

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO.32/TT/2016

Coram:

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

**Date of Hearing: 13.6.2016
Date of Order : 20.6.2016**

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 Asset-I 765 kV, 240 (3*80) MVAR Bus Reactor II along with associated bays at 765/400 kV Balia sub-station; Asset-II 765 kV 330 MVAR (3*110) Bus Reactor along with associated bays at 765/400/220 kV Fatehpur sub-station ;Asset-III 765 kV 3*80 MVAR Bus Reactor at Lucknow along with associated bays ;Asset-IV 400 kV 125 MVAR Bus Reactor III along with associated bays at 765/400 KV Agra (Augmentation) sub-station ;Asset-V 400 kV 125 MVAR Bus Reactor II along with associated bays at 765/400 KV Agra (Augmentation) sub-station ;Asset-VI 400 kV 125 MVAR Bus Reactor III at Ballia sub-station along with associated bays(Augmentation of 400 KV to 765 kV) under common scheme for 765 kV Pooling station and Network for NR, import by NR from ER and common scheme for network for WR and import by WR from ER and from NER/SR/WR via ER in Northern 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

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd.,
VidyutBhawan, Vidyut Marg,
Jaipur - 302 005.



2. Ajmer Vidyut Vitran Nigam Ltd.,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.
3. Jaipur Vidyut Vitran Nigam Ltd.,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.
4. Jodhpur Vidyut Vitran Nigam Ltd.,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur
5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla - 171 004.
6. Punjab State Electricity Board,
The Mall, Patiala - 147 001.
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector - 6
Panchkula (Haryana) - 134 109
8. Power Development Department,
Govt. of Jammu and Kashmir
Mini Secretariat, Jammu .
9. Uttar Pradesh Power Corporation Ltd.,
Shakti Bhawan, 14, Ashok Marg,
Lucknow - 226 001.
10. Delhi Transco Ltd.,
Shakti Sadan, Kotla Road,
New Delhi - 110 002
11. BSES Yamuna Power Ltd.,
Shakti Kiran Building, Karkardooma,
Delhi – 110 092.
12. BSES Rajdhani Power Ltd.,
BSES Bhawan, Nehru Place,
New Delhi.
13. North Delhi Power Ltd.,
Power Trading & Load Dispatch Group,
Cennet Building, Adjacent to 66/11kV Pritampura - ,
Grid Building, Near PP Jewellers,
Pritampura, New Delhi - 110 0



14. Chandigarh Administration,
Sector - 9, Chandigarh
15. Uttarakhand Power Corporation Ltd.,
UrjaBhawan, Kanwali Road,
Dehradun
16. North Central Railway,
Allahabad
17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi - 110 002
18. Chief Engineer Commercial
West Bengal State Electricity State Distribution Company Limited
Bidyut Bhawan ,8th Floor (A Block)
Block DJ ,Salt Lake City
Calcutta – 700091
19. Director (Technical)
Damodar Valley Corporation
DVC tower,VIP Road
Calcutta-700054
20. The Chairman
Bihar State Electricity Board
Vidyut Bhawan, Bailey Road
Patna – 800001
21. The Chairman & Managing Director
Grid Corporation of Orissa Limited
Vidyut Bhawan, Janpath ,
Bhubaneshwar-751007
22. The P.C.E. Cum Seceretary (Power)
Power Department
Govt. Of Sikkim, Gangtok -727102
23. The Chairman
Jharkhand State Electricity Board
Engineering Building
HEC Township
Dhurwa, Ranchi-834004

....Respondent(s)



The following were present:

For Petitioner: Shri Rakesh Prasad, PGCIL
Shri M.M. Mondal, PGCIL
Shri S.S. Raju, PGCIL
Shri Jasbir Singh, PGCIL

For Respondents: Shri S.K. Agarwal, Advocate, Rajasthan Discom
Shri S.P. Das, Advocate, Rajasthan Discom

ORDER

This 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 Asset-I 765 kV, 240 (3*80) MVAR Bus Reactor II along with associated bays at 765/400 kV Balia sub-station; Asset-II 765 kV 330 MVAR (3*110) Bus Reactor along with associated bays at 765/400/220 kV Fatehpur sub-station ;Asset-III 765 kV 3*80 MVAR Bus Reactor at Lucknow along with associated bays ;Asset-IV 400 kV 125 MVAR Bus Reactor III along with associated bays at 765/400 KV Agra (Augmentation) sub-station ;Asset-V 400 kV 125 MVAR Bus Reactor II along with associated bays at 765/400 KV Agra (Augmentation) sub-station ;Asset-VI 400 kV 125 MVAR Bus Reactor III at Ballia sub-station along with associated bays(Augmentation of 400 KV to 765 kV) under common



scheme for 765 kV Pooling station and Network for NR, import by NR from ER and common scheme for network for WR and import by WR from ER and from NER/SR/WR via ER in Northern Region (hereinafter referred to as "the transmission assets").

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

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

a) The administrative approval for the transmission project was accorded by the Board of Directors of PGCIL vide letter dated 29.8.2008 at an estimated cost of ₹707533 lakh including IDC of ₹71360 lakh. (Based on 1st Quarter, 2008 price level). The petitioner has submitted the RCE vide affidavit dated 10.6.2016 accorded by the Board of Directors of PGCIL in its 326th vide memorandum C/CP/RCE-DVC and Maithon RB project dated 11.3.2016 at an estimated cost of ₹657054 lakh including IDC of ₹67714 lakh The details of assets covered in the instant petition and the date of commercial operations are given hereunder:-

Name of Assets	SCOD	COD	Time Over-run (months)
Asset-I 765 kV, 240 (3*80) MVAR Bus Reactor II alongwith associated bays at 765/400 kV Balia sub-station	1.9.2012	1.4.2012	-
Asset-II 765 kV 330 MVAR (3*110) Bus Reactor alongwith associated bays at 765/400/220 kV Fatehpur sub-station		1.4.2012	-
Asset-III 765 kV 3*80 MVAR Bus Reactor at Lucknow alongwith associated bays		1.6.2012	-
Asset-IV 400 kV 125 MVAR Bus Reactor III alongwith associated		1.6.2012	-



Name of Assets	SCOD	COD	Time Over-run (months)
bays at 765/400 KV Agra (Augmentation) sub-station ;			
Asset-V 400 kV 125 MVAR Bus Reactor II alongwith associated bays at 765/400 KV Agra (Augmentation) sub-station ;		1.6.2012	-
Asset-VI 400 kV 125 MVAR Bus Reactor III at Ballia sub-station alongwith associated bays (Augmentation of 400 KV to 765 kV)		1.6.2012	-

b) The annual transmission charges for 2009-14 tariff period for the transmission assets were determined vide order dated 16.1.2015 in Petition No. 207/TT/2012 based on admitted capital cost given as under:-

(₹in lakh)			
Asset	Capital cost approved as on COD as per order 207/TT/2012	IDC and IEDC disallowed	Excess initial spares disallowed
Asset-I	3054.67	0.00	51.53
Asset-II	5577.99	0.00	0.00
Asset-III	4047.85	0.00	0.00
Asset-IV	1316.95	0.00	0.00
Asset-V	1573.15	0.00	0.00
Asset-VI	1177.39	0.00	0.00

c) As per the investment approval, the COD for the assets was scheduled on 1.9.2012. Accordingly, there is no delay in commissioning of Assets.

d) 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:



(₹in lakh)

Asset	Apportioned approved cost as per FR	Apportioned approved cost as per RCE	Capital cost as on COD*	Allowed additional capital expenditure during 2009-14		Cost as on 31.3.2014
				2012-13	2013-14	
Asset-I	3932.05	5255.52	3054.67	693.78	0.00	3748.45
Asset-II	7775.02	6645.23	5577.99	288.04	0.00	5866.03
Asset-III	6557.06	6541.94	4047.85	0.00	0.00	5361.85#
Asset-IV	1573.15	2548.22	1316.95	256.20	0.00	1573.15*
Asset-V	1573.15	2548.22	1573.15	0.00	0.00	1573.15*
Asset-VI	1620.66	1545.52	1177.39	272.00	0.00	1449.39

*Cost considered after restricting cost over-run,

In tariff order dated 16.1.2015 the capital cost of Asset –III is apportioned to the total capital cost of Asset-I and cost of ₹1314 lakh was restricted. Further in tariff order of Review petition 07/RP/2015 same cost has been allowed and the tariff revision is allowed at the time of truing-up.

e) The annual fixed charges were determined vide order dated 16.1.2015 in Petition No. 207/TT/2012 based the above capital cost and estimated additional capital expenditure for the transmission assets during 2009-14 as given below:-

(₹in lakh)

Particulars	Asset-I		Asset-II		Asset-III	
	2012-13	2013-14	2012-13	2013-14	2012-13 (pro-rata)	2013-14
Depreciation	179.19	197.12	298.89	305.82	174.21	209.05
Interest on Loan	203.56	208.40	340.27	322.41	204.00	227.69
Return on Equity	178.39	196.58	300.08	307.63	176.90	212.28
Interest on Working Capital	17.70	18.92	26.41	26.60	16.77	20.00
O & M Expenses	86.68	91.64	86.68	91.64	72.23	91.64
Total	665.52	712.66	1052.33	1054.10	644.10	760.66

(₹in lakh)

Particulars	Asset-IV		Asset-V		Asset-VI	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Depreciation	46.31	62.33	56.16	67.39	57.05	74.86



Particulars	Asset-IV		Asset-V		Asset-VI	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Interest on Loan	75.10	93.36	81.54	92.23	67.65	83.84
Return on Equity	63.15	82.50	68.75	82.50	57.40	76.01
Interest on Working Capital	7.10	9.10	7.60	9.19	7.04	9.02
O & M Expenses	51.60	65.46	51.60	65.46	51.60	65.46
Total	243.26	312.75	265.64	316.77	240.74	309.20

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 actual capital expenditure including additional capital expenditure incurred up to 31.3.2014, 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 on the respondents and notice of this application has been published in the newspapers 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. The hearing in this matter was held on 13.6.2016. Ajmer Vidyut Vitran Nigam Limited (AVVNL), Respondent No. 2, Jaipur Vidyut Vitran Nigam Limited (JVVNL), Respondent No. 3, and Jodhpur Vidyut Vitran Nigam Limited (JdVVNL) Respondent No. 4, (hereinafter collectively referred to as "Rajasthan Discoms") have filed their reply vide a common affidavit dated 6.4.2016 raising the objections regarding the RCE, variation in cost of Asset-I in Asset –III, cost



over-run, O&M Expenses and service tax. The petitioner has not filed the rejoinder for the reply.RCE has been submitted by the petitioner vide affidavit dated 10.6.2016 .

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 that the actual capital expenditure incurred as on COD for all assets, as certified vide Auditor’s Certificates dated 20.5.2015. Details of capital cost claimed is as under:-

(₹in lakh)

Asset	Capital cost as on COD as per Auditor Certificate dated 20.5.2015
Asset-I	3016.20
Asset-II	5440.31
Asset-III	4196.08
Asset-IV	1464.63
Asset-V	2070.83
Asset-VI	1266.91

10. 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.”

11. 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 paragraphs taking into consideration the IEDC and IDC and initial spares claimed and allowed.

IDC and IEDC

12. The Commission, in order dated 16.1.2015 in Petition No. 207/TT/2012, had allowed IDC and IEDC as there was no time over-run in commissioning of the Assets.

Initial Spares

13. The petitioner has claimed the actual initial spares pertaining to substation as stated in Auditor’s Certificates dated 20.5.2015. We have worked out the admissible initial spares by considering capital cost as per Auditor’s Certificate in accordance with the 2009 Tariff Regulations. In case of Asset – IV excess initial spares of ₹2.60 lakh

have been deducted for tariff calculation purpose. For other Assets, initial spares are well within the specified limits of the 2009 Tariff Regulations.

14. 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 disallowed for Asset-IV as under:-

(₹in lakh)

Sub-Station							
Asset	Capital cost as on cut-off date	Capital cost after deducting excess IDC	Initial spares as per Auditor's Certificate	Proportion -ate initial spares claimed after deducting IDC	Ceiling limit as per Regulation 8 of 2009 Tariff Regulations	Initial spares worked out	Excess initial spares
	(a)	(b)	(c)	(d) = (c)/(a) *(b)	(e) %	(f)= ((b-d)*e)/(100% -e)	(g)=(d)- (f)
Asset-IV	2097.24	2097.24	54.97	54.97	2.5	52.37	2.60

The cut-off date of the subject assets falls beyond 31.3.2014. However, the petitioner has submitted the additional capital expenditure during 2014-15 and 2015-16. Hence, admissible initial spares have been worked out by considering additional capital expenditure upto cut-off date corresponding to each asset.

15. Rajasthan discom has raised the objections regarding the RCE, variation in cost of Asset-I in Asset –III. The issue of cost variation has already been dealt in the order dated 18.9.2015. The extract of the relevant para is given as under:-

11... The original estimated completion cost of Asset I at Ballia was ₹3932.05 being an extension of existing substation whereas the original estimated completion cost of Asset III at Lucknow was ₹6557.86 being a new sub-station. The review petitioner had also submitted that the variation in cost was on account of variation in the cost of switchgear (CT, PT, Circuit Breaker, Isolator etc.) and the higher taxes and duties paid in the case of Asset III. The review petitioner has now explained that in the case of Asset III, additional equipment



were required as it was a new sub-station which also included an additional bay. It has been further observed that the Asset I and Asset III were awarded to different contractors and Asset III was awarded first in February, 2010 at a higher cost than Asset I, which was awarded later in March, 2010 and it was not possible for the review petitioner to renegotiate the contract for Asset III. Considering all these aspects we are of the view that though the review petitioner had not explained the difference in cost between the two assets in the main petition in sufficient details, the fact remains that the review petitioner has awarded the contract after selecting the contractors through competitive bidding and there are justifiable reasons for the cost variation between the two assets. In our view, there are sufficient reasons to review the impugned order and allow the cost of ₹1314 lakh which was disallowed in the impugned order. The actual tariff revision will be carried out at the time of truing up.

16. Accordingly, the capital cost of the instant assets as on COD considered for truing up of tariff of 2009-14 is as follows:-

(₹in lakh)			
Asset	Capital cost on COD	Excess initial spares	Capital cost as on COD considered for tariff determination
Asset-I	3016.20	0.00	3016.20
Asset-II	5440.31	0.00	5440.31
Asset-III	4196.08	0.00	4196.08
Asset-IV	1464.63	2.60	1462.04
Asset-V	2070.83	0.00	2070.83
Asset-VI	1266.91	0.00	1266.91

Additional Capital Expenditure

17. 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”

18. The petitioner has submitted actual additional capital expenditure during 2009-14 towards balance and retention payments for the works completed before the cut-off date. The petitioner has claimed the admissibility of additional capital expenditure before the cut-off date under Regulation 9(1)(i) of 2009 Tariff Regulations. Rajasthan Discoms have submitted that the admissibility of additional capital expenditure incurred



after COD and up to cut-off date is to be dealt in accordance with the provisions of Regulation 14(1) and 14(3) of the 2009 Tariff Regulations.

19. The additional capital expenditure claimed by the petitioner is towards actual balance and retention payments and the same has been certified by the Auditor vide certificates dated 20.5.2015. 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 as per the RCE submitted by the petitioner. 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.

20. The capital expenditure as on COD and additional capital expenditure from COD to 31.3.2014 allowed is as depicted below:-

(₹in lakh)

Name of Asset	Apportioned approved cost as per RCE		Capital cost as on COD	Additional capital expenditure		Capital cost as on 31.3.2014
				2012-13	2013-14	
Asset-I	5255.52	Approved in Order dated 16.1.2015	3054.67	693.78	0.00	3748.45
		Claimed by the petitioner	3016.20	1007.16	944.46	4967.82
		Allowed in this Order	3016.20	1007.16	944.46	4967.82
Asset-II	6645.23	Approved in Order dated 16.1.2015	5577.99	288.04	0.00	5866.03
		Claimed by the petitioner	5440.31	443.37	557.09	6440.77
		Allowed in this Order	5440.31	443.37	557.09	6440.77
Asset-III	6541.94	Approved in Order dated 16.1.2015	4047.85	0.00	0.00	4047.85



		Allowed in review order 07/RP/2015	4055.20	1306.65	0.00	5361.85
		Claimed by the petitioner	4196.08	1050.20	1212.96	6459.24
		Allowed in this Order	4196.08	1050.20	1212.96	6459.24
Asset-IV	2548.22	Approved in Order dated 16.1.2015	1316.95	256.20	0.00	1573.15
		Claimed by the petitioner	1464.63	524.39	79.53	2068.55
		Allowed in this Order	1462.04*	524.39	79.53	2065.96
Asset-V	2548.22	Approved in Order dated 16.1.2015	1573.15	0.00	0.00	1573.15
		Claimed by the petitioner	2070.83	162.65	73.48	2306.96
		Allowed in this Order	2070.83	162.65	73.48	2306.96
Asset-VI	1545.52	Approved in Order dated 16.1.2015	1177.39	272.00	0.00	1449.39
		Claimed by the petitioner	1266.91	42.89	64.81	1374.61
		Allowed in this Order	1266.91	42.89	64.81	1374.61

*Excess initial spares adjusted.

Debt: Equity

21. 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.”



22. The debt:equity ratio admitted by the Commission vide order dated 16.1.2015 in Petition No. 207/TT/2012as 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 26.2.2016, has submitted that the actual equity infusion during 2009-14 period is not less than 30%.

23. 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	(%)	Total Cost as on 31.3.2014	(%)
Asset-I						
Debt	2111.34	70.00	1366.13	70.00	3477.47	70.00
Equity	904.86	30.00	585.49	30.00	1490.35	30.00
Total	3016.20	100.00	1951.62	100.00	4967.82	100.00
Asset-II						
Debt	3808.22	70.00	700.32	70.00	4508.54	70.00
Equity	1632.09	30.00	300.14	30.00	1932.23	30.00
Total	5440.31	100.00	1000.46	100.00	6440.77	100.00
Asset-III						
Debt	2937.25	70.00	1584.21	70.00	4521.46	70.00
Equity	1258.82	30.00	678.95	30.00	1937.77	30.00
Total	4196.07	100.00	2263.16	100.00	6459.23	100.00
Asset-IV						
Debt	1023.43	70.00	422.74	70.00	1446.17	70.00
Equity	438.61	30.00	181.18	30.00	619.79	30.00
Total	1462.04	100.00	603.92	100.00	2065.96	100.00
Asset-V						
Debt	1449.58	70.00	165.29	70.00	1614.87	70.01
Equity	621.25	30.00	70.84	30.00	692.09	29.99
Total	2070.83	100.00	236.13	100.00	2306.96	100.00
Asset-VI						
Debt	886.84	70.00	75.39	70.00	962.23	70.00
Equity	380.07	30.00	32.31	30.00	412.38	30.00
Total	1266.91	100.00	107.70	100.00	1374.61	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 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

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

(₹ in lakh)

Return on Equity	Asset-I		Asset-II		Asset-III	
	2012-13	2013-14	2012-13	2013-14	2012-13 (pro-rata)	2013-14
Approved in Order dated 16.1.2015	178.39	196.58	300.08	307.63	176.90	212.28
Claimed by the petitioner	204.61	264.48	329.14	362.52	228.70	344.32
Allowed in this Order	204.61	264.48	329.14	362.53	228.70	344.33

(₹ in lakh)

Return on Equity	Asset-IV		Asset-V		Asset-VI	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved in Order dated 16.1.2015	63.15	82.50	68.75	82.50	57.40	76.01
Claimed by the petitioner	83.65	119.35	104.26	133.56	62.41	78.96
Allowed in this Order	83.53	119.20	104.26	133.56	62.41	78.96

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 due to actual additional capital expenditure.

Interest on Loan (“IoL”)

27. 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”.

28. 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:-



(₹ in lakh)

	Asset-I		Asset-II		Asset-III	
	2012-13	2013-14	2012-13	2013-14	2012-13 (pro-rata)	2013-14
Interest on Loan						
Approved in Order dated 16.1.2015	203.56	208.40	340.27	322.41	204.00	227.69
Claimed by the petitioner	210.22	252.87	335.80	337.86	237.19	328.47
Allowed in this Order	210.22	252.86	335.80	337.86	237.19	328.47

(₹ in lakh)

	Asset-IV		Asset-V		Asset-VI	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Interest on Loan						
Approved in Order dated 16.1.2015	75.10	93.36	81.54	92.23	67.65	83.84
Claimed by the petitioner	88.41	118.06	111.40	132.78	63.24	73.50
Allowed in this Order	88.28	117.91	111.40	132.78	63.24	73.50

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

29. 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)

	Asset-I		Asset-II		Asset-III	
	2012-13	2013-14	2012-13	2013-14	2012-13 (pro-rata)	2013-14
Depreciation						
Approved in Order dated 16.1.2015	179.19	197.12	298.89	305.82	174.21	209.05
Claimed by the petitioner	185.79	237.25	296.38	322.73	203.78	304.15
Allowed in this Order	185.79	237.24	296.38	322.73	203.79	304.15



(₹ in lakh)

Depreciation	Asset-IV		Asset-V		Asset-VI	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved in Order dated 16.1.2015	46.31	62.33	56.16	67.39	57.05	74.86
Claimed by the petitioner	58.71	86.23	77.43	98.99	56.62	70.73
Allowed in this Order	58.60	86.10	77.43	98.98	56.62	70.73

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”)

30. 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)

O&M Expenses	Asset-I		Asset-II		Asset-III	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved in Order dated 16.1.2015	86.68	91.64	86.68	91.64	72.23	91.64
Claimed by the petitioner	86.68	91.64	86.68	91.64	72.23	91.64
Allowed in this Order	86.68	91.64	86.68	91.64	72.23	91.64

(₹ in lakh)

O&M Expenses	Asset-IV		Asset-V		Asset-VI	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved in Order dated 16.1.2015	51.60	65.46	51.60	65.46	51.60	65.46
Claimed by the petitioner	51.60	65.46	51.60	65.46	51.60	65.46
Allowed in this Order	51.60	65.46	51.60	65.46	51.60	65.46



Interest on Working Capital (“IWC”)

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

(₹ in lakh)

Interest on Working Capital	Asset-I		Asset-II		Asset-III	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved in Order dated 16.1.2015	17.70	18.92	26.41	26.60	16.77	20.00
Claimed by the petitioner	18.61	22.43	26.92	28.61	19.41	27.55
Allowed in this Order	18.61	22.43	26.92	28.61	19.40	27.55

(₹ in lakh)

Interest on Working Capital	Asset-IV		Asset-V		Asset-VI	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Approved in Order dated 16.1.2015	7.10	9.10	7.60	9.19	7.04	9.02
Claimed by the petitioner	8.17	11.07	9.60	12.03	7.05	8.75
Allowed in this Order	8.15	11.06	9.60	12.02	7.05	8.75

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

32. 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 I and II:

(₹in lakh)

Particulars	Asset-I		Asset-II	
	2012-13	2013-14	2012-13	2013-14
Depreciation				
Opening Gross Block	3016.20	4023.36	5440.31	5883.68
Additional Capitalisation	1007.16	944.46	443.37	557.09
Closing Gross Block	4023.36	4967.82	5883.68	6440.77
Average Gross Block	3519.78	4495.59	5662.00	6162.23
Rate of Depreciation (%)	5.28%	5.28%	5.23%	5.24%
Depreciable Value*	3167.80	4046.03	5054.71	5504.92
Balance useful life of the asset	25.00	24.00	25.00	24.00
Elapsed life	0.00	1.00	0.00	1.00
Remaining Depreciable Value	3167.80	4046.03	5054.71	5504.92
Depreciation during the year	185.79	237.24	296.38	322.73
Depreciation upto previous year	0.00	185.79	0.00	296.38
Cumulative depreciation (incl. of AAD)	185.79	423.03	296.38	619.11
Interest on Loan				
Gross Normative Loan	2111.34	2816.35	3808.22	4118.58
Cumulative Repayment upto Previous Year	0.00	185.79	0.00	296.38
Net Loan-Opening	2111.34	2630.56	3808.22	3822.20
Additions	705.01	661.12	310.36	389.96
Repayment during the year	185.79	237.24	296.38	322.73
Net Loan-Closing	2630.56	3054.44	3822.20	3889.43
Average Loan	2370.95	2842.50	3815.21	3855.81
Weighted Average Rate of Interest on Loan (%)	8.8665%	8.8957%	8.8017%	8.7624%
Interest on Loan	210.22	252.86	335.80	337.86
Return on Equity				
Opening Equity	904.86	1207.01	1632.09	1765.10
Additions	302.15	283.34	133.01	167.13
Closing Equity	1207.01	1490.35	1765.10	1932.23
Average Equity	1055.93	1348.68	1698.60	1848.67
Return on Equity (Base Rate) (%)	15.500%	15.500%	15.500%	15.500%
MAT rate for the respective year (%)	20.008%	20.961%	20.008%	20.961%
Rate of Return on Equity (%)	19.377%	19.610%	19.377%	19.610%
Return on Equity	204.61	264.48	329.14	362.53
Interest on Working Capital				



Particulars	Asset-I		Asset-II	
	2012-13	2013-14	2012-13	2013-14
O & M expenses	7.22	7.63	7.22	7.63
Maintenance Spares	13.00	13.75	13.00	13.75
Receivables	117.65	144.78	179.15	190.56
Total	137.87	166.16	199.37	211.94
Rate of Interest(%)	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	18.61	22.43	26.92	28.61
Annual Transmission Charges				
Depreciation	185.79	237.24	296.38	322.73
Interest on Loan	210.22	252.86	335.80	337.86
Return on Equity	204.61	264.48	329.14	362.53
Interest on Working Capital	18.61	22.43	26.92	28.61
O & M Expenses	86.68	91.64	86.68	91.64
Total	705.91	868.66	1074.91	1143.38

*after adjusting freehold land

Asset III and IV:

(₹in lakh)

Particulars	Asset-III		Asset-IV	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Depreciation				
Opening Gross Block	4196.07	5246.27	1462.04	1986.43
Additional Capitalisation	1050.20	1212.96	524.39	79.53
Closing Gross Block	5246.27	6459.23	1986.43	2065.96
Average Gross Block	4721.17	5852.75	1724.23	2026.19
Rate of Depreciation (%)	5.18%	5.20%	4.08%	4.25%
Depreciable Value*	4174.66	5193.08	1199.57	1468.58
Balance useful life of the asset	25.00	24.00	25.00	24.00
Elapsed life	0.00	1.00	0.00	1.00
Remaining Depreciable Value	4174.66	5193.08	1199.57	1468.58
Depreciation during the year	203.79	304.15	58.60	86.10
Depreciation upto previous year	0.00	203.79	0.00	58.60
Cumulative depreciation (incl. of AAD)	203.79	507.94	58.60	144.69
Interest on Loan				
Gross Normative Loan	2937.25	3672.39	1023.43	1390.50
Cumulative Repayment upto Previous Year	0.00	203.79	0.00	58.60
Net Loan-Opening	2937.25	3468.60	1023.43	1331.90



Particulars	Asset-III		Asset-IV	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Additions	735.14	849.07	367.07	55.67
Repayment during the year	203.79	304.15	58.60	86.10
Net Loan-Closing	3468.60	4013.53	1331.90	1301.48
Average Loan	3202.93	3741.06	1177.66	1316.69
Weighted Average Rate of Interest on Loan (%)	8.8864%	8.7801%	8.9953%	8.9553%
Interest on Loan	237.19	328.47	88.28	117.91
Return on Equity				
Opening Equity	1258.82	1573.88	438.61	595.93
Additions	315.06	363.89	157.32	23.86
Closing Equity	1573.88	1937.77	595.93	619.79
Average Equity	1416.35	1755.83	517.27	607.86
Return on Equity (Base Rate) (%)	15.500%	15.500%	15.500%	15.500%
MAT rate for the respective year (%)	20.008%	20.961%	20.008%	20.961%
Rate of Return on Equity (%)	19.377%	19.610%	19.377%	19.610%
Return on Equity	228.70	344.33	83.53	119.20
Interest on Working Capital				
O & M expenses	7.22	7.63	5.16	5.45
Maintenance Spares	13.00	13.75	9.29	9.82
Receivables	152.26	182.69	58.03	66.62
Total	172.49	204.07	72.48	81.89
Rate of Interest(%)	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	19.40	27.55	8.15	11.06
Annual Transmission Charges				
Depreciation	203.79	304.15	58.60	86.10
Interest on Loan	237.19	328.47	88.28	117.91
Return on Equity	228.70	344.33	83.53	119.20
Interest on Working Capital	19.40	27.55	8.15	11.06
O & M Expenses	72.23	91.64	51.60	65.46
Total	761.32	1096.13	290.16	399.73

*after adjusting freehold land



Asset V and VI:

(₹in lakh)

Particulars	Asset-V		Asset-VI	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Depreciation				
Opening Gross Block	2070.83	2233.48	1266.91	1309.80
Additional Capitalisation	162.65	73.48	42.89	64.81
Closing Gross Block	2233.48	2306.96	1309.80	1374.61
Average Gross Block	2152.16	2270.22	1288.36	1342.21
Rate of Depreciation (%)	4.32%	4.36%	5.27%	5.27%
Depreciable Value*	1584.71	1688.20	1159.52	1207.98
Balance useful life of the asset	25.00	24.00	25.00	24.00
Elapsed life	0.00	1.00	0.00	1.00
Remaining Depreciable Value	1584.71	1688.20	1159.52	1207.98
Depreciation during the year	77.43	98.98	56.62	70.73
Depreciation upto previous year	0.00	77.43	0.00	56.62
Cumulative depreciation (incl. of AAD)	77.43	176.41	56.62	127.35
Interest on Loan				
Gross Normative Loan	1449.58	1563.44	886.84	916.86
Cumulative Repayment upto Previous Year	0.00	77.43	0.00	56.62
Net Loan-Opening	1449.58	1486.01	886.84	860.24
Additions	113.86	51.44	30.02	45.37
Repayment during the year	77.43	98.98	56.62	70.73
Net Loan-Closing	1486.01	1438.46	860.24	834.87
Average Loan	1467.79	1462.23	873.54	847.56
Weighted Average Rate of Interest on Loan (%)	9.1077%	9.0807%	8.6880%	8.6723%
Interest on Loan	111.40	132.78	63.24	73.50
Return on Equity				
Opening Equity	621.25	670.04	380.07	392.94
Additions	48.80	22.04	12.87	19.44
Closing Equity	670.04	692.09	392.94	412.38
Average Equity	645.65	681.07	386.51	402.66
Return on Equity (Base Rate) (%)	15.500%	15.500%	15.500%	15.500%
MAT rate for the respective year (%)	20.008%	20.961%	20.008%	20.961%
Rate of Return on Equity (%)	19.377%	19.610%	19.377%	19.610%
Return on Equity	104.26	133.56	62.41	78.96



Particulars	Asset-V		Asset-VI	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Interest on Working Capital				
O & M expenses	5.16	5.45	5.16	5.45
Maintenance Spares	9.29	9.82	9.29	9.82
Receivables	70.86	73.80	48.18	49.57
Total	85.30	89.07	62.63	64.84
Rate of Interest(%)	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	9.60	12.02	7.05	8.75
Annual Transmission Charges				
Depreciation	77.43	98.98	56.62	70.73
Interest on Loan	111.40	132.78	63.24	73.50
Return on Equity	104.26	133.56	62.41	78.96
Interest on Working Capital	9.60	12.02	7.05	8.75
O & M Expenses	51.60	65.46	51.60	65.46
Total	354.28	442.81	240.92	297.41

*after adjusting freehold land

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

33. The petitioner has combined all the assets and has claimed one combined tariff for all the assets for 2014-19 tariff period. The tariff charges claimed for 2014-19 tariff period as under:-

Particulars	(₹in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1200.92	1219.49	1234.11	1234.11	1234.11
Interest on Loan	1231.00	1145.78	1054.29	945.08	836.43
Return on Equity	1393.87	1414.76	1431.24	1431.24	1431.24
Interest on Working Capital	112.05	111.79	111.22	109.56	107.93
O & M Expenses	434.16	448.56	463.47	478.86	494.73
Total	4372.00	4340.38	4294.33	4198.85	4104.44

34. 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	36.18	37.38	38.62	39.91	41.23
Maintenance Spares	65.12	67.28	69.52	71.83	74.21
Receivables	728.67	723.40	715.72	699.81	684.07
Total	829.97	828.06	823.86	811.55	799.51
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	112.05	111.79	111.22	109.56	107.93

Capital Cost

35. 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;”

36. The petitioner has combined all the assets for claiming tariff during 2014-19 tariff period and accordingly claimed capital cost of combined assets is ₹23617.95 lakh as on 31.3.2014. We have considered the capital cost of ₹23615.35 lakh, as worked out in earlier paras, as the opening capital cost on 1.4.2014 for determination of tariff in accordance with Regulation 9 of the 2014 Tariff Regulations as shown below:-

(₹in lakh)

Name of Asset	Apportioned approved cost as per RCE	Capital cost as on 31.3.2014
Asset-I	5255.52	4967.82
Asset-II	6645.23	6440.77
Asset-III	6541.94	6459.23
Asset-IV	2548.22	2065.96
Asset-V	2548.22	2306.96
Asset-VI	1545.22	1374.61
Total	25084.65	23615.35



Additional Capital Expenditure

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

”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;

XXX”

38. 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:”

39. The cut-off date is 31.3.2015 for all Assets-. The petitioner has claimed additional capital expenditure for 2014-19 tariff period under Regulation 14(2)of the 2014 Tariff Regulations. The additional capital expenditure allowed is as shown below:-

(₹in lakh)

Name of Asset	Apportione d approved cost as per RCE	Capital cost as on 1.3.2014	Additional capital expenditure allowed			Capital cost as on 31.3.2019
			2014-15	2015-16	Total	
Asset-I	5255.52	4967.82	18.18	166.31	184.49	5152.31
Asset-II	6645.23	6440.77	54.20	95.87	150.07	6590.84
Asset-III	6541.94	6459.23	16.68	54.25	70.93	6530.16
Asset-IV	2548.22	2065.96	28.69	124.45	153.14	2219.10
Asset-V	2548.22	2306.96	28.16	116.45	144.61	2451.57
Asset-VI	1545.22	1374.61	4.41	2.77	7.18	1381.79
Total	25084.65	23615.35	150.32	560.10	710.42	24325.77



40. The petitioner has claimed the admissibility of additional capital expenditure after the cut-off date under Regulation 14(3) of 2014 Tariff Regulations. We have considered the submissions of the petitioner with regard to the estimated capital expenditure during 2014-19. The above mentioned additional capital expenditure is towards balance and retention payments and the same has been certified by the Auditor vide certificates dated 20.5.2015 for all the assets. Further, the total capital cost for all the assets as on 31.3.2019 is within the approved apportioned cost of the project. Thus, the same is allowed for the purpose of revision of tariff in accordance with Regulation 14(3) of the 2014 Tariff Regulations.

Debt: Equity

41. 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.”

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

(₹in lakh)

Funding	Capital cost as on 31.3.2014	(%)	Additional capital expenditure during 2014-19	(%)	Total cost as on 31.3.2019	(%)
Debt	16530.74	70.00	497.30	70.00	17028.04	70.00
Equity	7084.60	30.00	213.12	30.00	7297.72	30.00
Total	23615.35	100.00	710.42	100.00	24325.77	100.00

Return on Equity (“ROE”)

43. 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.”

44. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate of 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	7084.60	7129.69	7297.72	7297.72	7297.72
Additions	45.09	168.03	0.00	0.00	0.00
Closing Equity	7129.69	7297.72	7297.72	7297.72	7297.72



Return on Equity	2014-15	2015-16	2016-17	2017-18	2018-19
Average Equity	7107.15	7213.71	7297.72	7297.72	7297.72
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	1393.74	1414.64	1431.12	1431.12	1431.12

Interest on Loan (“IoL”)

45. 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.”

46. 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 allowed is as follows:-

	(₹in lakh)				
Interest on Loan	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	16530.74	16635.97	17028.04	17028.04	17028.04
Cumulative Repayment upto Previous Year	1998.54	3199.32	4418.67	5652.64	6886.61



Interest on Loan	2014-15	2015-16	2016-17	2017-18	2018-19
Net Loan-Opening	14532.20	13436.65	12609.37	11375.40	10141.43
Additions	105.23	392.07	0.00	0.00	0.00
Repayment during the year	1200.78	1219.35	1233.97	1233.97	1233.97
Net Loan-Closing	13436.65	12609.37	11375.40	10141.43	8907.46
Average Loan	13984.43	13023.01	11992.39	10758.42	9524.45
Weighted Average Rate of Interest on Loan (%)	8.8015%	8.7973%	8.7905%	8.7838%	8.7810%
Interest on Loan	1230.84	1145.67	1054.19	944.99	836.35

Depreciation

47. 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."

48. 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
Opening Gross Block	23615.35	23765.67	24325.77	24325.77	24325.77
Additional Capitalisation	150.32	560.10	0.00	0.00	0.00
Closing Gross Block	23765.67	24325.77	24325.77	24325.77	24325.77
Average Gross Block	23690.51	24045.72	24325.77	24325.77	24325.77
Rate of Depreciation (%)	5.07%	5.07%	5.07%	5.07%	5.07%
Depreciable Value*	20490.46	20807.90	21057.69	21057.69	21057.69
Balance useful life of the asset	23.00	22.00	21.00	20.00	19.00
Elapsed life	2.00	3.00	4.00	5.00	6.00
Remaining Depreciable Value	20490.46	20807.90	21057.69	21057.69	21057.69
Depreciation during the year	1200.78	1219.35	1233.97	1233.97	1233.97
Depreciation upto previous year	1998.54	3199.32	4418.67	5652.64	6886.61
Cumulative depreciation	3199.32	4418.67	5652.64	6886.61	8120.58

*after adjusting freehold land

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

49. 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	03	03	03	03	03
Norms(₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
765 kV Bays:					
No. of Bays	03	03	03	03	03
Norms(₹ lakh/Bay)	84.42	87.22	90.12	93.11	96.20
Total O&M Expenses (₹ lakh)	313.56	323.96	334.73	345.84	357.31

50. 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. Rajasthan Discoms have requested to consider prudence check of the claims made by 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 asset as per prevailing norms.

Interest on Working Capital (IWC)

51. 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;”

52. 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%.

53. 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	26.12	26.99	27.88	28.81	29.76
Maintenance Spares	47.03	48.59	50.21	51.88	53.60
Receivables	707.38	701.42	693.02	676.35	659.85



Interest on Working Capital	2014-15	2015-16	2016-17	2017-18	2018-19
Total	780.54	777.00	771.11	757.04	743.21
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	105.37	104.89	104.10	102.20	100.33

ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

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

Particulars	(₹in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	23615.35	23765.67	24325.77	24325.77	24325.77
Additional Capitalisation	150.32	560.10	0.00	0.00	0.00
Closing Gross Block	23765.67	24325.77	24325.77	24325.77	24325.77
Average Gross Block	23690.51	24045.72	24325.77	24325.77	24325.77
Rate of Depreciation (%)	5.07%	5.07%	5.07%	5.07%	5.07%
Depreciable Value*	20490.46	20807.90	21057.69	21057.69	21057.69
Balance useful life of the asset	23.00	22.00	21.00	20.00	19.00
Elapsed life	2.00	3.00	4.00	5.00	6.00
Remaining Depreciable Value	20490.46	20807.90	21057.69	21057.69	21057.69
Depreciation during the year	1200.78	1219.35	1233.97	1233.97	1233.97
Depreciation upto previous year	1998.54	3199.32	4418.67	5652.64	6886.61
Cumulative depreciation	3199.32	4418.67	5652.64	6886.61	8120.58
Interest on Loan					
Gross Normative Loan	16530.74	16635.97	17028.04	17028.04	17028.04
Cumulative Repayment upto Previous Year	1998.54	3199.32	4418.67	5652.64	6886.61
Net Loan-Opening	14532.20	13436.65	12609.37	11375.40	10141.43
Additions	105.23	392.07	0.00	0.00	0.00
Repayment during the year	1200.78	1219.35	1233.97	1233.97	1233.97
Net Loan-Closing	13436.65	12609.37	11375.40	10141.43	8907.46
Average Loan	13984.43	13023.01	11992.39	10758.42	9524.45
Weighted Average Rate of Interest on Loan (%)	8.8017%	8.7972%	8.7904%	8.7837%	8.7810%
Interest on Loan	1230.87	1145.66	1054.18	944.99	836.34
Return on Equity					
Opening Equity	7084.60	7129.69	7297.72	7297.72	7297.72
Additions	45.09	168.03	0.00	0.00	0.00
Closing Equity	7129.69	7297.72	7297.72	7297.72	7297.72
Average Equity	7107.15	7213.71	7297.72	7297.72	7297.72
Return on Equity (Base Rate) (%)	15.500%	15.500%	15.500%	15.500%	15.500%
MAT rate for the year(%)	20.961%	20.961%	20.961%	20.961%	20.961%
Rate of Return on Equity (%)	19.610%	19.610%	19.610%	19.610%	19.610%



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity	1393.74	1414.64	1431.12	1431.12	1431.12
Interest on Working Capital					
O & M expenses	26.12	26.99	27.88	28.81	29.76
Maintenance Spares	47.03	48.59	50.21	51.88	53.60
Receivables	707.39	701.42	693.02	676.35	659.84
Total	780.54	777.00	771.11	757.04	743.21
Rate of Interest(%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	105.37	104.89	104.10	102.20	100.33
Annual Transmission Charges					
Depreciation	1200.78	1219.35	1233.97	1233.97	1233.97
Interest on Loan	1230.87	1145.66	1054.18	944.99	836.34
Return on Equity	1393.74	1414.64	1431.12	1431.12	1431.12
Interest on Working Capital	105.37	104.89	104.10	102.20	100.33
O & M Expenses	313.56	323.96	334.73	345.84	357.31
Total	4244.32	4208.51	4158.10	4058.11	3959.07

*after adjusting freehold land

55. 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 in fructuous.

Filing Fee and the Publication Expenses

56. 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

57. 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

58. The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future. Rajasthan Discoms have requested not to consider the aforesaid prayer. We are of the view that the petitioner's prayer is premature.

Sharing of Transmission Charges

59. 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.

60. This order disposes of Petition No.32/TT/2016.

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

Sd/-
(A.S. Bakshi)
Member



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

Asset -1				
Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
				(Rs in lakh)
BOND XXVIII DOCO Drawl on 1 APR 2012	9.33	100.00	0.00	100.00
BOND XXX DOCO Drawl on 1 APR 2012	8.80	950.00	0.00	950.00
BOND XXXI DOCO Drawl on 1 APR 2012	8.90	950.00	0.00	950.00
BOND XXXIII DOCO Drawl on 1 APR 2012	8.64	50.00	0.00	50.00
BOND XXXIV DOCO Drawl on 1 APR 2012	8.84	50.00	0.00	50.00
BOND XXXVI IDOCO Drawl on 1 APR 2012	9.35	11.34	0.00	11.34
SBI(21.03.2012) ADDCAP for 2013-2014 ADDCAP Loan 3	10.29	0.00	345.05	345.05
BOND XLI ADDCAP for 2012-2013 ADD CAP Loan 1	8.85	0.00	705.01	705.01
BOND XLIII ADDCAP for 2013-2014 ADD CAP Loan 2	7.93	0.00	316.07	316.07
Total		2111.34	1541.13	3477.47

Asset -2				
Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
				(Rs in lakh)
BOND XXVIII-DOCO DRAWL ON 01-APR-2012-	9.33	100.00	0.00	100.00
BOND XXX-DOCO	8.80	1500.00	0.00	1500.00
BOND XXXIII-DOCO	8.64	700.00	0.00	700.00
BOND XXXIV-DOCO	8.84	1508.22	0.00	1508.22
BOND XLI ADDCAP for 2012-2013 ADD CAP Loan 1	8.85	0.00	310.36	310.36
BOND XLIII ADDCAP for 2013-2014 ADD CAP Loan 2	7.93	0.00	389.96	389.96
Total		3808.22	700.32	4508.54



Asset -3				
Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
				(Rs in lakh)
BOND-XXVIII-DOCO DRAWL ON 01-JUN-2012-	9.33	200.00	0.00	200.00
BOND-XXX-DOCO DRAWL ON 01-JUN-2012-	8.80	1681.30	0.00	1681.30
BOND-XXXI-DOCO DRAWL ON 01-JUN-2012-	8.90	923.98	0.00	923.98
BOND-XXXVI-DOCO DRAWL ON 01-JUN-2012-	9.35	131.98	0.00	131.98
BOND-XLI-ADDCAP FOR 2012-13	8.85	0.00	735.14	735.14
BOND-XLIII-ADDCAP FOR 2013-14-	7.93	0.00	849.70	849.70
Total		2937.26	1584.84	4522.10

Asset -4				
Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
				(Rs in lakh)
BOND XXVIII-DOCO	9.33	50.00	0.00	50.00
BOND XXIX-DOCO	9.20	25.00	0.00	25.00
BOND XXX-DOCO	8.80	190.00	0.00	190.00
BOND XXXI-DOCO	8.90	125.00	0.00	125.00
BOND XXXIII-DOCO	8.64	165.00	0.00	165.00
BOND XXXII-DOCO	8.84	25.00	0.00	25.00
BOND XXXIV-DOCO	8.84	165.00	0.00	165.00
BOND XXXV-DOCO	9.64	150.00	0.00	150.00
BOND XXXVI-DOCO	9.35	130.24	0.00	130.24
BOND -XLI ADDCAP FOR -2012-13 ADDCAP Loan 1	8.85	0.00	367.07	367.07
BOND - XLIII-ADDCAP FOR 2013-2014 ADDCAP Loan 2	7.93	0.00	55.67	55.67
Total		1025.24	422.74	1447.98

Asset -5				
Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
				(Rs in lakh)
BOND-XXVIII-DOCO	9.33	50.00	0.00	50.00
BOND XXIX- DOCO	9.20	25.00	0.00	25.00
BOND XXX- DOCO	8.80	190.00	0.00	190.00



BOND XXXI- DOCO	8.90	125.00	0.00	125.00
BOND XXXIII- DOCO	8.64	165.00	0.00	165.00
BOND XXXII- DOCO	8.84	25.00	0.00	25.00
BOND XXXIV- DOCO	8.84	165.00	0.00	165.00
BOND XXXV- DOCO	9.64	150.00	0.00	150.00
BOND XXXVI- DOCO	9.35	554.58	0.00	554.58
BOND-XLI Addcap for 2012-13 Add Cap Loan-1	8.85	0.00	113.86	113.86
BOND-XLIII Addcap for 2012-13 Add Cap Loan-2	7.93	0.00	51.44	51.44
Total		1449.58	165.30	1614.88

Asset -6				
Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
				(Rs in lakh)
BOND XXXIII-DOCO Drawl on 1 Jun 2012	8.64	686.00	0.00	686.00
BOND XXXIV-DOCO Drawl on 1 Jun 2012	8.84	200.84	0.00	200.84
BOND-XLI Addcap for 2012-13 Add Cap	8.85	0.00	30.02	30.02
BOND-XLIII Addcap for 2013-14 Add Cap	7.93	0.00	45.37	45.37
Total		886.84	75.39	962.23

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

(₹in lakh)

Asset-I		
Particulars	2012-13 (pro-rata)	2013-14
Gross Opening Loan	2111.34	2816.35
Cumulative Repayments of Loans up to Previous Year	0.00	8.33
Net Loans Opening	2111.34	2808.02
Add: Drawl(s) during the Year	705.01	661.12
Less: Repayments during the year	8.33	166.67
Net Closing Loan	2808.02	3302.47
Average Net Loan	2459.68	3055.25
Rate of Interest on Loan (%)*	8.8665%	8.8957%
Interest on Loan	218.09	271.79



(₹in lakh)

Asset-II		
Particulars	2012-13 (pro-rata)	2013-14
Gross Opening Loan	3808.22	4118.58
Cumulative Repayments of Loans up to Previous Year	0.00	8.33
Net Loans Opening	3808.22	4110.25
Add: Drawl(s) during the Year	310.36	389.96
Less: Repayments during the year	8.33	133.33
Net Closing Loan	4110.25	4366.88
Average Net Loan	3959.24	4238.57
Rate of Interest on Loan (%)*	8.8017%	8.7624%
Interest on Loan	348.48	371.40

(₹in lakh)

Asset-III		
Particulars	2012-13 (pro-rata)	2013-14
Gross Opening Loan	2937.26	3672.40
Cumulative Repayments of Loans up to Previous Year	0.00	16.67
Net Loans Opening	2937.26	3655.73
Add: Drawl(s) during the Year	735.14	849.70
Less: Repayments during the year	16.67	233.78
Net Closing Loan	3655.73	4271.65
Average Net Loan	3296.50	3963.69
Rate of Interest on Loan (%)*	8.8864%	8.7801%
Interest on Loan	292.94	348.01

(₹in lakh)

Asset-IV		
Particulars	2012-13 (pro-rata)	2013-14
Gross Opening Loan	1025.24	1392.31
Cumulative Repayments of Loans up to Previous Year	0.00	6.25
Net Loans Opening	1025.24	1386.06
Add: Drawl(s) during the Year	367.07	55.67
Less: Repayments during the year	6.25	34.58
Net Closing Loan	1386.06	1407.15
Average Net Loan	1205.65	1396.61
Rate of Interest on Loan (%)*	8.9953%	8.9553%
Interest on Loan	108.45	125.07

(₹in lakh)



Asset-V		
Particulars	2012-13 (pro-rata)	2013-14
Gross Opening Loan	1449.58	1563.44
Cumulative Repayments of Loans up to Previous Year	0.00	6.25
Net Loans Opening	1449.58	1557.19
Add: Drawl(s) during the Year	113.86	51.44
Less: Repayments during the year	6.25	34.58
Net Closing Loan	1557.19	1574.05
Average Net Loan	1503.39	1565.62
Rate of Interest on Loan (%)*	9.1077%	9.0807%
Interest on Loan	136.92	142.17

(₹in lakh)

Asset-VI		
Particulars	2012-13 (pro-rata)	2013-14
Gross Opening Loan	886.84	916.86
Cumulative Repayments of Loans up to Previous Year	0.00	0.00
Net Loans Opening	886.84	916.86
Add: Drawl(s) during the Year	30.02	45.37
Less: Repayments during the year	0.00	0.00
Net Closing Loan	916.86	962.23
Average Net Loan	901.85	939.55
Rate of Interest on Loan (%)*	8.6880%	8.6723%
Interest on Loan	78.35	81.48

Annexure – 2

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

(₹in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
				(Rs in lakh)
BOND XXVIII-1.DOCO DRAWL ON 01-APR-2012-	9.33	100.00	0.00	100.00
BOND XXVIII-11.DOCO DRAWL ON 01-JUN-2012-	9.33	200.00	0.00	200.00
BOND XXVIII-18.DOCO DRAWL ON 01-APR-2012-	9.33	100.00	0.00	100.00
BOND XXVIII-30.DOCO-	9.33	50.00	0.00	50.00



BOND XXVIII-42.DOCO-	9.33	50.00	0.00	50.00
BOND XXIX-31.DOCO-	9.20	25.00	0.00	25.00
BOND XXIX-43.DOCO-	9.20	25.00	0.00	25.00
BOND XXX-12.DOCO DRAWL ON 01-JUN-2012-	8.80	1681.30	0.00	1681.30
BOND XXX-19.DOCO-	8.80	1500.00	0.00	1500.00
BOND XXX-2.DOCO DRAWL ON 01-APR-2012-	8.80	950.00	0.00	950.00
BOND XXX-32.DOCO-	8.80	190.00	0.00	190.00
BOND XXX-44.DOCO-	8.80	190.00	0.00	190.00
BOND XXXI-13.DOCO DRAWL ON 01-JUN-2012-	8.90	923.98	0.00	923.98
BOND XXXI-3.DOCO DRAWL ON 01-APR-2012-	8.90	950.00	0.00	950.00
BOND XXXI-33.DOCO-	8.90	125.00	0.00	125.00
BOND XXXI-45.DOCO-	8.90	125.00	0.00	125.00
BOND XXXIII-20.DOCO-	8.64	700.00	0.00	700.00
BOND XXXIII-25.DOCO DRAWL ON 01-JUN-2012-	8.64	686.00	0.00	686.00
BOND XXXIII-35.DOCO-	8.64	165.00	0.00	165.00
BOND XXXIII-4.DOCO DRAWL ON 01-APR-2012-	8.64	50.00	0.00	50.00
BOND XXXIII-47.DOCO-	8.64	165.00	0.00	165.00
BOND XXXII-34.DOCO-	8.84	25.00	0.00	25.00
BOND XXXII-46.DOCO-	8.84	25.00	0.00	25.00
BOND-XXXIV-21.DOCO-	8.84	1508.22	0.00	1508.22
BOND-XXXIV-26.DOCO DRAWL ON 01-JUN-2012-	8.84	200.84	0.00	200.84
BOND-XXXIV-36.DOCO-	8.84	165.00	0.00	165.00
BOND-XXXIV-48.DOCO-	8.84	165.00	0.00	165.00
BOND-XXXIV-5.DOCO DRAWL ON 01-APR-2012-	8.84	50.00	0.00	50.00
BOND-XXXV-37.DOCO-	9.64	150.00	0.00	150.00
BOND-XXXV-49.DOCO-	9.64	150.00	0.00	150.00
BOND XXXVI-14.DOCO DRAWL ON 01-JUN-2012-	9.35	131.98	0.00	131.98
BOND XXXVI-38.DOCO-	9.35	130.24	0.00	130.24
BOND XXXVI-50.DOCO-	9.35	554.58	0.00	554.58
BOND XXXVI-6.DOCO DRAWL ON 01-APR-2012-	9.35	11.34	0.00	11.34
SBI (21.03.2012)-9.ADDCAP FOR 2013-2014 ADD CAP Loan 3-	10.25	345.05	0.00	345.05
BOND - XLI-15.ADDCAP FOR 2012-2013 Add cap-	8.85	735.14	0.00	735.14
BOND - XLI-22.ADDCAP FOR 2012-2013 ADD CAP Loan 1-	8.85	310.36	0.00	310.36
BOND - XLI-27.ADDCAP FOR 2012-2013 Add cap-	8.85	30.02	0.00	30.02
BOND - XLI-39.ADDCAP FOR 2012-2013	8.85	367.07	0.00	367.07



ADD CAP Loan 1-				
BOND - XLI-51.ADDCAP FOR 2012-2013 ADD CAP Loan 1-	8.85	113.86	0.00	113.86
BOND - XLI-7.ADDCAP FOR 2012-2013 ADD CAP Loan 1-	8.85	705.01	0.00	705.01
BOND - XLIII-16.ADDCAP FOR 2013-2014 Add cap-	7.93	849.07	0.00	849.07
BOND - XLIII-23.ADDCAP FOR 2013-2014 ADD CAP Loan 2-	7.93	389.96	0.00	389.96
BOND - XLIII-28.ADDCAP FOR 2013-2014 Add cap-	7.93	45.37	0.00	45.37
BOND - XLIII-40.ADDCAP FOR 2013-2014 ADD CAP Loan 2-	7.93	55.67	0.00	55.67
BOND - XLIII-52.ADDCAP FOR 2013-2014 ADD CAP Loan 2-	7.93	51.44	0.00	51.44
BOND - XLIII-8.ADDCAP FOR 2013-2014 ADD CAP Loan 2-	7.93	316.07	0.00	316.07
Bond XLVIII-10.ADDCAP FOR 2014-2015 ADD CAP Loan 4-	8.20	0.00	12.73	12.73
Bond XLVIII-17.ADDCAP FOR 2014-2015 Add cap-	8.20	0.00	11.68	11.68
Bond XLVIII-24.ADDCAP FOR 2014-2015 ADD CAP Loan 3-	8.20	0.00	37.94	37.94
Bond XLVIII-29.ADDCAP FOR 2014-2015 Add cap-	8.20	0.00	3.09	3.09
Bond XLVIII-41.ADDCAP FOR 2014-2015 ADD CAP Loan 3-	8.20	0.00	20.08	20.08
Bond XLVIII-53.ADDCAP FOR 2014-2015 ADD CAP Loan 3-	8.20	0.00	19.71	19.71
Total		16532.57	105.23	16637.80

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

Particulars	(₹in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	16532.57	16637.80	16637.80	16637.80	16637.80
Cumulative Repayments of Loans up to Previous Year	648.77	1572.98	2522.19	3746.43	5112.98
Net Loans Opening	15883.80	15064.82	14115.61	12891.37	11524.82
Add: Drawl(s) during the Year	105.23	0.00	0.00	0.00	0.00
Less: Repayments during the year	924.21	949.21	1224.24	1366.55	1366.55
Net Closing Loan	15064.82	14115.61	12891.37	11524.82	10158.27
Average Net Loan	15474.31	14590.22	13503.49	12208.10	10841.55
Rate of Interest on Loan (%)*	8.80169%	8.79720%	8.79041%	8.78370%	8.78096%
Interest on Loan	1362.00	1283.53	1187.01	1072.32	951.99

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

