.55	1094.20
Allowed after trued up in this order	898.35	1090.10	1093.56	1094.21

For Asset IV

(₹ in lakh)

Depreciation	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Approved vide order dated 19.8.2011 in 310/2010	180.87	246.41	246.41	246.41
Claimed by the petitioner	177.23	238.05	239.53	239.67
Allowed after trued up in this order	177.23	238.05	239.53	239.68

The difference in the approved depreciation and that allowed after truing up is on account of change in gross block during the 2009-14 tariff period.

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

31. Clause (g) of Regulation 19 of the 2009 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The normative O&M Expenses are not required to be trued up. Accordingly, the total allowable O&M expenses for the instant assets have been worked out based on norms of O&M Expenses and the details are as follows:-

For Asset I

O&M Expenses	(₹ in lakh)	
	2009-10 (pro-rata)	2010-11 (pro-rata)
Approved vide revised order dated 1.3.2013 in 310/2010	125.13	33.08
Claimed by the petitioner	125.06	33.06
Allowed after trued up in this order	125.06	33.06

For Asset II

O&M Expenses	(₹ in lakh)				
	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
Approved vide revised order dated 20.2.2013 in 72/2010	216.59	343.48	363.14	383.88	405.84
Claimed by the petitioner	216.59	343.48	363.14	383.88	405.84
Allowed after trued up in this order	216.59	343.48	363.14	383.88	405.84

For Asset I & III

O&M Expenses	(₹ in lakh)			
	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Approved vide revised order dated 1.3.2013 in 310/2010	344.95	437.64	462.66	489.06
Claimed by the petitioner	344.85	437.51	462.52	488.92
Allowed after trued up in this order	344.85	437.51	462.52	488.92

For Asset IV

(₹ in lakh)

O&M Expenses	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Approved vide order dated 19.8.2011 in 310/2010	257.61	363.14	383.88	405.84
Claimed by the petitioner	257.61	363.14	383.88	405.84
Allowed after trued up in this order	257.61	363.14	383.88	405.84

Interest on Working Capital (IWC)

32. The IWC has been worked out as per the methodology provided in the Regulation 18 of the 2009 Tariff Regulations.

33. The KSEB in its submission has highlighted certain anomalies in the computation of maintenance spares by the petitioner, and has prayed to direct the petitioner to clarify the same. The petitioner in its rejoinder dated 20.4.2015 has submitted that the O&M Expenses shown in the Form 1 are pro-rata. The O&M Expenses considered for the computation maintenance spares in IWC are based on the O&M Expenses for the whole year and thereby 15% of the same has been considered. We have considered the submission of the petitioner and the respondent. The computation of the maintenance spares submitted by the petitioner are in line with the methodology provided in the Regulation 18 of the 2009 Tariff Regulations and the same is allowed as under:-

For Asset I

(₹ in lakh)

Interest on Working Capital	2009-10 (pro-rata)	2010-11 (pro-rata)
Approved vide revised order dated 1.3.2013 in 310/2010	26.74	6.87
Claimed by the petitioner	27.12	7.11
Allowed after trued up in this order	27.12	7.11

For Asset II

(₹ in lakh)

Interest on Working Capital	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
Approved vide revised order dated 20.2.2013 in 72/2010	20.26	33.92	34.58	35.12	35.71
Claimed by the petitioner	21.79	34.23	34.81	35.37	36.05
Allowed after trued up in this order	21.79	34.23	34.81	35.37	36.04

For Asset I & III

(₹ in lakh)

Interest on Working Capital	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Approved vide revised order dated 1.3.2013 in 310/2010	76.47	91.81	91.03	90.26
Claimed by the petitioner	78.38	94.17	93.56	93.15
Allowed after trued up in this order	78.37	94.17	93.56	93.15

For Asset IV

(₹ in lakh)

Interest on Working Capital	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Approved vide order dated 19.8.2011 in 310/2010	22.29	30.55	31.05	31.60
Claimed by the petitioner	22.43	30.53	31.14	31.77
Allowed after trued up in this order	22.43	30.53	31.14	31.77

The difference in the approved IWC and that allowed after truing up is on account of change in the receivables during the 2009-14 tariff period.

APPROVED ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

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

For Asset I: From 1.8.2009 to 31.5.2010

Particulars	2009-10 (pro-rata)	2010-11 (pro-rata)
Depreciation		
Opening Gross Block	8766.88	9372.69
Additional Capitalisation	605.81	186.22
Closing Gross Block	9372.69	9558.91
Average Gross Block	9069.79	9465.80
Rate of Depreciation	4.60%	4.60%
Depreciable Value	7356.18	7985.21
Balance Useful life of the asset	31.00	30.00
Elapsed Life	0.00	1.00
Remaining Depreciable Value	7356.18	7434.35
Depreciation during the year	278.25	72.64
Cumulative depreciation	278.25	350.89
Interest on Loan		
Gross Normative Loan	6137.00	6561.07
Cumulative Repayment upto Previous Year	0.00	278.25
Net Loan-Opening	6137.00	6282.82
Additions	424.07	130.35
Repayment during the year	278.25	72.64
Net Loan-Closing	6282.82	6340.53
Average Loan	6209.91	6311.68
Weighted Average Rate of Interest on Loan (%)	9.2787%	9.2628%
Interest on Loan	384.13	97.44
Return on Equity		
Opening Equity	2629.88	2811.62
Additions	181.74	55.87
Closing Equity	2811.62	2867.49
Average Equity	2720.75	2839.56
Return on Equity (Base Rate)(%)	15.500	15.500
MAT rate for the respective year (%)	16.995	19.931

Particulars	2009-10 (pro-rata)	2010-11 (pro-rata)
Rate of Return on Equity (%)	18.674	19.358
Return on Equity	338.71	91.61
Interest on Working Capital		
O & M expenses	10.42	2.75
Maintenance Spares	18.76	4.96
Receivables	192.21	50.31
Total	221.39	58.02
Rate of Interest(%)	12.25	12.25
Interest	27.12	7.11
Annual Transmission Charges		
Depreciation	278.25	72.64
Interest on Loan	384.13	97.44
Return on Equity	338.71	91.61
Interest on Working Capital	27.12	7.11
O & M Expenses	125.06	33.06
Total	1153.26	301.86

For Asset II: From 1.8.2009

(₹ in lakh)

Particulars	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
Depreciation					
Opening Gross Block	4372.56	4787.67	4829.05	4836.55	4836.55
Additional Capitalisation	415.11	41.38	7.50	0.00	0.00
Closing Gross Block	4787.67	4829.05	4836.55	4836.55	4836.55
Average Gross Block	4580.12	4808.36	4832.80	4836.55	4836.55
Rate of Depreciation	5.28%	5.28%	5.28%	5.28%	5.28%
Depreciable Value	4122.10	4514.32	4368.14	4356.27	4352.90
Balance Useful life of the asset	31.00	30.00	29.00	28.00	27.00
Elapsed Life	0.00	1.00	2.00	3.00	4.00
Remaining Depreciable Value	4122.10	4166.30	3934.42	3682.62	3427.25
Depreciation during the year	161.22	253.88	255.17	255.37	255.37
Cumulative depreciation (incl. of AAD)	161.22	415.10	670.27	925.64	1181.01
Interest on Loan					
Gross Normative Loan	3061.00	3351.58	3380.54	3385.79	3385.79
Cumulative Repayment upto Previous Year	0.00	161.22	415.10	670.27	925.64
Net Loan-Opening	3061.00	3190.36	2965.44	2715.52	2460.15
Additions	290.58	28.97	5.25	0.00	0.00
Repayment during the year	161.22	253.88	255.17	255.37	255.37
Net Loan-Closing	3190.36	2965.44	2715.52	2460.15	2204.78
Average Loan	3125.68	3077.90	2840.48	2587.83	2332.46



Particulars	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
Weighted Average Rate of Interest on Loan (%)	9.2734%	9.2558%	9.2520%	9.2469%	9.2433%
Interest on Loan	193.24	284.88	262.80	239.29	215.60
Return on Equity					
Opening Equity	1311.56	1436.09	1448.51	1450.76	1450.76
Additions	124.53	12.41	2.25	0.00	0.00
Closing Equity	1436.09	1448.51	1450.76	1450.76	1450.76
Average Equity	1373.83	1442.30	1449.63	1450.76	1450.76
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for the respective year	17.00%	19.93%	20.01%	20.01%	20.96%
Rate of Return on Equity	18.67%	19.36%	19.38%	19.38%	19.61%
Return on Equity	171.03	279.20	280.89	281.11	284.50
Interest on Working Capital					
O & M expenses	18.04	28.61	30.25	31.98	33.81
Maintenance Spares	32.49	51.52	54.47	57.58	60.88
Receivables	127.31	199.28	199.47	199.17	199.56
Total	177.84	279.41	284.19	288.73	294.24
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest on Working Capital	21.79	34.23	34.81	35.37	36.04
Annual Transmission Charges					
Depreciation	161.22	253.88	255.17	255.37	255.37
Interest on Loan	193.24	284.88	262.80	239.29	215.60
Return on Equity	171.03	279.20	280.89	281.11	284.50
Interest on Working Capital	21.79	34.23	34.81	35.37	36.04
O & M Expenses	216.59	343.48	363.14	383.88	405.84
Total	763.86	1195.68	1196.82	1195.03	1197.35

For Combined Asset I & III: From 1.6.2010

(₹ in lakh)

Particulars	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Depreciation				
Opening Gross Block	21884.43	22253.81	22360.49	22385.00
Additional Capitalisation	369.38	106.68	24.51	0.00
Closing Gross Block	22253.81	22360.49	22385.00	22385.00
Average Gross Block	22069.12	22307.15	22372.75	22385.00
Rate of Depreciation	4.88%	4.89%	4.89%	4.89%
Depreciable Value	18876.06	19256.51	19197.33	19171.38
Balance Useful life of the asset	31.00	30.00	29.00	28.00
Elapsed Life	0.00	1.00	2.00	3.00
Remaining Depreciable Value	18525.17	17841.04	16809.98	15727.44
Depreciation during the year	898.35	1090.10	1093.56	1094.21



Particulars	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Cumulative depreciation (incl. of AAD)	1249.24	2339.35	3432.91	4527.12
Interest on Loan				
Gross Normative Loan	15319.80	15578.37	15653.04	15670.20
Cumulative Repayment upto Previous Year	350.89	1249.24	2339.35	3432.91
Net Loan-Opening	14968.91	14329.12	13313.70	12237.29
Additions	258.57	74.68	17.16	0.00
Repayment during the year	898.35	1090.10	1093.56	1094.21
Net Loan-Closing	14329.12	13313.70	12237.29	11143.08
Average Loan	14649.02	13821.41	12775.49	11690.18
Weighted Average Rate of Interest on Loan (%)	9.2552%	9.2462%	9.2370%	9.2310%
Interest on Loan	1129.83	1277.96	1180.07	1079.12
Return on Equity				
Opening Equity	6564.63	6675.44	6707.45	6714.80
Additions	110.81	32.00	7.35	0.00
Closing Equity	6675.44	6707.45	6714.80	6714.80
Average Equity	6620.04	6691.45	6711.12	6714.80
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%
MAT rate for the respective year	19.93%	20.01%	20.01%	20.96%
Rate of Return on Equity	19.36%	19.38%	19.38%	19.61%
Return on Equity	1067.94	1296.60	1300.41	1316.80
Interest on Working Capital				
O & M expenses	34.47	36.44	38.53	40.73
Maintenance Spares	62.07	65.63	69.38	73.34
Receivables	703.87	699.39	688.35	678.70
Total	800.42	801.46	796.26	792.77
Rate of Interest	11.75%	11.75%	11.75%	11.75%
Interest on Working Capital	94.05	94.17	93.56	93.15
Annual Transmission Charges				
Depreciation	898.35	1090.10	1093.56	1094.21
Interest on Loan	1129.83	1277.96	1180.07	1079.12
Return on Equity	1067.94	1296.60	1300.41	1316.80
Interest on Working Capital	78.37	94.17	93.56	93.15
O & M Expenses	344.85	437.51	462.52	488.92
Total	3519.35	4196.34	4130.13	4072.20

For Asset IV

(₹ in lakh)

Particulars	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Depreciation				
Opening Gross Block	4458.95	4474.40	4524.90	4530.39
Additional Capitalisation	15.45	50.50	5.49	0.00
Closing Gross Block	4474.40	4524.90	4530.39	4530.39
Average Gross Block	4466.68	4499.65	4527.65	4530.39
Rate of Depreciation	5.29%	5.29%	5.29%	5.29%
Depreciable Value	4020.01	4056.64	4097.61	4079.82
Balance Useful life of the asset	31.00	30.00	29.00	28.00
Elapsed Life	0.00	1.00	2.00	3.00
Remaining Depreciable Value	4020.01	3872.45	3659.59	3422.53
Depreciation during the year	177.23	238.05	239.53	239.68
Cumulative depreciation (incl. of AAD)	177.23	415.29	654.82	894.49
Interest on Loan				
Gross Normative Loan	3121.40	3132.22	3167.57	3171.41
Cumulative Repayment upto Previous Year	0.00	177.23	415.29	654.82
Net Loan-Opening	3121.40	2954.98	2752.28	2516.59
Additions	10.82	35.35	3.84	0.00
Repayment during the year	177.23	238.05	239.53	239.68
Net Loan-Closing	2954.98	2752.28	2516.59	2276.91
Average Loan	3038.19	2853.63	2634.43	2396.75
Weighted Average Rate of Interest on Loan (%)	9.2520%	9.2450%	9.2340%	9.2275%
Interest on Loan	210.82	263.82	243.26	221.16
Return on Equity				
Opening Equity	1337.55	1342.19	1357.34	1358.98
Additions	4.64	15.15	1.65	0.00
Closing Equity	1342.19	1357.34	1358.98	1358.98
Average Equity	1339.87	1349.76	1358.16	1358.98
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%
MAT rate for the respective year	19.93%	20.01%	20.01%	20.96%
Rate of Return on Equity	19.36%	19.38%	19.38%	19.61%
Return on Equity	194.53	261.54	263.17	266.50
Interest on Working Capital				
O & M expenses	28.61	30.25	31.98	33.81
Maintenance Spares	51.52	54.47	57.58	60.88
Receivables	191.69	192.85	193.50	194.16
Total	271.83	277.57	283.06	288.84
Rate of Interest	11.00%	11.00%	11.00%	11.00%
Interest on Working Capital	29.90	30.53	31.14	31.77
Annual Transmission Charges				
Depreciation	177.23	238.05	239.53	239.68



Particulars	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Interest on Loan	210.82	263.82	243.26	221.16
Return on Equity	194.53	261.54	263.17	266.50
Interest on Working Capital	22.43	30.53	31.14	31.77
O & M Expenses	257.61	363.14	383.88	405.84
Total	862.62	1157.09	1160.98	1164.95

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

35. The petitioner has claimed the tariff charges for 2014-19 tariff period as under:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1589.25	1589.25	1589.25	1589.25	1589.25
Interest on Loan	1365.84	1219.47	1073.10	925.73	779.52
Return on Equity	1867.97	1867.97	1867.97	1867.97	1867.97
Interest on Working Capital	177.11	175.93	174.83	173.78	172.83
O & M Expenses	1196.35	1236.10	1277.14	1319.49	1363.29
Total	6196.52	6088.72	5982.29	5876.22	5772.86

36. 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
O & M Expenses	99.70	103.01	106.43	109.96	113.61
Maintenance Spares	179.45	185.42	191.57	197.92	204.49
Receivables	1,032.75	1,014.79	997.05	979.37	962.14
Total	1,311.90	1,303.22	1,295.05	1,287.25	1,280.24
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	177.11	175.93	174.83	173.78	172.83

Capital Cost

37. Clause (3) and (6) of Regulation 9 of 2014 Tariff Regulation provide as follows:-

“(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.”

“(6) The following shall be excluded or removed from the capital cost of the existing and new project:

- (a) The assets forming part of the project, but not in use; (b) Decapitalisation of Asset;”

38. The petitioner has claimed capital cost for the tariff period 2014-19 by combining Asset-1 & 3, Asset 2 and Asset- 4. The claimed actual capital expenditure as on 31.3.2014 is ₹31751.94 lakh and the same has been considered as opening capital cost as on 1.4.2014 for determination of tariff for 2014-19 tariff period in accordance with Regulation 9 of the 2014 Tariff Regulations.

Name of Asset	Capital cost as on 31.3.2014
Asset-2	4836.55
Asset 1 & 3	22385.00
Asset 4	4530.39
Total cost of assets	31751.94

Additional Capital Expenditure

39. Clause (3) of Regulation 14 of the 2014 Tariff Regulations provides as under:-

“(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) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;
- (ii) Change in law or compliance of any existing law;
- (iii) Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security;
- (iv) Deferred works relating to ash pond or ash handling system in the original scope of work;

- (v) Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;
- (vi) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments:”

40. Clause 13 of Regulation 3 of the 2014 Tariff Regulations defines “cut-off” as follows:-

“Cut - off Date” means 31st March of the year closing after two years of the year of commercial operation of whole or part of the project, and in case the whole or part of the project is declared under commercial operation in the last quarter of a year, the cut - off date shall be 31st March of the year closing after three years of the year of commercial operation:”

41. The notional COD of the Combined Assets is 1.2.2010 and the cut-off date works out to be 31.3.2013. The petitioner has not claimed additional capital expenditure for 2014-19 tariff period.

42. Accordingly, the capital cost of the instant assets including additional capital expenditure during 2014-19 tariff period is as below:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	31751.94	31751.94	31751.94	31751.94	31751.94
Addition during 2014-19	00.00	00.00	00.00	00.00	00.00
Gross Block	31751.94	31751.94	31751.94	31751.94	31751.94

Debt: Equity

43. Clause (1) and (3) of Regulation 19 of the 2014 Tariff Regulations provide as under:-

“19. Debt-Equity Ratio: (1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:”

“(3) In case of the generating station and the transmission system including communication 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.”

“(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as maybe 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.”

44. The details of the debt:equity considered for the purpose of tariff for 2014-19 tariff period are as follows:-

(₹ in lakh)

Funding	Capital cost as on 31.3.2014	(%)	Additional capital expenditure during 2014-19	(%)	Total Cost as on 31.3.2019	(%)
Debt	22227.41	70.00	0.00	0.00	22227.41	70.00
Equity	9524.53	30.00	0.00	0.00	9524.53	30.00
Total	31751.94	100	0.00	0.00	31751.94	100

Return on Equity (“ROE”)

45. Clause (1) and (2) of Regulations 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.”

46. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during the 2013-14 has been considered for the purpose of ROE, which shall be trued up with actual tax rate in accordance with Clause (3) of Regulation 25 of the 2014 Tariff Regulations. The ROE has been worked out and allowed as follows:-

(₹ in lakh)

Return on Equity	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	9524.53	9524.53	9524.53	9524.53	9524.53
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	9524.53	9524.53	9524.53	9524.53	9524.53
Average Equity	9524.53	9524.53	9524.53	9524.53	9524.53
Return on Equity (Base Rate)(%)	15.500%	15.500%	15.500%	15.500%	15.500%
MAT Rate for respective year(%)	20.961%	20.961%	20.961%	20.961%	20.961%
Rate of Return on Equity (%)	19.610%	19.610%	19.610%	19.610%	19.610%
Return on Equity	1867.80	1867.80	1867.80	1867.80	1867.80

Interest on Loan (“IoL”)

47. Clause 5 and Clause 6 of Regulation 26 of the 2014 Tariff Regulations provides as follows:-

“(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.”

48. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2014. The petitioner has prayed that the change in interest rate due



to floating rate of interest applicable, if any, during 2014-19 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up or next revision of tariff. The details of weighted average rate of interest for 2014-19 tariff period are placed in Annexure 2, IoL allowed is as follows:-

(₹ in lakh)

Interest on Loan	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	22227.41	22227.41	22227.41	22227.41	22227.41
Cumulative Repayment upto Previous Year	6602.81	8192.07	9781.32	11370.58	12959.84
Net Loan-Opening	15624.60	14035.34	12446.09	10856.83	9267.57
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	1589.26	1589.26	1589.26	1589.26	1589.26
Net Loan-Closing	14035.34	12446.09	10856.83	9267.57	7678.31
Average Loan	14829.97	13240.71	11651.46	10062.20	8472.94
Weighted Average Rate of Interest on Loan (%)	9.2324%	9.2302%	9.2280%	9.2253%	9.2216%
Interest on Loan	1369.15	1222.15	1075.20	928.27	781.34

Depreciation

49. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations provides 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."

50. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2014 and accumulated depreciation up to 31.3.2014. The detailed calculations for depreciation for the transmission asset are worked out and allowed as follows:-

(₹ in lakh)

Depreciation	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	31751.94	31751.94	31751.94	31751.94	31751.94
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	31751.94	31751.94	31751.94	31751.94	31751.94
Average Gross Block	31751.94	31751.94	31751.94	31751.94	31751.94
Rate of Depreciation	5.01%	5.01%	5.01%	5.01%	5.01%
Depreciable Value	27590.60	27590.60	27590.60	27590.60	27590.60
Balance Useful life of the asset	24.00	23.00	22.00	21.00	20.00
Elapsed Life	5.00	6.00	7.00	8.00	9.00
Remaining Depreciable Value	20987.80	19398.54	17809.29	16220.03	14630.77
Depreciation	1589.26	1589.26	1589.26	1589.26	1589.26
Cumulative depreciation	8192.07	9781.32	11370.58	12959.84	14549.10

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

51. The petitioner has submitted that the wage revision of the employees of the petitioner company is due during 2014-19 and actual impact of wage hike which will be effective from a future date has also not been factored in fixation of the normative O&M rate specified for the 2014-19 tariff period. The petitioner has also submitted that it will approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase.

52. We have considered the submissions of the petitioner. We would like to clarify that any application filed by the petitioner for revision of O&M Expenses on account of wage

revision will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations. The O&M Expenses are allowed for the instant transmission assets as per the prevailing norms.

53. Clause 3(a) of Regulation 29 of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The total allowable O&M Expenses for the instant assets are as follows:-

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
400 kV Bays :					
No. of Bays	10	10	10	10	10
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
220 kV Bays :					
No. of Bays	12	12	12	12	12
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.1
D/C (Twin/Triple Conductor):					
Length (Km)	122.812	122.812	122.812	122.812	122.812
Norms (₹ lakh/Km)	0.707	0.731	0.755	0.780	0.806
Total O&M Expenses (₹ lakh)	1196.35	1236.10	1277.14	1319.49	1363.29

Interest on Working Capital ("IWC")

54. Clause 1 (c) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specifies 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;"

55. The petitioner has submitted that it has computed interest on working capital for the tariff block 2014-19 considering the SBI Base Rate plus 350 basis points as on 1.4.2014. The rate of interest on working capital considered is 13.50%.

56. 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 components of the working capital and interest thereon have been worked as follows:-

(₹ in lakh)

Interest on Working Capital	2014-15	2015-16	2016-17	2017-18	2018-19
O & M expenses	99.66	102.97	106.39	109.91	113.56
Maintenance Spares	179.45	185.41	191.57	197.92	204.49
Receivables	1033.29	1015.21	997.38	979.77	962.43
Total	1312.40	1303.60	1295.34	1287.61	1280.48
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	177.17	175.99	174.87	173.83	172.86

ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

57. The transmission charges allowed for the instant transmission assets for the 2014-19 tariff period are summarised below:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	31751.94	31751.94	31751.94	31751.94	31751.94
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	31751.94	31751.94	31751.94	31751.94	31751.94
Average Gross Block	31751.94	31751.94	31751.94	31751.94	31751.94
Rate of Depreciation	5.01%	5.01%	5.01%	5.01%	5.01%
Depreciable Value	27590.60	27590.60	27590.60	27590.60	27590.60
Balance Useful life of the asset	24.00	23.00	22.00	21.00	20.00
Elapsed Life	5.00	6.00	7.00	8.00	9.00

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Remaining Depreciable Value	20987.80	19398.54	17809.29	16220.03	14630.77
Depreciation	1589.26	1589.26	1589.26	1589.26	1589.26
Cumulative depreciation	8192.07	9781.32	11370.58	12959.84	14549.10
Interest on Loan					
Gross Normative Loan	22227.41	22227.41	22227.41	22227.41	22227.41
Cumulative Repayment upto Previous Year	6602.81	8192.07	9781.32	11370.58	12959.84
Net Loan-Opening	15624.60	14035.34	12446.09	10856.83	9267.57
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	1589.26	1589.26	1589.26	1589.26	1589.26
Net Loan-Closing	14035.34	12446.09	10856.83	9267.57	7678.31
Average Loan	14829.97	13240.71	11651.46	10062.20	8472.94
Weighted Average Rate of Interest on Loan	9.2324%	9.2302%	9.2280%	9.2253%	9.2216%
Interest	1369.15	1222.15	1075.20	928.27	781.34
Return on Equity					
Opening Equity	9524.53	9524.53	9524.53	9524.53	9524.53
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	9524.53	9524.53	9524.53	9524.53	9524.53
Average Equity	9524.53	9524.53	9524.53	9524.53	9524.53
Return on Equity (Base Rate)	15.500	15.500	15.500	15.500	15.500
MAT rate for the respective year	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity	19.610	19.610	19.610	19.610	19.610
Return on Equity	1867.80	1867.80	1867.80	1867.80	1867.80
Interest on Working Capital					
O & M expenses	99.66	102.97	106.39	109.91	113.56
Maintenance Spares	179.45	185.41	191.57	197.92	204.49
Receivables	1033.29	1015.21	997.38	979.77	962.43
Total	1312.40	1303.60	1295.34	1287.61	1280.48
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on working capital	177.17	175.99	174.87	173.83	172.86
Annual Transmission Charges					
Depreciation	1589.26	1589.26	1589.26	1589.26	1589.26
Interest on Loan	1369.15	1222.15	1075.20	928.27	781.34

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity	1867.80	1867.80	1867.80	1867.80	1867.80
Interest on Working Capital	177.17	175.99	174.87	173.83	172.86
O & M Expenses	1196.35	1236.10	1277.14	1319.49	1363.29
Total	6199.74	6091.29	5984.28	5878.65	5774.55

58. The petitioner has prayed to allow to recover the deferred tax liability upto 31.3.2019 from the beneficiaries or the long term customers/DICs as and when the same gets materialised. As per Regulation 49 of the 2014 Tariff regulations, the deferred tax liabilities for the periods 1.4.2009 upto 31.3.2014 and 1.4.2014 upto 31.3.2019 shall not be recoverable from the beneficiaries or the long term customers/DICs. Accordingly, the petitioner's prayer is rejected.

Filing Fee and the Publication Expenses

58. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. 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 Regulation 52 (1) of the 2014 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

59. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 52 (2) (b) of the 2014 Tariff Regulations for 2014-19 tariff period. The petitioner shall also be entitled for recovery of RLDC fee & charges in accordance with Regulations 52 (2) (a) of the 2014 Tariff Regulations for 2014-19 tariff period.

Service Tax

60. The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future. We are of the view that the petitioner's prayer is premature.

Sharing of Transmission Charges

61. 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.

62. This order disposes of Petition No.549/TT/2014.

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

**Sd/-
(A.S. Bakshi)
Member**

DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2009-14)**Asset-I**

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
BOND XX-DRAWL ON 01-AUG-2009-	8.93	150.00	0.00	150.00
BOND XXI-DRAWL ON 01-AUG-2009-	8.73	100.00	0.00	100.00
BOND XXII-DRAWL ON 01-AUG-2009-	8.68	100.00	0.00	100.00
BOND XXIV-DOCO-	9.95	250.00	0.00	250.00
BOND XXVII-DRAWL ON 01-AUG-2009-	9.47	2000.00	0.00	2000.00
BOND XXVIII-DRAWL ON 01-AUG-2009-	9.33	1400.00	0.00	1400.00
BOND XXIX-DRAWL ON 01-AUG-2009-	9.20	1620.00	0.00	1620.00
BOND XXX-DRAWL ON 01-AUG-2009-	8.80	517.00	0.00	517.00
BOND XXXI-ADDCAP FOR 2009-2010 DRAWL ON 31-MAR-2010-	8.90	0.00	424.07	424.07
BOND XXXI-ADDCAP FOR 2010-2011 DRAWL ON 31-MAR-2011-	8.90	0.00	108.63	108.63
BOND XXXI-ADDCAP FOR 2010-2011 DRAWL ON 31-MAY-2010-	8.90	0.00	21.73	21.73
BOND XXXIII-ADDCAP FOR 2011-2012 DRAWL ON 31-MAR-2012-	8.64	0.00	20.78	20.78
Total		6137.00	575.21	6712.21

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

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	6137.00	6561.07	6691.43	6712.21	6712.21
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	0.00
Net Loans Opening	6137.00	6561.07	6691.43	6712.21	6712.21
Add: Draw(s) during the Year	424.07	130.36	20.78	0.00	0.00
Less: Repayments of Loan during the year	0.00	0.00	0.00	0.00	0.00
Net Closing Loan	6561.07	6691.43	6712.21	6712.21	6712.21
Average Net Loan	6349.04	6626.25	6701.82	6712.21	6712.21
Rate of Interest on Loan* (%)	9.2787%	9.2628%	9.2584%	9.2574%	9.2574%
Interest on Loan	589.11	613.78	620.48	621.38	621.38

DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2009-14)

Asset- II

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
BOND XX-DOCO DRAWL ON 01-AUG-2009-	8.93	100.00	0.00	100.00
BOND XXI-DRAWL ON 01-AUG-2009-	8.73	100.00	0.00	100.00
BOND XXII-DRAWL ON 01-AUG-2009-	8.68	100.00	0.00	100.00
BOND XXIV-DOCO DRAWL ON 01-AUG-2009-	9.95	100.00	0.00	100.00
BOND XXVII-DOCO DRAWL ON 01-AUG-2009-	9.47	1000.00	0.00	1000.00
BOND XXVIII-DOCO DRAWL ON 01-AUG-2009-	9.33	1000.00	0.00	1000.00
BOND XXIX-DOCO DRAWL ON 01-AUG-2009-	9.20	486.00	0.00	486.00
BOND XXX-DOCO DRAWL ON 01-AUG-2009-	8.80	175.00	0.00	175.00
BOND XXXI-ADDCAP FOR 2009-2010 DRAWL ON 31-MAR-2010-	8.90	0.00	290.58	290.58
BOND XXXI-ADDCAP FOR 2010-2011 DRAWL ON 31-MAR-2011-	0.00	0.00	7.60	7.60
BOND XXXIII-ADDCAP FOR 2010-2011	0.00	0.00	21.37	21.37
BOND XXXIII-ADDCAP FOR 2011-2012	0.00	0.00	5.25	5.25
Total		3061.00	324.80	3385.80

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

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	3061.00	3351.58	3380.55	3385.80	3385.80
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	33.32	149.97	390.45
Net Loans Opening	3061.00	3351.58	3347.23	3235.83	2995.35
Add: Draw(s) during the Year	290.58	28.97	5.25	0.00	0.00
Less: Repayments of Loan during the year	0.00	33.32	116.65	240.48	279.91
Net Closing Loan	3351.58	3347.23	3235.83	2995.35	2715.44
Average Net Loan	3206.29	3349.41	3291.53	3115.59	2855.40
Rate of Interest on Loan* (%)	9.2734%	9.2558%	9.2520%	9.2469%	9.2433%
Interest on Loan	297.33	310.01	304.53	288.10	263.93



DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2009-14)

Combined Asset- I& III

(₹in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
BOND XX-1.DRAWL ON 01-AUG-2009-	8.93	150.00	0.00	150.00
BOND XX-13.DRAWL ON 01-JUN-2010-	8.93	330.00	0.00	330.00
BOND XXI-14.DRAWL ON 01-JUN-2010-	8.73	140.00	0.00	140.00
BOND XXI-2.DRAWL ON 01-AUG-2009-	8.73	100.00	0.00	100.00
BOND XXII-15.DRAWL ON 01-JUN-2010-	8.68	80.00	0.00	80.00
BOND XXII-3.DRAWL ON 01-AUG-2009-	8.68	100.00	0.00	100.00
BOND XXIV-12.DOCO-	9.95	250.00	0.00	250.00
BOND XXIV-16.DRAWL ON 01-JUN-2010-	9.95	380.00	0.00	380.00
BOND XXVII-17.DRAWL ON 01-JUN-2010-	9.47	2950.00	0.00	2950.00
BOND XXVII-4.DRAWL ON 01-AUG-2009-	9.47	2000.00	0.00	2000.00
BOND XXVIII-18.DRAWL ON 01-JUN-2010-	9.33	2480.00	0.00	2480.00
BOND XXVIII-5.DRAWL ON 01-AUG-2009-	9.33	1400.00	0.00	1400.00
BOND XXIX-19.DRAWL ON 01-JUN-2010-	9.20	292.00	0.00	292.00
BOND XXIX-6.DRAWL ON 01-AUG-2009-	9.20	1620.00	0.00	1620.00
BOND XXX-20.DRAWL ON 01-JUN-2010-	8.80	980.00	0.00	980.00
BOND XXX-7.DRAWL ON 01-AUG-2009-	8.80	517.00	0.00	517.00
BOND XXXI-10.ADDCAP FOR 2010-2011 DRAWL ON 31-MAR-2011-	8.90	0.00	108.63	108.63
BOND XXXI-21.DRAWL ON 01-JUN-2010-	8.90	1105.00	0.00	1105.00
BOND XXXI-8.ADDCAP FOR 2009-2010 DRAWL ON 31-MAR-2010-	8.90	424.07	0.00	424.07
BOND XXXI-9.ADDCAP FOR 2010-2011 DRAWL ON 31-MAY-2010-	8.90	21.73	0.00	21.73
BOND XXXIII-11.ADDCAP FOR 2011-2012 DRAWL ON 31-MAR-2012-	8.64	0.00	20.78	20.78
BOND XXXIII-22.ADDCAP FOR	8.64	0.00	149.94	149.94



Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
2010-2011 DRAWL ON 31-MAR-2011-				
BOND XXXIII-23.ADDCAP FOR 2011-2012 DRAWL ON 31-MAR-2012-	8.64	0.00	53.89	53.89
BOND-XXXIV-24.ADDCAP FOR 2012-2013 DRAWL ON 31-MAR-2013-	8.84	0.00	17.16	17.16
Total		15319.80	350.40	15670.20

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

(₹in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	0.00	15319.80	15578.37	15653.04	15670.20
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	127.50	667.50	1690.17
Net Loans Opening	0.00	15319.80	15450.87	14985.54	13980.03
Add: Draw(s) during the Year	0.00	258.57	74.67	17.16	0.00
Less: Repayments of Loan during the year	0.00	127.50	540.00	1022.67	1285.70
Net Closing Loan	0.00	15450.87	14985.54	13980.03	12694.33
Average Net Loan	0.00	15385.34	15218.21	14482.79	13337.18
Rate of Interest on Loan* (%)	0.00	9.2552%	9.2462%	9.2370%	9.2310%
Interest on Loan	0.00	1423.94	1407.11	1337.77	1231.15

DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2009-14)

Asset-IV

(₹in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
BOND XX-DOCO DRAWL ON 07-SEP-06-	8.93	120.00	0.00	120.00
BOND XXI-DOCO DRAWL ON 11 OCT-06-	8.73	55.00	0.00	55.00
BOND XXII-DOCO DRAWL ON 07-DEC-2006-	8.68	35.00	0.00	35.00
BOND XXIV-DOCO DRAWL ON 26-MAR-2007-	9.95	132.00	0.00	132.00
BOND XXVII-DOCO DRAWL ON 31-MAR-2008-	9.47	1050.00	0.00	1050.00
BOND XXVIII-DOCO DRAWL ON 15-DEC-2008-	9.33	887.00	0.00	887.00
BOND XXIX-DOCO DRAWL ON 12-MAR-2009-	9.20	100.00	0.00	100.00
BOND XXX-DRAWL ON 01-JUL-2010-	8.80	328.00	0.00	328.00
BOND XXXI-DRAWL ON 01-JUL-2010-	8.90	414.40	0.00	414.40
BOND XXXIII-ADDCAP FOR 2010-2011 DRAWL ON 31-MAR-2011-	8.64	0.00	10.82	10.82
BOND XXXIII-ADDCAP FOR 2011-2012 DRAWL ON 31-MAR-2012-	8.64	0.00	9.95	9.95
BOND-XXXIV-ADDCAP FOR 2011-2012 DRAWL ON 31-MAR-2012-	8.84	0.00	25.40	25.40
BOND-XXXIV-ADDCAP FOR 2012-2013 DRAWL ON 31-MAR-2013-	8.84	0.00	3.84	3.84
Total		3121.40	50.01	3171.41

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

(₹in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	0.00	3121.40	3132.22	3167.57	3171.41
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	28.50	144.50	342.75
Net Loans Opening	0.00	3121.40	3103.72	3023.07	2828.66
Add: Draw(s) during the Year	0.00	10.82	35.35	3.84	0.00
Less: Repayments of Loan during the year	0.00	28.50	116.00	198.25	260.11
Net Closing Loan	0.00	3103.72	3023.07	2828.66	2568.55
Average Net Loan	0.00	3112.56	3063.40	2925.87	2698.61
Rate of Interest on Loan* (%)	0.00	9.2520%	9.2450%	9.2340%	9.2275%
Interest on Loan	0.00	287.97	283.21	270.17	249.01



DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2014-19)**Combined Asset-I,II,III& IV**

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
BOND XX-1.DOCO DRAWL ON 01-AUG-2009-	8.93	100.00	0.00	100.00
BOND XX-13.DOCO DRAWL ON 07-SEP-2006-	8.93	120.00	0.00	120.00
BOND XX-26.1.DRAWL ON 01-AUG-2009-	8.93	150.00	0.00	150.00
BOND XX-38.13.DRAWL ON 01-JUN-2010-	8.93	330.00	0.00	330.00
BOND XXI-14.DOCO DRAWL ON 11-OCT-2006-	8.73	55.00	0.00	55.00
BOND XXI-2.DOCO DRAWL ON 01-AUG-2009-	8.73	100.00	0.00	100.00
BOND XXI-27.2.DRAWL ON 01-AUG-2009-	8.73	100.00	0.00	100.00
BOND XXI-39.14.DRAWL ON 01-JUN-2010-	8.73	140.00	0.00	140.00
BOND XXII-15.DOCO DRAWL ON 07-DEC-2006-	8.68	35.00	0.00	35.00
BOND XXII-28.3.DRAWL ON 01-AUG-2009-	8.68	100.00	0.00	100.00
BOND XXII-3.DOCO DRAWL ON 01-AUG-2009-	8.68	100.00	0.00	100.00
BOND XXII-40.15.DRAWL ON 01-JUN-2010-	8.68	80.00	0.00	80.00
BOND XXIV-16.DOCO DRAWL ON 26-MAR-2007-	9.95	132.00	0.00	132.00
BOND XXIV-37.12.DOCO-	9.95	250.00	0.00	250.00
BOND XXIV-4.DOCO DRAWL ON 01-AUG-2009-	9.95	100.00	0.00	100.00
BOND XXIV-41.16.DRAWL ON 01-JUN-2010-	9.95	380.00	0.00	380.00
BOND XXVII-17.DOCO DRAWL ON 31-MAR-2008-	9.47	1050.00	0.00	1050.00
BOND XXVII-29.4.DRAWL ON 01-AUG-2009-	9.47	2000.00	0.00	2000.00
BOND XXVII-42.17.DRAWL ON 01-JUN-2010-	9.47	2950.00	0.00	2950.00
BOND XXVII-5.DOCO DRAWL ON 01-AUG-2009-	9.47	1000.00	0.00	1000.00
BOND XXVIII-18.DOCO DRAWL ON 15-DEC-2008-	9.33	887.00	0.00	887.00

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
BOND XXVIII-30.5.DRAWL ON 01-AUG-2009-	9.33	1400.00	0.00	1400.00
BOND XXVIII-43.18.DRAWL ON 01-JUN-2010-	9.33	2480.00	0.00	2480.00
BOND XXVIII-6.DOCO DRAWL ON 01-AUG-2009-	9.33	1000.00	0.00	1000.00
BOND XXIX-19.DOCO DRAWL ON 12-MAR-2009-	9.20	100.00	0.00	100.00
BOND XXIX-31.6.DRAWL ON 01-AUG-2009-	9.20	1620.00	0.00	1620.00
BOND XXIX-44.19.DRAWL ON 01-JUN-2010-	9.20	292.00	0.00	292.00
BOND XXIX-7.DOCO DRAWL ON 01-AUG-2009-	9.20	486.00	0.00	486.00
BOND XXX-20.DRAWL ON 01-JUL-2010-	8.80	328.00	0.00	328.00
BOND XXX-32.7.DRAWL ON 01-AUG-2009-	8.80	517.00	0.00	517.00
BOND XXX-45.20. DRAWL ON 01-JUN-2010-	8.80	980.00	0.00	980.00
BOND XXX-8.DOCO DRAWL ON 01-AUG-2009-	8.80	175.00	0.00	175.00
BOND XXXI-10.ADDCAP FOR 2010-2011 DRAWL ON 31-MAR-2011-	8.90	7.60	0.00	7.60
BOND XXXI-21.DRAWL ON 01-JUL-2010-	8.90	414.40	0.00	414.40
BOND XXXI-33.8.ADDCAP FOR 2009-2010 DRAWL ON 31-MAR-2010-	8.90	424.07	0.00	424.07
BOND XXXI-34.9.ADDCAP FOR 2010-2011 DRAWL ON 31-MAY-2010-	8.90	21.73	0.00	21.73
BOND XXXI-35.10.ADDCAP FOR 2010-2011 DRAWL ON 31-MAR-2011-	8.90	108.63	0.00	108.63
BOND XXXI-46.21.DRAWL ON 01-JUN-2010-	8.90	1105.00	0.00	1105.00
BOND XXXI-9.ADDCAP FOR 2009-2010 DRAWL ON 31-MAR-2010-	8.90	290.58	0.00	290.58
BOND XXXIII-11.ADDCAP FOR 2010-2011 DRAWL ON 31-MAR-2011-	8.64	21.37	0.00	21.37
BOND XXXIII-12.ADDCAP FOR 2011-2012 DRAWL ON 31-MAR-2012-	8.64	5.25	0.00	5.25
BOND XXXIII-22.ADDCAP FOR 2010-2011 DRAWL ON 31-MAR-	8.64	10.82	0.00	10.82



Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
2011-				
BOND XXXIII-23.ADDCAP FOR 2011-2012 DRAWL ON 31-MAR-2012-	8.64	9.95	0.00	9.95
BOND XXXIII-36.11.ADDCAP FOR 2011-2012 DRAWL ON 31-MAR-2012-	8.64	20.78	0.00	20.78
BOND XXXIII-47.22.ADDCAP FOR 2010-2011 DRAWL ON 31-MAR-2011-	8.64	149.94	0.00	149.94
BOND XXXIII-48.23.ADDCAP FOR 2011-2012 DRAWL ON 31-MAR-2012-	8.64	53.89	0.00	53.89
BOND-XXXIV-24.ADDCAP FOR 2011-2012 DRAWL ON 31-MAR-2012-	8.84	25.40	0.00	25.40
BOND-XXXIV-25.ADDCAP FOR 2012-2013 DRAWL ON 31-MAR-2013-	8.84	3.84	0.00	3.84
BOND-XXXIV-49.24.ADDCAP FOR 2012-2013 DRAWL ON 31-MAR-2013-	8.84	17.16	0.00	17.16
Total		22227.41	0.00	22227.41

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

(₹in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	22227.41	22227.41	22227.41	22227.41	22227.41
Cumulative Repayments of Loans up to Previous Year	4249.09	6101.35	7953.61	9805.87	11658.13
Net Loans Opening	17978.32	16126.06	14273.80	12421.54	10569.28
Add: Drawl(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments during the year	1852.26	1852.26	1852.26	1852.26	1852.26
Net Closing Loan	16126.06	14273.80	12421.54	10569.28	8717.02
Average Net Loan	17052.19	15199.93	13347.67	11495.41	9643.15
Rate of Interest on Loan (%)	9.2302%	9.2280%	9.2253%	9.2216%	9.2165%
Interest on Loan	1573.95	1402.66	1231.36	1060.06	888.76

