CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

PETITION NO.501/TT/2014

Coram:

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

Date of Hearing : 08.02.2016 Date of Order : 14.03.2016

In the Matter of:

Truing up of transmission tariff 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 for Combined Asset of 1x125 MVAR Bus Reactor at Khandwa along with associated bays and 1x125 MVAR Bus Reactor at Dehgam along with associated bays under WRSS VII Transmission Scheme in Western 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-122001 (Haryana)

.....Petitioner

Versus

- Madhya Pradesh Power Management Company Ltd. Shakti Bhawan, Rampur Jabalpur - 482 008
- Maharashtra State Electricity Distribution Co. Ltd. Prakashgad, 4th Floor Andheri (East), Mumbai - 400 052
- Gujarat Urja Vikas Nigam Ltd. Sardar Patel Vidyut Bhawan, Race Course Road Vadodara - 390 007



- Electricity Department Govt. Of Goa Vidyut Bhawan, Panaji, Ner Mandvi Hotel, Goa - 403 001
- Electricity Department
 Administration of Daman & Diu
 Daman 396 210
- Electricity Department
 Administration of Dadra Nagar Haveli
 U.T., Silvassa 396 230
- Chhattisgarh State Electricity Board P.O.Sunder Nagar, Dangania, Raipur Chhatisgaarh-492013
- Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Ltd.
 3/54, Press Complex, Agra-Bombay Road, Indore-452 008

.....Respondents

The following were present:

For Petitioner: Shri Rakesh Prasad, PGCIL

Shri M.M. Mondal, PGCIL Shri S.S. Raju, PGCIL Shri S.C. Taneja, PGCIL Shri.Mohd. Mohsin,PGCIL Shri S.K. Venkatasan,PGCIL Smt.Sonam Gangawar,PGCIL

Shri A. M. Pavgi,PGCIL Shri Pankaj Sharma,PGCIL Shri Jasbir Singh,PGCIL

For Respondents: None

<u>ORDER</u>

The petition has been preferred 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 from the date of commercial operation 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 for 1x125 MVAR Bus Reactor at Khandwa along with associated bays (referred as "Asset IA") and 1x125 MVAR Bus Reactor at Dehgam along with associated bays under WRSS VII Transmission Scheme in Western Region(referred as "Asset IB") (hereinafter collectively referred as "the transmission asset").

- 2. The respondents are distribution licensees, who are procuring transmission service from the petitioner, mainly beneficiaries of Western Region.
- 3. The brief facts of the case are as follows:
 - a) The administrative approval for the transmission scheme was accorded by the Board of Directors of the petitioner's company vide letter dated 25.2.2008 at an estimated cost of ₹3205 lakh, including IDC of ₹169 lakh based on 3rd quarter, 2007 price level. The details of assets covered in the instant petition and the date of commercial operations are given hereunder:

Name of Asset	COD
1x125 MVAR Bus Reactor at Khandwa along with	1.10.2010
associated bays	1.10.2010
1x125 MVAR Bus Reactor at Dehgam along with	1.11.2010
associated bays	1.11.2010

As per the investment approval, the COD for the assets was as per schedule, accordingly there was no time over-run.



b) For the determination of annual transmission charges for 2009-14 tariff period, capital cost for individual asset was considered form COD to 1.11.2010 and form 1.11.2010 to 31.3.2014 capital cost of Combined Asset was considered vide order dated 13.5.2011 in Petition No. 309/2010 based on admitted capital cost given as under:

(₹ in lakh)

Asset	Capital Cost Approved as on COD as per order dated 13.5.2011 in Petition No. 309/2010	
Asset-1A	491.49	0.00
Asset-1B Combined Asset	1239.59	63.46

The debt:equity ratio is 70:30 as on COD for all the assets. The estimated additional capital expenditure approved was towards balance and retention payments for determination of tariff for 2009-14 tariff period is as follows:

	Apportio-	Admitt-	Allowed Additional capital expenditure during 2009-14				Cost as
Asset	ned approved cost	ed cost as on COD	1.10.10 to 31.10.10	2010- 11	2011- 12	2012- 13	on 31.3.2014
Bus Reactor at 400/220 kV Khandwa	1589.42	491.49	94.20	218.12	130.40	70.67	1004.52
Bus Reactor at 400/220 kV Dehgam	1615.53		717.36	165.22	78.00	31.77	992.35
Combined Asset of Bus reactor at 400/220 kV Dehgam (Notional COD 1.11.2010)	3204.95		1239.59*	383.34	208.04	102.44	1933.41

^{*}Capital cost after adjusting the disallowed excess initial spares.



c) The annual fixed charges were determined vide order dated 13.5.2011 in Petition No. 309/2010 based the above capital cost and estimated additional capital expenditure for the transmission assets during 2009-14 as given below:-

(₹ in lakh)

Single Asset					
Particulars	2010-11 (pro-rata)				
Depreciation	2.85				
Interest on Loan	2.92				
Return on Equity	2.83				
Interest on Working Capital	0.39				
O & M Expenses	4.62				
Total	13.61				

(₹ in lakh)

Combined Asset							
Particulars	2010-11 (pro-rata)	2011-12	2012-13	2013-14			
Depreciation	31.49	91.18	99.38	102.08			
Interest on Loan	31.91	88.18	89.58	84.76			
Return on Equity	31.27	90.57	98.71	101.39			
Interest on Working Capital	4.10	11.01	11.68	12.03			
O & M Expenses	46.17	117.14	123.84	130.92			
Total	144.95	398.07	423.19	431.19			

4. 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. 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.

- 5. 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 the Electricity Act, 2003. No comments/objections have been received from the public in response to the notice in newspaper. None of the respondents have filed the reply in the matter. The hearing in this matter was held on 8.2.2016. The Commission had directed the petitioner to submit the details in respect of the FERV loss, actual equity infused during 2009-14 and 2014-19 tariff periods, details of balance and payment and un-discharged liabilities. The petitioner has filed its reply vide affidavit dated 18.2.2016. The petitioner was directed to explain the reasons for large variation in apportioned approved cost and actual completion cost .The Petitioner vide its affidavit dated 18.2.2016 submitted that the FR cost was estimated based on the budgetary offer collected from M/s BHEL wherein 125 MVAR Bus Reactor was first time being installed in India in the absence of historical data. But, the awarded cost was very much on lower side. The submission of petitioner has been considered in the instant order.
- 6. 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:-

- 7. 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".

8. 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

9. The petitioner has submitted the actual capital cost as on COD for assets, certified vide Auditor's Certificates dated 23.9.2014. However, for the combined asset, the petitioner had claimed capital cost as on COD, after deducting excess initial spares for the purpose of tariff determination. Details of capital cost claimed is as under:

(₹ in lakh)

Asset	Capital Cost as on COD as per auditor certificate	n COD as per spares as per uditor petitioner's		Initial Spares S/S(Actual)
	(a)	(b)	(c)=(a)-(b)	
Asset-1A	491.49	0.00	491.49	55.87
Asset-1B	719.65	0.00	719.65	55.93
Combined Asset 1	1306.35	69.30	1237.05	111.80

- 2. 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."



10. The admissible capital cost of the transmission asset as on COD for the purpose of computation of tariff for 2009-14 tariff period is worked out in the subsequent paragraph after the treatment of initial spares.

Treatment of Initial Spares

- 11. The petitioner has submitted the actual initial spares of ₹55.87 lakh, ₹55.93 lakh, and ₹111.80 lakh, pertaining to sub-station capital cost of ₹802.24 lakh, ₹966.98 lakh and ₹1769.22 lakh, as on the cut-off date of 31.3.2013 for Asset-1A, Asset-1B and Combined Asset 1 respectively as submitted vide Auditor's Certificates dated 23.9.2014.We have worked out the admissible initial spares by considering capital cost as per Auditor's Certificate in accordance with the 2009 Tariff Regulations.
- 12. Regulation 8 of the 2009 Tariff Regulations provide for ceiling norms for capitalization of initial spares in respect of sub-station at 2.50%. Accordingly, the initial spares have been allowed as under:-

Particulars	Logical		Substation	
Faiticulais	Formula	Asset 1A	Asset 1B	Combined Asset 1
Capital cost as on cut off date	(a)	802.24	966.98	1769.22
Capital Cost after deducting excess IDC	(b)	802.24	966.98	1769.22
Initial Spares as per Auditor`s Certificate	(c)	55.87	55.93	111.80
Proportionate Initial Spares claimed after deducting IDC	(d) = (c)/(a) *(b)	55.87	55.93	111.80
Ceiling limit as per Regulation 8 of 2009 regulations	(e)	2.50	2.50	2.50
Initial spares worked out	(f)= ((b-d)*e)) /(100%-e)	19.14	23.36	42.50
Excess initial spares claimed	(g)=(d)-(f)	36.73	32.57	69.30



13. Accordingly, the capital cost as on COD for tariff computation of 2009-14 tariff period is considered as below:-

(₹ in lakh)

Particulars	Asset 1A	Asset 1B	Combined Asset 1
Capital cost as on COD	491.49	719.65	1306.35
Excess initial spares	36.73	32.57	69.30
Capital cost as on COD considered for tariff determination	454.76	687.08	1237.05

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 submitted that it has actually incurred an additional capital expenditure of ₹310.75 lakh, ₹247.33 lakh, and ₹462.87 lakh for Asset 1A-, Asset-1B and Combined Asset-1 respectively during 2009-14 towards balance and retention payments for the works completed before the cut-off date, as depicted below:-

	Apportioned		Capital	Addit	ional capit	al expendi	ture	Capital
Name of Asset	approved cost		cost as on COD	1.10.10 to 31.10.10	2010-11	2011-12	2012-13	cost as on 31.3.2014
		Approved in Order dated 13.5.2011	491.49	94.20	218.12	130.40	70.67	1004.52
Asset 1A	1589.42	Claimed by the petitioner	491.49	95.21	109.86	92.03	13.65	802.23
		Allowed in this Order	454.76	95.21	-	ı	-	549.97
Combined		Approved in Order dated 13.5.2011		1239.59	383.34	208.04	102.44	1933.41
Asset 1(1A+1B)	3204.95	Claimed by the petitioner		1237.05	252.86	173.41	36.60	1699.92
		Allowed in this Order		1237.05	252.86	173.41	36.60	1699.92



16. The petitioner has claimed the admissibility of additional capital expenditure before the cut-off date under Regulation 9(1)(i) of 2009 Tariff Regulations. We have considered the submissions of the petitioner with regard to the actual capital expenditure during 2009-14. The above mentioned Additional capital expenditure is towards balance and retention payments and the same has been certified by the Auditor vide certificate dated 23.9.2014. Further, the total capital expenditure during 2009-14 is within the limits of the total approved capital expenditure and the total cost as on 31.3.2014 is within the approved cost of the project. Thus, the same is allowed for the purpose of revision of tariff in accordance with Regulation 9(1)(i) and Regulation 6 of the 2009 Tariff Regulations.

Debt: Equity

- 17. 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."
- 18. The debt:equity ratio admitted by the Commission vide order dated 13.5.2011 in Petition No. 309/2011 as on COD was 70:30, for determination of tariff in accordance with the Regulation 12 of the 2009 Tariff Regulations. The petitioner was directed to



confirm that actual equity corresponding to additional capital expenditure is not less than 30%. In response, the petitioner vide affidavit dated 18.2.2016 has submitted the actual debt:equity ratio of the Additional Capital Expenditure during 2010-11,2011-12 and 2012-13 as 64.50:35.50 ,41.21:58.79 and 0.00:100.00 for the asset. However in tariff form-6 for Combined Asset 1, petitioner has claimed debt: equity ratio of 88.78:11.22 for additional capital expenditure in 2010-11. The debt:equity of 88.78:11.22 for 2010-11 and 70:30 for 2011-12 and 2012-13 as submitted by the petitioner has been considered for the calculation of transmission charges and for other years it has been considered on normative basis in accordance with Regulation 12 of the 2009 Tariff Regulations.

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

(₹ in lakh)

Funding	Capital cost as on COD	(%)	Additional capital expenditure during 2009-14	expenditure (%)		(%)
			Asset 1A			
Debt	318.33	70.00	64.42	70.00	384.98	70.00
Equity	136.43	30.00	28.56	30.00	164.99	30.00
Total	454.76	100.00	95.21	100.00	549.97	100.00
		С	ombined Asset 1			
Debt	865.93	70.00	371.50	80.26	1237.43	72.79
Equity	371.11	30.00	91.37	19.74	462.49	27.21
Total	1237.05	100.00	462.87	100.00	1699.92	100.00

Return on Equity ("ROE")

- 20. 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."

21. 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

22. The ROE as trued up and allowed is as follows:-

Asset 1A				
Return on Equity	2010-11 (pro-rata)			
Approved in Order dated 13.5.2011	2.83			
Claimed by the petitioner	2.88			
Allowed in this Order	2.43			



Combined Asset 1					
Return on Equity 2010-11 (pro-rata) 2011-12 2012-13 2013-					
Approved in Order dated 13.5.2011	31.27	90.57	98.71	101.39	
Claimed by the petitioner	31.08	82.45	88.55	90.69	
Allowed in this Order	31.08	82.45	88.55	90.70	

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 ("loL")

- 23. 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".
- 24. 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:-

Asset 1A			
Interest on Loan	2010-11 (pro-rata)		
Approved in Order dated 13.5.2011	2.92		
Claimed by the petitioner	1.14		
Allowed in this Order	0.98		



Combined Asset 1						
Interest on Loan 2010-11 (pro-rata) 2011-12 2012-13 2013-7						
Approved in Order dated 13.5.2011	31.91	88.18	89.58	84.76		
Claimed by the petitioner	18.63	47.16	47.92	43.37		
Allowed in this Order	18.64	47.21	47.91	43.36		

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

25. The depreciation has been worked out as per the methodology provided in the Regulation 17 of the 2009 Tariff Regulations. The depreciation allowed is as follows:-

(₹ in lakh)

	(V III IGIGII)	
Asset 1A		
Depreciation	2010-11 (pro-rata)	
Approved in Order dated 13.5.2011	2.85	
Claimed by the petitioner	2.61	
Allowed in this Order	2.21	

(₹ in lakh)

Combined Asset 1					
Depreciation 2010-11 (pro-rata) 2011-12 2012-13					
Approved in Order dated 13.5.2011	31.49	91.18	99.38	102.08	
Claimed by the petitioner	30.00	83.25	88.79	89.76	
Allowed in this Order	30.00	83.25	88.79	89.76	

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")

26. 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:-

(₹ in lakh)

Asset 1A		
O&M Expenses	2010-11 (pro-rata)	
Approved in Order dated 13.5.2011	4.62	
Claimed by the petitioner	4.62	
Allowed in this Order	4.62	

(₹ in lakh)

Combined Asset 1						
O&M Expenses 2010-11 (pro-rata) 2011-12 2012-13 2013-1						
Approved in Order dated 13.5.2011	46.17	117.14	123.84	130.94		
Claimed by the petitioner	46.17	117.14	123.84	130.92		
Allowed in this Order	46.17	117.14	123.84	130.92		

Interest on Working Capital ("IWC")

27. The IWC has been worked out as per the methodology provided in the Regulation 18 of the 2009 Tariff Regulations and allowed as under:-

Asset 1A		
Interest on Working Capital	2010-11 (pro-rata)	
Approved in Order dated 13.5.2011	0.39	
Claimed by the petitioner	0.33	
Allowed in this Order	0.31	



Combined Asset 1							
Interest on Working Capital 2010-11 (pro-rata) 2011-12 2012-13 2013-14							
Approved in Order dated 13.5.2011	4.10	11.01	11.68	12.03			
Claimed by the petitioner	3.56	9.23	9.76	10.05			
Allowed in this Order	3.56	9.23	9.76	10.05			

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

28. 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:-

Asset 1A:

Particulars	2010-11 (pro-rata)
Depreciation	
Opening Gross Block	454.76
Additional Capitalisation	95.21
Closing Gross Block	549.97
Average Gross Block	502.36
Freehold Land (Av. Cost)	0.00
Rate of Depreciation (%)	5.28
Depreciable Value	452.13
Balance useful life of the asset	25.00
Elapsed life	0.00
Remaining Depreciable Value	452.13
Depreciation during the year	2.21
Depreciation upto previous year	0.00
Cumulative depreciation (incl. of AAD)	2.21
Interest on Loan	
Gross Normative Loan	318.33
Cumulative Repayment upto Previous Year	0.00



Particulars	2010-11 (pro-rata)
Net Loan-Opening	318.33
Additions	66.65
Repayment during the year	2.21
Net Loan-Closing	382.77
Average Loan	350.55
Weighted Average Rate of Interest on Loan (%)	3.3534
Interest on Loan	0.98
Return on Equity	
Opening Equity	136.43
Additions	28.56
Closing Equity	164.99
Average Equity	150.71
Return on Equity (Base Rate) (%)	15.500
MAT rate for the respective year (%)	19.931
Rate of Return on Equity (%)	19.358
Return on Equity	2.43
Interest on Working Capital	
O & M expenses	4.62
Maintenance Spares	8.31
Receivables	21.10
Total	34.03
Rate of Interest (%)	11.00
Interest on Working Capital	0.31
Annual Transmission Charges	
Depreciation	2.21
Interest on Loan	0.98
Return on Equity	2.43
Interest on Working Capital	0.31
O & M Expenses	4.62
Total	10.55

Combined Asset 1:

Particulars	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Depreciation				
Opening Gross Block	1237.05	1489.91	1663.32	1699.92
Additional Capitalisation	252.86	173.41	36.60	0.00
Closing Gross Block	1489.91	1663.32	1699.92	1699.92



5 1	2010-11	0044.40	2040.40	0040.44
Particulars	(pro-rata)	2011-12	2012-13	2013-14
Average Gross Block	1363.48	1576.61	1681.62	1699.92
Freehold Land (Av. Cost)	0.00	0.00	0.00	0.00
Rate of Depreciation (%)	5.28	5.28	5.28	5.28
Depreciable Value	1227.13	1532.74	1591.49	1546.40
Balance useful life of the asset	25.00	24.00	23.00	22.00
Elapsed life	0.00	1.00	2.00	3.00
Remaining Depreciable Value	1224.92	1532.74	1544.00	1471.68
Depreciation during the year	30.00	83.25	88.79	89.76
Depreciation upto previous year	2.21	32.21	115.45	204.24
Cumulative depreciation (incl. of AAD)	32.21	115.45	204.24	294.00
·				
Interest on Loan				
Gross Normative Loan	865.93	1090.42	1211.81	1237.43
Cumulative Repayment upto Previous	2.21	32.21	115.45	204.24
Year	2.21	32.21	115.45	204.24
Net Loan-Opening	863.72	1058.22	1096.36	1033.19
Additions	224.49	121.39	25.62	0.00
Repayment during the year	30.00	83.25	88.79	89.76
Net Loan-Closing	1058.22	1096.36	1033.19	943.43
Average Loan	960.97	1077.29	1064.77	988.31
Weighted Average Rate of Interest on	4.6547	4.3826	4.4995	4.3876
Loan (%)	4.0547	4.3620	4.4995	4.3070
Interest on Loan	18.64	47.21	47.91	43.36
Return on Equity				
Opening Equity	371.11	399.48	451.51	462.49
Additions	28.37	52.02	10.98	0.00
Closing Equity	399.48	451.51	462.49	462.49
Average Equity	385.30	425.50	457.00	462.49
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
MAT rate for the respective year (%)	19.931	20.008	20.008	20.961
Rate of Return on Equity (%)	19.358	19.377	19.377	19.610
Return on Equity	31.08	82.45	88.55	90.70
Interest on Working Capital				
O & M expenses	9.23	9.76	10.32	10.91
Maintenance Spares	16.62	17.57	18.58	19.64
Receivables	51.77	56.55	59.81	60.80
Total	77.63	83.88	88.70	91.34
Rate of Interest (%)	11.00	11.00	11.00	11.00
Interest on Working Capital	3.56	9.23	9.76	10.05
Annual Transmission Charges				
Depreciation	30.00	83.25	88.79	89.76
Interest on Loan	18.64	47.21	47.91	43.36
Return on Equity	31.08	82.45	88.55	90.70
Interest on Working Capital	3.56	9.23	9.76	10.05
O & M Expenses	46.17	117.14	123.84	130.92
Total	129.44	339.27	358.85	364.78



DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

29. As the notional COD of Combined Asset 1 is 1.11.2010 for the determination of tariff for 2014-19 tariff period capital cost of Combined Asset 1 as on 1.4.2014 has been considered. The tariff charges claimed for 2014-19 tariff period as under:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	89.76	89.76	89.76	89.76	89.76
Interest on Loan	39.75	35.37	31.09	26.92	22.87
Return on Equity	90.69	90.69	90.69	90.69	90.69
Interest on Working Capital	11.73	11.85	11.98	12.12	12.27
O & M Expenses	120.60	124.60	128.74	133.02	137.42
Total	352.53	352.27	352.26	352.51	353.01

30. 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	10.05	10.38	10.73	11.09	11.45
Maintenance Spares	18.09	18.69	19.31	19.95	20.61
Receivables	58.76	58.71	58.71	58.75	58.84
Total	86.90	87.78	88.75	89.79	90.90
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	11.73	11.85	11.98	12.12	12.27

Capital Cost

- 31. 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;"
- 32. The petitioner has claimed the tariff during 2014-19 tariff period based on capital cost of combined assets is ₹1699.92 lakh as on 31.3.2014, as was worked out by the Commission and the same has been considered as opening capital cost as on 1.4.2014 for determination of tariff in accordance with Regulation 9 of the 2014 Tariff Regulations.

Additional Capital Expenditure

33. The petitioner has claimed no additional capital expenditure for 2014-19 tariff period. Hence the completion cost of ₹1669.92 lakh as on 31.3.2016 has been considered.

Debt: Equity

- 34. 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."
- 35. The normative debt:equity ratio has been considered to work out the tariff in accordance with the 2014 Tariff Regulations as given below:-



Funding	Capital cost as on 31.3.2014	(%)	Additional capital expenditure during 2014-19	Total Cost as on 31.3.2019	(%)
Debt	1237.43	72.79	0.00	1237.43	72.79
Equity	462.49	27.21	0.00	462.49	27.21
Total	1699.92	100.00	0.00	1699.92	100.00

Return on Equity ("ROE")

- 36. 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."

37. 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:-

Return on Equity	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	462.49	462.49	462.49	462.49	462.49
Additions	0.00	0.00	0.00	0.00	0.00



Return on Equity	2014-15	2015-16	2016-17	2017-18	2018-19
Closing Equity	462.49	462.49	462.49	462.49	462.49
Average Equity	462.49	462.49	462.49	462.49	462.49
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	90.70	90.70	90.70	90.70	90.70

Interest on Loan ("IoL")

- 38. Clause 5 and Clause 6 of Regulation 26 of the 2014 Tariff Regulations provides that:-
 - "(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."
- 39. 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. By considering above, the IoL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of weighted average rate of interest for 2014-19 tariff period are placed in Annexure 2. IoL has been worked out and allowed as follows:



Interest on Loan	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	1237.43	1237.43	1237.43	1237.43	1237.43
Cumulative Repayment upto Previous Year	294.00	383.75	473.51	563.26	653.02
Net Loan-Opening	943.43	853.68	763.92	674.17	584.41
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	89.76	89.76	89.76	89.76	89.76
Net Loan-Closing	853.68	763.92	674.17	584.41	494.66
Average Loan	898.56	808.80	719.04	629.29	539.53
Weighted Average Rate of Interest on Loan (%)	4.4272	4.3760	4.3273	4.2824	4.2429
Interest on Loan	39.78	35.39	31.12	26.95	22.89

Depreciation

- 40. 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."
- 41. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2014 and accumulated depreciation up to 31.3.2014.



depreciation up to 2014-19 tariff period has been calculated annually based on Straight Line Method and at rates specified in Appendix-II of the 2014 Tariff Regulations. 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
•	1699.92	1699.92	1699.92	1699.92	1699.92
Opening Gross Block					
A 1 877 1 A 2 77 17 17	0.00	0.00	0.00	0.00	0.00
Additional Capitalisation	1000.00	4000.00	1000.00	4000.00	4000.00
Closing Gross Block	1699.92	1699.92	1699.92	1699.92	1699.92
Average Gross Block	1699.92	1699.92	1699.92	1699.92	1699.92
Average Gross Blook	0.00	0.00	0.00	0.00	0.00
Freehold Land (Av. Cost)	0.00	0.00	0.00	0.00	0.00
Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Depreciable Value	1529.93	1529.93	1529.93	1529.93	1529.93
Depreciable value	21.00	20.00	19.00	18.00	17.00
Balance useful life of the asset	21.00	20.00	19.00	10.00	17.00
Elapsed life	4.00	5.00	6.00	7.00	8.00
Remaining Depreciable Value	1381.92	1292.17	1202.41	1112.66	1022.90
Depreciation during the year	89.76	89.76	89.76	89.76	89.76
Depreciation upto previous year	294.00	383.75	473.51	563.26	653.02
Cumulative depreciation (incl. of AAD)	383.75	473.51	563.26	653.02	742.78

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

42. 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 have been worked out and allowed are as follows:-



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
400 kV Bays:					
No. of Bays	2	2	2	2	2
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
Total O&M Expenses (₹ lakh)	120.60	124.60	128.74	133.02	137.42

43. The petitioner has further submitted that the wage revision of the employees of the petitioner company is due during 2014-19 and actual impact of wage hike which will be effective 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 prayed that it will approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase. 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 asset as per prevailing norms.

Interest on Working Capital (IWC)

44. 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;"



- 45. 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%.
- 46. 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:-

Interest on Working Capital	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	10.05	10.38	10.72	11.08	11.45
Maintenance Spares	18.09	18.69	19.31	19.95	20.61
Receivables	58.76	58.72	58.71	58.76	58.84
Total	86.90	87.79	88.75	89.79	90.90
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	11.73	11.85	11.98	12.12	12.27

ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

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

Particulars	2014-15	2015-16	2016-18	2017-18	2018-19
Depreciation					
Opening Gross Block	1699.92	1699.92	1699.92	1699.92	1699.92
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00



Closing Gross Block	1699.92	1699.92	1699.92	1699.92	1699.92
Average Gross Block	1699.92	1699.92	1699.92	1699.92	1699.92
Freehold Land (Av. Cost)	0.00	0.00	0.00	0.00	0.00
Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Depreciable Value	1529.93	1529.93	1529.93	1529.93	1529.93
Balance useful life of the asset	21.	20	19	18	17
Elapsed life	4	5	6	7	8
Remaining Depreciable Value	1381.92	1292.17	1202.41	1112.66	1022.90
Depreciation during the year	89.76	89.76	89.76	89.76	89.76
Depreciation upto previous year	294.00	383.75	473.51	563.26	653.02
Cumulative depreciation (incl. of AAD)	383.75	473.51	563.26	653.02	742.78
Carrialative depressation (incl. of 7th t2)	000.70	170.01	000.20	000.02	7 12.70
Interest on Loan					
Gross Normative Loan	1237.43	1237.43	1237.43	1237.43	1237.43
Cumulative Repayment upto Previous Year	294.00	383.75	473.51	563.26	653.02
Net Loan-Opening	943.43	853.68	763.92	674.17	584.41
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	89.76	89.76	89.76	89.76	89.76
Net Loan-Closing	853.68	763.92	674.17	584.41	494.66
Average Loan	898.56	808.80	719.04	629.29	539.53
Weighted Average Rate of Interest on Loan (%)	4.4272	4.3760	4.3273	4.2824	4.2429
Interest on Loan	39.78	35.39	31.12	26.95	22.89
Return on Equity					
Opening Equity	462.49	462.49	462.49	462.49	462.49
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	462.49	462.49	462.49	462.49	462.49
Average Equity	462.49	462.49	462.49	462.49	462.49
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	90.70	90.70	90.70	90.70	90.70
Interest on Working Capital					
O & M expenses	10.05	10.38	10.72	11.08	11.45
Maintenance Spares	18.09	18.69	19.31	19.95	20.61
Receivables	58.76	58.72	58.71	58.76	58.84
Total	86.90	87.79	88.75	89.79	90.90



Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	11.73	11.85	11.98	12.12	12.27
Annual Transmission Charges					
Depreciation	89.76	89.76	89.76	89.76	89.76
Interest on Loan	39.78	35.39	31.12	26.95	22.89
Return on Equity	90.70	90.70	90.70	90.70	90.70
Interest on Working Capital	11.73	11.85	11.98	12.12	12.27
O & M Expenses	120.60	124.60	128.74	133.02	137.42
Total	352.56	352.30	352.29	352.54	353.03

48. The petitioner has sought recovery of deferred tax liability before 1.4.2009 from the beneficiaries or long term consumers/ DICs as and when materialized. However, the COD of the asset is after 2009, hence the claim of the petitioner is not maintainable.

Filing Fee and the Publication Expenses

49. 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

50. 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

51. 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

- 52. 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.
- 53. This order disposes of Petition No.501/TT/2014.

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

Sd/
(A.S. Bakshi)
Member



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

	Asset 1A			
Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during 2010-11	Total
	2010-11			
ADB III-ADDCAP FOR 2010-2011 Addcap 45.71	1.97	0.00	124.38	124.38
ADB III-ADDCAP FOR 2010-2011 Addcap 45.71	0.00	0.00	0.00	0.00
ADB III -Loan 2- 45.29	1.97	45.74	0.00	45.74
ADB III -Loan 3- 45.29	1.97	219.29	0.00	219.29
BOND-XXXI Loan 1	8.90	79.00	0.00	79.00
Total		344.03	124.38	468.41

	Asse	

Particulars	Interest Rate (%)			Loan deployed as on COD	Addition s during the tariff period	Total	
	2010- 11	2011- 12	2012 -13	2013- 14		•	
ADB III-ADDCAP FOR	11	12	-13	1-7			
2010-2011 Addcap-2- 44.39	1.95	1.90	2.11	1.88	0.00	6.26	6.26
ADB III-ADDCAP FOR							
2010-2011 Addcap-3- 45.71	1.95	1.90	2.11	1.88	0.00	66.05	66.05
ADB III-ADDCAP FOR 2010-2011 Addcap-4-45.71	1.95	1.90	2.11	1.88	0.00	124.38	124.38
ADB III-ADDCAP FOR 2010-2011 Addcap-5-44.31	0.00	1.90	2.11	1.88	0.00	19.32	19.32
ADB III-ADDCAP FOR 2010-2011 Addcap-6-48.90	0.00	1.90	2.11	1.88	0.00	52.15	52.15
ADB III-DOCO -1- 44.93	1.95	1.90	2.11	1.88	78.63	0.00	78.63
ADB III-DOCO -2- 44.93	1.95	1.90	2.11	1.88	145.93	0.00	145.93
ADB III-DOCO -3- 45.29	1.95	1.90	2.11	1.88	45.74	0.00	45.74
ADB III-DOCO -4- 45.29	1.95	1.90	2.11	1.88	219.29	0.00	219.29
BOND XXXI-DOCO-	8.90	8.90	8.90	8.90	214.00	0.00	214.00
BOND-XXXIII-ADDCAP FOR 2010-2011 Add Cap-1-	8.64	8.64	8.64	8.64	0.00	27.80	27.80
BOND XXXIII-DOCO-	8.64	8.64	8.64	8.64	144.20	0.00	144.20
Total					847.79	295.96	1143.75



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

Asset 1A						
Particulars	2010-11					
Gross Opening Loan	344.03					
Cumulative Repayments of Loans upto Previous Year	7.40					
Net Loans Opening	336.63					
Add: Draw(s) during the Year	124.38					
Less: Repayments of Loan during the year	6.14					
Net Closing Loan	454.87					
Average Net Loan	395.75					
Rate of Interest on Loan (%)	3.3534					
Interest on Loan	13.27					

Combined Asset 1								
Particulars	2010-11	2011-12	2012-13	2013-14				
Gross Opening Loan	847.79	1072.28	1143.75	1143.75				
Cumulative Repayments of Loans upto Previous Year	13.68	24.50	50.77	80.47				
Net Loans Opening	834.11	1047.78	1092.98	1063.28				
Add: Draw(s) during the Year	224.49	71.47	0.00	0.00				
Less: Repayments of Loan during the year	10.82	26.27	29.70	50.91				
Net Closing Loan	1047.78	1092.98	1063.28	1012.37				
Average Net Loan	940.95	1070.38	1078.13	1037.83				
Rate of Interest on Loan (%)	4.6547	4.3826	4.4995	4.3876				
Interest on Loan	43.80	46.91	48.51	45.54				

^{*}Petitioner, in the tariff computation submitted with the petition, has considered rate of interest on loan upto two decimal points.



Annexure - 2

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

(₹ in lakh)

Particulars		Interst Ra	te (%)	Loan deploye d as on 1.4.2014	Additions during the tariff period	Total	
	2014-15	2015- 16	2016- 17	2017- 18			
ADB III-ADDCAP FOR 2010- 2011 Addcap-2-44.39	1.98	1.98	1.98	1.98	6.26	0.00	6.26
ADB III-ADDCAP FOR 2010- 2011 Addcap-3-45.71	1.98	1.98	1.98	1.98	66.05	0.00	66.05
ADB III-ADDCAP FOR 2010- 2011 Addcap-4-45.71	1.98	1.98	1.98	1.98	124.38	0.00	124.38
ADB III-ADDCAP FOR 2010- 2011 Addcap-5-44.31	1.98	1.98	1.98	1.98	19.32	0.00	19.32
ADB III-ADDCAP FOR 2010- 2011 Addcap-6-48.90	1.98	1.98	1.98	1.98	52.15	0.00	52.15
ADB III-DOCO -1- 44.93	1.98	1.98	1.98	1.98	78.63	0.00	78.63
ADB III-DOCO -2- 44.93	1.98	1.98	1.98	1.98	145.93	0.00	145.93
ADB III-DOCO -3- 45.29	1.98	1.98	1.98	1.98	45.74	0.00	45.74
ADB III-DOCO -4- 45.29	1.98	1.98	1.98	1.98	219.29	0.00	219.29
BOND XXXI-DOCO-	8.90	8.90	8.90	8.90	214.00	0.00	214.00
BOND-XXXIII-ADDCAP FOR 2010-2011 Add Cap-1-	8.64	8.64	8.64	8.64	27.80	0.00	27.80
BOND XXXIII-DOCO-	8.64	8.64	8.64	8.64	144.20	0.00	144.20
Total					1143.75	0.00	1143.75

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

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	1143.75	1143.75	1143.75	1143.75	1143.75
Cumulative Repayments of Loans upto Previous Year	131.38	199.98	272.29	348.82	429.91
Net Loans Opening	1012.37	943.77	871.46	794.93	713.84
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	68.60	72.31	76.53	81.09	86.02
Net Closing Loan	943.77	871.46	794.93	713.84	627.82
Average Net Loan	978.07	907.62	833.20	754.39	670.83
Rate of Interest on Loan (%)	4.4272	4.3760	4.3273	4.2824	4.2429
Interest on Loan	43.30	39.72	36.06	32.31	28.46

^{*}Petitioner, in the tariff computation submitted with the petition, has considered rate of interest on loan upto two decimal points.

