

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO. 49/TT/2016

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

Date of Hearing : 13.06.2016
Date of Order : 20.06.2016

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 A**: Raipur (Existing S/S)-Raipur PS (Durg) 400 kV D/C Transmission Line along with associated bays; **Asset B** : 400 kV D/C Raigarh PS (Near Kotra)-Raigarh (Existing) S/S Transmission Line along with associated bays; **Asset C**: 765 kV D/C Raigarh PS (Near Kotra)-Raipur PS (Durg) Transmission Line along with associated bays; **Asset D**: 765/400 kV, 1500 MVA, ICT-I with spare unit and 765 kV, 240 MVAR Bus Reactor with Spare unit at Raigarh 1.6.2013 Page 8 of 71 Order in Petition No. 162/TT/2013 Pooling Station along with associated bays; **Asset E**: Part-I)-765/400 kV, 1500 MVA, ICT-II and 400 kV, 80 MVAR Bus Reactor at Raigarh Pooling Station (Near Kotra) along with associated Bays and Part II 765 kV, 3x80 MVAR, Shunt Reactor for 765 kV D/C Raigarh PS (Near Kotra)-Raipur PS (Durg) Ckt-I charged as Bus Reactor along with associated bays; **Asset F**: 765/400 kV, 1500 MVA, ICT with Spare unit and 765 kV, 240 MVAR Bus Reactor with Spare unit at Raipur Pooling Station (Durg) along with associated bays; **Asset G**: 765/400 kV, 1500 MVA, ICT-III at Raigarh Pooling Station (Near Kotra) along with associated bays; **Asset H**: 765/400 kV, 1500 MVA, ICT-IV at Raigarh PS along with associated bays and 765 kV, 3x80 MVAR Shunt Reactor for 765 kV D/C Raigarh PS (Near Kotra)- Raipur PS (Durg) Ckt-II charged as Bus Rector along with associated bays under establishment of pooling Station at Raigarh (Kotra) and Raipur for IPP Generation Projects in Chattisgarh 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

1. Madhya Pradesh Power Management company Ltd.
Shakti bhawan, Rampur
Jabalpur - 482 008
2. Maharashtra State Electricity Distribution Co. Ltd.
Prakashgad, 4th Floor
Andheri (East), Mumbai - 400 052
3. Gujarat Urja Vikas Nigam Ltd.
Sardar Patel Vidyut Bhawan,
Racecourse Road
Vadodara - 390 007
4. Electricity Department, Govt. Of Goa
Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa - 403 001
5. Electricity Department
Administration of Daman & Diu
Daman - 396 210
6. Electricity Department
Administration of Dadra Nagar Haveli
U.T., Silvassa - 396 230
7. Chhattisgarh state Electricity Board
P.O.Sunder Nagar, Dangania, Raipur
Chhatisgaarh-492013
8. Madhyapadesh Audyogik Kendra
Vikas Nigam (Indore) Ltd.
3/54, Press Complex, Agra-Bombay Road,
Indore-452 008
9. Rajasthan Rajya Vidyut Prasaran Nigam Limited
Vidyut Bhawan, Vidyut Marg, Jaipur - 302 005
10. Ajmer Vidyut Vitran Nigam Ltd
400 Kv Gss Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.
11. Jaipur Vidyut Vitran Nigam Ltd
400 Kv Gss Building (Ground Floor), Ajmer Road,



Heerapura, Jaipur.

12. Jodhpur Vidyut Vitran Nigam Ltd
400 Kv Gss Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.
13. Himachal Pradesh State Electricity Board
Vidyut Bhawan
Kumar House Complex Building II
Shimla-171 004
14. Punjab State Electricity Board
The Mall, Patiala - 147 001
15. Haryana Power Purchase Centre
Shakti Bhawan, Sector-6
Panchkula (Haryana) 134 109
16. Power Development Deptt.
Govt. Of Jammu & Kashmir
Mini Secretariat, Jammu
17. Uttar Pradesh Power Corporation Ltd.
(Formerly Uttar Pradesh State Electricity Board)
Shakti Bhawan, 14, Ashok Marg
Lucknow - 226 001
18. Delhi Transco Ltd
Shakti Sadan, Kotla Road,
New Delhi-110 002
19. BSES Yamuna Power Ltd,
BSES Bhawan, Nehru Place ,
New Delhi.
20. BSES Rajdhani Power Ltd,
BSES Bhawan, Nehru Place,
New Delhi
21. North Delhi Power Ltd,
Power Trading & Load Dispatch Group
Cennet Building, Adjacent To 66/11 Kv Pitampura-3
Grid Building, Near Pp Jewellers
Pitampura, New Delhi - 110034
22. Chandigarh Administration
Sector -9, Chandigarh.
23. Uttarakhand Power Corporation Ltd.



Urja Bhawan, Kanwali Road
Dehradun.

24. North Central Railway
Allahabad.
25. New Delhi Municipal Council
Palika Kendra, Sansad Marg,
New Delhi-110002
26. Karnataka Power Transmission Corporation Ltd. (KPTCL),
Kaveri Bhavan, Bangalore – 560 009
27. Transmission Corporation Of Andhra Pradesh Ltd. (APTRANSCO),
Vidyut Soudha, Hyderabad – 500 082
28. Kerala State Electricity Board (Kseb)
Vaidyuthi Bhavanam
Pattom, Thiruvananthapuram – 695 004
29. TANGEDCO
Npkrr Maaligai, 800, Anna Salai
Chennai – 600 002
30. Electricity Department, Govt Of Pondicherry,
Pondicherry - 605001
31. Eastern Power Distribution Company Of
Andhra Pradesh Limited (APEPDCL)
APEPDCL, P&T Colony, Seethmmadhara, Vishakhapatnam
Andhra Pradesh,
32. Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL)
Srinivasasa Kalyana Mandapam Backside,
Tiruchanoor Road, Kesavayana Gunta,
Tirupati-517 501, Chittoor District, Andhra Pradesh
33. Central Power Distribution Company of Andhra Pradesh Limited (APCPDCL)
Corporate Office, Mint Compound,
Hyderabad – 500 063
Andhra Pradesh
34. Northern Power Distribution Company of Andhra Pradesh Limited (APNPDCL)
Opp. Nit Petrol Pump, Chaitanyapuri, Kazipet,
Warangal – 506 004
Andhra Pradesh
35. Bangalore Electricity Supply Company Ltd.,
(Bescom), Corporate Office,



K. R. Circle, Bangalore – 560 001
Karnataka

36. Gulbarga Electricity Supply Company Ltd., (Gescom)
Station Main Road, Gulbarga
Karnataka
37. Hubli Electricity Supply Company Ltd., (Hescom)
Navanagar, Pb Road
Hubli, Karnataka
38. Mescom Corporate Office,
Paradigm Plaza, Ab Shetty Circle
Mangalore – 575 001, Karnataka
39. Chamundeswari Electricity Supply Corporation Ltd., (CESC)
927, L J Avenue ground Floor,
New Kantharaj Urs Road, Saraswatipuram,
Mysore – 570 009, Karnataka
40. R. K. M. Power Limited
147, Gitanjali Nagar, Avanti Vihar,
Sector-I, Raipur (C.G.) – 492004
41. Athena Chhattisgarh Power Pvt. Ltd.
7-1-24 B Block, 5th Floor, “Roxanotowers”,
Greenlands, Begumpet, Hyderabad-500016
42. Jindal Power Limited
Post Box No. – 16,
Kharsia Road, Raigarh – 496001
43. SKS Power Generation (Chhattisgarh) Ltd.
501 B, Elegant Businesspark, Andheri Kurla Road,
J. B. Nagar, Andheri(E), Mumbai – 400059
44. Korba West Power Co. Ltd.
2nd Floor, Centrumplaza, Golf Course Road,
Sector – 53, Gurgaon – 122002
45. KSK Mahanadi Power Company Ltd.
8-2/293/82/A/431/A, Road No. 22, Jubilee Hills,
Hyderabad – 500033
46. Bharat Aluminium Co. Ltd,
Core – 6, Scope Office Complex,
Lodi Road, New Delhi – 110003
47. Visa Power Ltd.



HUL building, 2nd Floor, 9,
Shakespeare Sarani, Kolkata – 700071

48. GMR Chhatisgarh Energy Pvt. Ltd.
10th Floor tower, D Block,
Knowledge park, 4/1, Bannerghatta Road,
Near Dairy Circle, Bangalore-560029
49. D. B. Power Ltd.
Plot No.-813, Phase-V,
Udyog Vihar, Gurgaon-122016

....Respondent(s)

The following were present:

For Petitioner: Shri Pankaj Sharma, PGCIL
Shri S.S. Raju, PGCIL
Shri Jasbir Singh, PGCIL
Shri Rakesh Prasad, PGCIL
Shri A M Pavgi, PGCIL
Shri M.M. Mondal, PGCIL
Shri Mohd. Mohsin, PGCIL

For Respondents: None

ORDER

The petition has been preferred by Power Grid Corporation of India Limited (hereinafter referred to as “the petitioner”), a transmission licensee, for revision of tariff under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 Tariff Regulations”) based on truing up of capital expenditure for the period from COD to 31.3.2014 and for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) for the period from 1.4.2014 to 31.3.2019 in respect of



Raipur (Existing S/S)-Raipur PS (Durg) 400 kV D/C Transmission Line along with associated bays (hereinafter referred to as "Asset A"); 400 kV D/C Raigarh PS (Near Kotra)-Raigarh (Existing) S/S Transmission Line along with associated bays (hereinafter referred to as "Asset B"); 765 kV D/C Raigarh PS (Near Kotra)-Raipur PS (Durg) Transmission Line along with associated bays (hereinafter referred to as "Asset C"); 765/400 kV, 1500 MVA, ICT-I with spare unit and 765 kV, 240 MVAR Bus Reactor with Spare unit at Raigarh 1.6.2013 Page 8 of 71 Order in Petition No. 162/TT/2013 Pooling Station along with associated bays (hereinafter referred to as "Asset D"); Part-I)-765/400 kV, 1500 MVA, ICT-II and 400 kV, 80 MVAR Bus Reactor at Raigarh Pooling Station (Near Kotra) along with associated Bays and Part II 765 kV, 3x80 MVAR, Shunt Reactor for 765 kV D/C Raigarh PS (Near Kotra)-Raipur PS (Durg) Ckt-I charged as Bus Reactor along with associated bays (hereinafter referred to as "Asset E"); 765/400 kV, 1500 MVA, ICT with Spare unit and 765 kV, 240 MVAR Bus Reactor with Spare unit at Raipur Pooling Station (Durg) along with associated bays (hereinafter referred to as "Asset F"); 765/400 kV, 1500 MVA, ICT-III at Raigarh Pooling Station (Near Kotra) along with associated bays (hereinafter referred to as "Asset G"); 765/400 kV, 1500 MVA, ICT-IV at Raigarh PS along with associated bays and 765 kV, 3x80 MVAR Shunt Reactor for 765 kV D/C Raigarh PS (Near Kotra)- Raipur PS (Durg) Ckt-II charged as Bus Rector along with associated bays under Establishment of pooling Station at Raigarh (Kotra) and Raipur (hereinafter referred to as "Asset H") for IPP Generation Projects in Chattisgarh in Western Region (referred to 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 investment approval of the project was accorded by the Board of Directors of PGCIL vide the Memorandum No. C/CP/Chhattisgarh-IPP dated 15.12.2010 at an estimated cost of ₹171952 lakh including IDC of ₹10458 lakh (based on 3rd quarter, 2010 price level). Revised cost estimates of project have been approved by Board of Directors of the petitioner vide Memorandum C/CP/RCE/WR/Kotra dated 24.2.2015 at an estimated cost of ₹ 179272 lakh including IDC of ₹ 9858 lakh). The scope of work covered broadly includes:-

Transmission Lines:

- a) Raigarh Pooling Station (Near Kotra)-Raipur Pooling Station 765 kV D/C line : 250 km
- b) Raigarh Pooling Station (Near Kotra)-Raigarh 400 kV D/C line : 6 km
- c) Raipur Pooling Station-Raipur 400 kV D/C line :30 km

B. Sub-stations:

- a) Establishment of 765/400 kV, 4x1500 MVA Raigarh Pooling Station (Near Kotra)
 - b) Establishment of 765/400 kV, 1x1500 MVA Raipur Pooling Station
 - c) Bay extensions at Raigarh and Raipur existing Sub-stations
- b) All the assets of the project have been commissioned, as per the following details:

SI.No	Asset	SCOD	COD	Time over-run (months)
1	Asset A	1.9.2013	1.4.2013	-
2	Asset B		1.5.2013	-
3	Asset C		1.2.2014	5
4	Asset D		1.6.2013	-
5	Asset E		1.8.2013	-
6	Asset F		1.12.2013	3
7	Asset G		1.3.2014	6
8	Asset H		1.11.2013	2



c) Time over-run with regard to Asset C, Asset F, Asset G and Asset H has already been condoned in order dated 18.6.2015 in Petition no. 162/TT/2013.

d) The transmission tariff allowed by the Commission vide previous order and Annual fixed charges claimed by the petitioner in the instant transmission assets for 2009-14 tariff period is depicted below:-

(₹ in lakh)

Asset	Particulars	2013-14
Asset-A	Approved AFC	1746.54
	Revised AFC	1848.24
Asset-B	Approved AFC	1408.67
	Revised AFC	1475.95
Asset-C	Approved AFC	2376.10
	Revised AFC	2749.41
Asset-D	Approved AFC	1171.57
	Revised AFC	1235.39
Asset-E	Approved AFC	1169.32
	Revised AFC	1227.13
Asset-F	Approved AFC	559.85
	Revised AFC	599.76
Asset-G	Approved AFC	83.68
	Revised AFC	87.53
Asset-H	Approved AFC	651.84
	Revised AFC	689.48

e) Annual fixed charges claimed by the petitioner for 2014-19 tariff period is as follows:-

(₹ in lakh)

Name of Asset	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset (Asset-A and H)	29640.22	30244.95	30530.44	30195.90	29515.08

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.

5. In this context, the petitioner has filed the instant petition on 22.3.2016, for revision of tariff for the tariff period 2009-14 in accordance with Regulation 6 of the 2009 Tariff Regulations.

6. The petitioner has served the petition to the respondents and notice of this application has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003 ("the Act"). No comments/objections have been received from the public in response to the notice in newspaper. No respondent filed reply to the petition. The hearing in this matter was held on 13.6.2016.

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

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

8. 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”.

9. 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

10. The capital cost as on COD claimed by the petitioner for the purpose of tariff determination is as follows:-

(₹ in lakh)

Asset	Apportioned Approved Cost as per FR	Apportioned Approved Cost as per RCE	Particulars	Capital Cost Approved as on COD	Addition Capital Expenditure	Total Capital Cost as on 31.3.2014
					2013-14	
Asset A	13867.10	14020.50	Approved (162/2013)	8503.74	1959.41	10463.15
			Actual (Claimed)	8704.01	1959.41	10663.42
Asset B	13328.94	14793.33	Approved (162/2013)	7417.34	2928.43	10345.77
			Actual (Claimed)	7537.22	2928.43	10465.65
Asset C	83831.28	100845.88	Approved (162/2013)	83831.28	0.00	83831.28
			Actual (Claimed)	91083.93	3667.11	94751.04
Asset D	14840.47	10758.31	Approved (162/2013)	4634.83	5203.11	9837.94
			Actual (Claimed)	4757.35	5203.11	9960.46
Asset E	13009.26	10955.83	Approved (162/2013)	7304.04	2441.25	9745.29
			Actual (Claimed)	7447.63	2441.25	9888.88
Asset F	14709.43	12592.69	Approved (162/2013)	7567.89	2406.85	9974.74
			Actual (Claimed)	7914.70	2406.85	10321.55
Asset G	6668.51	5753.49	Approved (162/2013)	4955.71	327.20	5282.91
			Actual (Claimed)	5094.66	327.20	5421.86
Asset H	11697.20	9551.81	Approved (162/2013)	7162.18	1337.56	8499.74
			Actual (Claimed)	7363.72	1337.56	8701.28

11. The last proviso to Regulation 7(2) of the 2009 Tariff Regulations provides that:-

“Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2009 duly trued up by excluding un-discharged liability, if any, as on 1.4.2009 and the additional capital expenditure projected to be

incurred for the respective year of the tariff period 2009-14, as may be admitted by the Commission, shall form the basis for determination of tariff”.

12. The capital cost for the transmission assets admitted as on COD have been worked out in the subsequent paragraphs after the treatment of the IEDC/IDC and initial spares.

IDC and IEDC

13. It is observed that the total capital cost on COD claimed by the petitioner, as certified by the Auditor’s Certificate dated 16.10.2015 in respect of aforesaid assets is the same as in the previous orders for these assets and is as follows:

(₹ in lakh)

Assets	Capital cost claimed as per Auditor's Certificate
Asset A	8704.01
Asset B	7537.22
Asset C	91083.93
Asset D	4757.35
Asset E	7447.63
Asset F	7914.70
Asset G	5094.66
Asset H	7363.72

14. However, the petitioner has submitted that out of the total IDC submitted as per Auditor’s certificate, certain IDC has been discharged on cash basis as on COD and remaining during 2013-14 and 2014-15 period. The same has been taken in consideration while calculation of tariff and accordingly capital cost considered as on COD after adjusting IDC discharged as on cash basis is shown below:

Assets	Capital cost as on COD claimed as per Auditor's Certificate	IDC discharged upto COD	IDC discharged during		Capital cost as on COD after adjusting IDC discharged as on cash basis
			2013-14	2014-15	
Asset A	8704.01	257.46	27.24	-	8676.77
Asset B	7537.22	201.34	89.75	-	7447.47
Asset C	91083.93	5719.59	850.73	787.19	89446.01
Asset D	4757.35	160.44	124.06	-	4633.29
Asset E	7447.63	289.70	103.88	-	7343.75
Asset F	7914.70	436.80	77.95	87.28	7749.46
Asset G	5094.66	235.09	17.07	97.25	4980.34
Asset H	7363.72	186.19	112.08	29.22	7222.42

Treatment of Initial Spares

15. The initial spares claimed by the petitioner in respect of the transmission assets are as follows:-

(₹ in lakh)

Asset	TL	S/S
Asset A	41.55	227.38
Asset B	12.64	164.78
Asset C	668.0	187.74
Asset D	0.00	269.49
Asset E	0.00	204.68
Asset F	0.00	315.07
Asset G	0.00	0.00
Asset H	0.00	162.73

16. The initial spares claimed by the petitioner for all the transmission assets except Asset A, D, E, F and H are within the ceiling limit specified under the 2009 Tariff Regulations. Accordingly, the capital cost as on COD allowed after adjusting the excess initial spares and considered for computation of tariff are as follows:-



(₹ in lakh)

Assets	Capital cost on COD after adjusting IEDC and IDC on cash basis	Excess initial spares disallowed#		Capital cost allowed as on COD for tariff determination purpose
Asset A	8676.77	TL	9.74	8618.30
		SS	48.73	
Asset B	7447.47	TL	0.00	7447.47
		SS	0.00	
Asset C	89446.01	TL	0.00	89446.01
		SS	0.00	
Asset D	4633.29	TL	0.00	4629.62
		SS	3.67	
Asset E	7343.75	TL	0.00	7321.38
		SS	22.37	
Asset F	7749.46	TL	0.00	7732.60
		SS	16.86	
Asset G	4980.34	TL	0.00	4980.34
		SS	0.00	
Asset H	7222.42	TL	0.00	7155.59
		SS	66.83	

(#Excess Initial spares have been considered on individual element wise as the tariff is worked out by considering the capital cost of individual element.)

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 additional capital expenditure approved by the Commission in the previous order and that claimed by the petitioner based on actual expenditure are depicted below:-

(₹ in lakh)

Asset	Apportioned Approved Cost as per FR	Apportioned Approved Cost as per RCE	Particulars	Capital Cost Approved as on COD	Addition Capital Expenditure*	Total Capital Cost as on 31.3.2014
					2013-14	
Asset-A	13867.10	14020.50	Approved (162/2013)	8503.74	1959.41	10463.15



Asset	Apportioned Approved Cost as per FR	Apportioned Approved Cost as per RCE	Particulars	Capital Cost Approved as on COD	Addition Capital Expenditure*	Total Capital Cost as on 31.3.2014
					2013-14	
			Actual (Claimed)	8704.01	1959.41	10663.42
Asset-B	13328.94	14793.33	Approved (162/2013)	7417.34	2928.43	10345.77
			Actual (Claimed)	7537.22	2928.43	10465.65
Asset-C	83831.28	100845.88	Approved (162/2013)	83831.28	0.00	83831.28
			Actual (Claimed)	91083.93	3667.11	94751.04
Asset-D	14840.47	10758.31	Approved (162/2013)	4634.83	5203.11	9837.94
			Actual (Claimed)	4757.35	5203.11	9960.46
Asset-E	13009.26	10955.83	Approved (162/2013)	7304.04	2441.25	9745.29
			Actual (Claimed)	7447.63	2441.25	9888.88
Asset-F	14709.43	12592.69	Approved (162/2013)	7567.89	2406.85	9974.74
			Actual (Claimed)	7914.70	2406.85	10321.55
Asset-G	6668.51	5753.49	Approved (162/2013)	4955.71	327.20	5282.91
			Actual (Claimed)	5094.66	327.20	5421.86
Asset-H	11697.20	9551.81	Approved (162/2013)	7162.18	1337.56	8499.74
			Actual (Claimed)	7363.72	1337.56	8701.28

(*Additional capital expenditure has been considered as per Auditor Certificate)

19. The petitioner has submitted the Auditor's Certificates dated 16.10.2015 certifying the actual capital cost incurred towards additional capitalization for all the transmission assets. The petitioner has submitted the additional capital expenditure during 2009-14 tariff period is on account of balance and retention payments towards the transmission assets. The petitioner has claimed the actual additional capital expenditure during 2009-14 period under the provision of Regulation 9(1) and 9(2) of the 2009 Tariff Regulations.

20. The capital addition claimed by the petitioner is based on actual capital expenditure incurred as per the Auditor Certificate dated 16.10.2015 and the same is within the original scope of work. The additional capital expenditure claimed by the petitioner towards balance and retention payments is allowed for truing up under Regulation 9(1)(i) and 9 (2)(viii) of 2009 Tariff Regulations.

21. The additional capital expenditure during 2013-14 tariff period has been allowed after considering the IDC discharged on cash basis during 2013-14, the net additional capital expenditure considered for truing up is as follows:-

(₹ in lakh)

Assets	Capital Cost as on COD	Addition Capital Expenditure 2013-14	Total Capital Cost as on 31.3.2014
Asset A	8618.30	1986.65	10604.95
Asset B	7447.47	3018.18	10465.65
Asset C	89446.01	4517.84	93963.85
Asset D	4629.62	5327.17	9956.79
Asset E	7321.38	2545.13	9866.51
Asset F	7732.6	2484.81	10217.41
Asset G	4980.34	344.27	5324.61
Asset H	7155.59	1449.64	8605.23
Total			159005.01

Debt: Equity

22. The debt:equity ratio of 70:30 for additional capital expenditure as claimed by the petitioner is in accordance with the Regulation 12 (3) of the 2009 Tariff Regulations and hence, same has been considered towards financing of the additional capital expenditure.

23. 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.”

24. In respect of the additional capitalization, debt: equity ratio of 70:30 has been considered in line with Regulation 12 of the 2009 Tariff Regulations. 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 A						
Debt	6032.81	70.00	1390.66	70.00	7423.47	70.00
Equity	2585.49	30.00	596.00	30.00	3181.49	30.00
Total	8618.30	100.00	1986.65	100.00	10604.95	100.00
Asset B						
Debt	5213.23	70.00	2112.73	70.00	7325.96	70.00
Equity	2234.24	30.00	905.45	30.00	3139.70	30.00
Total	7447.47	100.00	3018.18	100.00	10465.65	100.00
Asset C						
Debt	62612.21	70.00	3162.49	70.00	65774.70	70.00
Equity	26833.80	30.00	1355.35	30.00	28189.15	30.00
Total	89446.01	100.00	4517.84	100.00	93963.85	100.00
Asset D						
Debt	3240.74	70.00	3729.02	70.00	6969.76	70.00
Equity	1388.89	30.00	1598.15	30.00	2987.04	30.00
Total	4629.62	100.00	5327.17	100.00	9956.79	100.00



Funding	Capital cost as on COD	(%)	Additional capital expenditure during 2009-14	(%)	Total Cost as on 31.3.2014	(%)
Asset E						
Debt	5124.96	70.00	1781.59	70.00	6906.56	70.00
Equity	2196.41	30.00	763.54	30.00	2959.95	30.00
Total	7321.38	100.00	2545.13	100.00	9866.51	100.00
Asset F						
Debt	5412.82	70.00	1739.37	70.00	7152.19	70.00
Equity	2319.78	30.00	745.44	30.00	3065.22	30.00
Total	7732.60	100.00	2484.81	100.00	10217.41	100.00
Asset G						
Debt	3486.24	70.00	240.99	70.00	3727.23	70.00
Equity	1494.10	30.00	103.28	30.00	1597.38	30.00
Total	4980.34	100.00	344.27	100.00	5324.61	100.00
Asset H						
Debt	5008.92	70.00	1014.75	70.00	6023.66	70.00
Equity	2146.68	30.00	434.89	30.00	2581.57	30.00
Total	7155.59	100.00	1449.64	100.00	8605.23	100.00

Return on Equity (“ROE”)

25. 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:

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

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

(5) The generating company or the transmission licensee, as the case maybe, shall recover the shortfall or refund the excess Annual Fixed Charge on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax Rate as



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

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

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

Year	MAT Rate claimed in the current petition	Grossed up ROE (Base Rate/(1-t)) claimed in the current petition
2013-14	20.961%	19.610%

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

(₹ in lakh)

Particulars	2013-14							
	Asset A	Asset B#	Asset C#	Asset D#	Asset E#	Asset F#	Asset G#	Asset H#
As approved	497.34	426.96	732.65	316.25	298.04	153.31	22.37	171.12
Claimed by the petitioner	568.89	483.01	899.17	357.73	337.93	176.33	25.26	194.81
Allowed after true up in this order	565.46	483.02	899.19	357.56	337.06	176.00	25.26	193.17

(*Approved in order dated 18.6.2015 in petition 162/2013)
(# - Pro-rata)

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.

Interest on Loan (“IoL”)

28. Regulation 16 of the 2009 Tariff Regulations provide the methodology for working out weighted average rate of IoL. The Commission in its earlier order dated 18.6.2015 in Petition No. 162/2013 has dealt with similar issue and held that:-



“...in case of floating rate of interest, any change in the rates of interest during the tariff period will be considered at the time of true up”.

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

(₹ in lakh)

Particulars	2013-14							
	Asset A	Asset B#	Asset C#	Asset D#	Asset E#	Asset F#	Asset G#	Asset H#
As approved in order dated 18.6.2015 in petition 162/2013	542.95	439.81	826.24	324.67	289.81	168.09	24.41	162.17
Claimed by the petitioner	553.04	442.83	904.90	324.67	290.46	172.21	24.55	162.94
Allowed after true up in this order	549.72	442.83	904.90	324.51	289.71	171.89	24.55	161.57

(# - Pro-rata)

Depreciation

30. 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)

Particulars	2013-14							
	Asset A	Asset B#	Asset C#	Asset D#	Asset E#	Asset F#	Asset G#	Asset H#
As approved in order dated 18.6.2015 in petition 162/2013	380.62	258.85	685.06	291.22	276.86	140.66	21.57	158.01
Claimed by the petitioner	398.45	265.58	804.99	312.14	292.85	152.56	22.30	170.37
Allowed after true up in this order	395.68	265.58	804.99	311.98	292.11	152.27	22.30	168.96



(# - Pro-rata)

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

Operation & Maintenance Expenses (O&M Expenses)

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

(₹ in lakh)

Particulars	2013-14							
	Asset A	Asset B#	Asset C#	Asset D#	Asset E#	Asset F#	Asset G#	Asset H#
As approved in order dated 18.6.2015 in petition 162/2013	278.62	244.53	77.48	207.28	270.56	82.91	13.09	141.83
Claimed by the petitioner	278.62	244.53	77.48	207.28	270.56	82.91	13.09	141.82
Allowed after true up in this order	278.62	244.53	77.48	207.28	270.56	82.91	13.09	141.83

(# - Pro-rata)

Interest on Working Capital (IWC)

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

Particulars	2013-14							
	Asset A	Asset B#	Asset C#	Asset D#	Asset E#	Asset F#	Asset G#	Asset H#
As approved in order dated	47.01	38.52	54.66	32.16	34.06	14.87	2.24	18.71



18.6.2015 in petition 162/2013									
Claimed by the petitioner	49.24	40.00	62.87	33.57	35.33	15.75	2.33	19.54	
Allowed after true up in this order	49.03	40.00	62.87	33.55	35.28	15.73	2.34	19.44	

(# - Pro-rata)

APPROVED ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

33. 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:-

(₹ in lakh)

Particulars	2013-14							
	Asset A	Asset B#	Asset C#	Asset D#	Asset E#	Asset F#	Asset G#	Asset H#
Depreciation								
Opening Gross Block	8618.30	7447.47	89446.01	4629.62	7321.38	7732.60	4980.34	7155.59
Additional Capitalisation	1986.65	3018.18	4517.84	5327.17	2545.13	2484.81	344.27	1449.64
Closing Gross Block	10604.95	10465.65	93963.85	9956.79	9866.51	10217.41	5324.61	8605.23
Average Gross Block	9611.63	8956.56	91704.93	7293.21	8593.94	8975.01	5152.48	7880.41
Rate of Depreciation	4.12	3.23	5.27	5.13	5.10	5.09	5.19	5.15
Depreciable Value	7205.69	5565.55	82534.44	6563.89	7734.55	8077.51	4637.23	7092.37
Balance Useful life of the asset	30.00	27.00	34.00	25.00	25.00	25.00	25.00	25.00
Elapsed Life	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Remaining Depreciable Value	7205.69	5565.55	82534.44	6563.89	7734.55	8077.51	4637.23	7092.37
Depreciation during the year	395.68	265.58	804.99	311.98	292.11	152.27	22.30	168.96
Cumulative depreciation	395.68	265.58	804.99	311.98	292.11	152.27	22.30	168.96
Interest on Loan								
Gross Normative Loan	6032.81	5213.23	62612.21	3240.74	5124.96	5412.82	3486.24	5008.92
Cumulative Repayment upto Previous Year	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Loan-Opening	6032.81	5213.23	62612.21	3240.74	5124.96	5412.82	3486.24	5008.92
Additions	1390.66	2112.73	3162.49	3729.02	1781.59	1739.37	240.99	1014.75
Repayment during the year	395.68	265.58	804.99	311.98	292.11	152.27	22.30	168.96



Particulars	2013-14							
	Asset A	Asset B#	Asset C#	Asset D#	Asset E#	Asset F#	Asset G#	Asset H#
Net Loan-Closing	7027.79	7060.38	64969.70	6657.77	6614.45	6999.92	3704.93	5854.71
Average Loan	6530.30	6136.80	63790.95	4949.26	5869.71	6206.37	3595.58	5431.81
Weighted Average Rate of Interest on Loan (%)	8.4180	7.8719	8.5112	7.8682	7.4034	8.3088	8.1948	7.1389
Interest on Loan	549.72	442.83	904.90	324.51	289.71	171.89	24.55	161.57
Return on Equity								
Opening Equity	2585.49	2234.24	26833.80	1388.89	2196.41	2319.78	1494.10	2146.68
Additions	596.00	905.45	1355.35	1598.15	763.54	745.44	103.28	434.89
Closing Equity	3181.49	3139.70	28189.16	2987.04	2959.95	3065.22	1597.38	2581.57
Average Equity	2883.49	2686.97	27511.48	2187.96	2578.18	2692.50	1545.74	2364.12
Return on Equity (Base Rate)	15.500	15.500	15.500	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	20.961	20.961	20.961
Rate of Return on Equity	19.610	19.610	19.610	19.610	19.610	19.610	19.610	19.610
Return on Equity	565.46	483.02	899.19	357.56	337.06	176.00	25.26	193.17
Interest on Working Capital								
O & M expenses	23.22	22.23	38.74	20.73	33.82	20.73	13.09	28.37
Maintenance Spares	41.79	40.01	69.73	37.31	60.88	37.31	23.57	51.06
Receivables	306.42	268.36	2749.43	246.98	306.18	299.40	175.77	273.99
Total	371.43	330.60	2857.89	305.02	400.87	357.44	212.42	353.41
Rate of Interest(%)	13.20	13.20	13.20	0.13	13.20	13.20	13.20	13.20
Interest	49.03	40.00	62.87	33.55	35.28	15.73	2.34	19.44
Annual Transmission Charges								
Depreciation	395.68	265.58	804.99	311.98	292.11	152.27	22.30	168.96
Interest on Loan	549.72	442.83	904.90	324.51	289.71	171.89	24.55	161.57
Return on Equity	565.46	483.02	899.19	357.56	337.06	176.00	25.26	193.17
Interest on Working Capital	49.03	40.00	62.87	33.55	35.28	15.73	2.34	19.44
O & M Expenses	278.62	244.53	77.48	207.28	270.56	82.91	13.09	141.83
Total	1838.51	1475.96	2749.43	1234.89	1224.71	598.80	87.53	684.97

(# - Pro-rata)

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

34. The tariff charges claimed by the petitioner for 2014-19 tariff period is as follows:-

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	8182.28	8534.87	8796.29	8883.97	8883.97
Interest on Loan	8942.43	8691.77	8287.85	7663.58	6914.49
Return on Equity	9562.83	9976.25	10319.44	10447.90	10447.90
Interest on Working Capital	736.71	752.63	761.45	756.40	743.63



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	2215.97	2289.43	2365.41	2444.05	2525.09
Total	29640.22	30244.95	30530.44	30195.90	29515.08

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 the capital cost of all the assets as on 31.3.2014 after combining is ₹159005.01 lakh, 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

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

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

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



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

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 for the assets A,B,D,E,F and H works out to be 31.3.2016 and for assets C and G is 31.3.2017 respectively. The petitioner has claimed additional capital expenditure of ₹6564.37 lakh, ₹7300.45 lakh and ₹4366.98 lakh during 2014-15, 2015-16 & 2016-17 respectively, however we have considered the additional capital expenditure considering the IDC discharged on cash basis during 2014-15 and this additional capital expenditure considered for 2014-19 tariff period is shown below:

(₹ in lakh)

Assets	Capital Cost as on 1.4.2014	Addition Capital Expenditure 2014-19				Total Capital Cost as on 31.3.2019
		2014-15	2015-16	2016-17	Total	
Combined assets A to H	159005.01	*7565.31	7300.45	4366.98	19232.74	178237.75

(*including IDC discharged on cash basis during 2014-15)

40. Further, the total capital cost for all the assets as on 31.3.2019 is within the approved apportioned cost of ₹179272 lakh. 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 details of the debt:equity considered for the purpose of tariff for 2014-19 tariff period is as follows:-

(₹ in lakh)

Funding	Capital cost as on 1.4.2014	(%)	Additional capital expenditure during 2014-19	(%)	Total Cost as on 31.3.2019	(%)
Debt	111303.51	70.00	13638.93	29.08	124942.43	70.00
Equity	47701.50	30.00	5593.81	70.92	53295.32	30.00
Total	159005.01	100.00	19232.74	100.00	178237.75	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 applicable during the 2013-14 has been considered for the purpose of ROE, which shall be trued up with actual tax rate in accordance with Clause (3) of Regulation 25 of the 2014 Tariff Regulations. The ROE has been worked out and allowed as follows:-

(₹ in lakh)

Return on Equity	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	47701.50	49795.09	51985.22	53295.32	53295.32
Additions	2093.58	2190.14	1310.09	0.00	0.00
Closing Equity	49795.09	51985.22	53295.32	53295.32	53295.32
Average Equity	48748.29	50890.15	52640.27	53295.32	53295.32
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	9559.76	9979.79	10322.99	10451.45	10451.45

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 and the IoL has been worked out and allowed as follows:-

(₹ in lakh)					
Interest on Loan	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	111303.51	116775.23	121885.55	124942.43	124942.43
Cumulative Repayment upto Previous Year	2413.86	10593.93	19132.70	27932.88	36820.74
Net Loan-Opening	108889.64	106181.30	102752.85	97009.56	88121.70
Additions	5471.73	5110.32	3056.89	0.00	0.00
Repayment during the year	8180.07	8538.76	8800.18	8887.86	8887.86
Net Loan-Closing	106181.30	102752.85	97009.56	88121.70	79233.84
Average Loan	107535.47	104467.08	99881.20	92565.63	83677.77
Weighted Average Rate of Interest on Loan (%)	8.3140	8.3252	8.3027	8.2841	8.2684
Interest on Loan	8940.47	8697.11	8292.88	7668.22	6918.81

Depreciation

47. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations provide that:-

"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. The detailed calculations for depreciation for the transmission asset are worked out and allowed as follows:-

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	159005.01	166570.32	173870.77	178237.75	178237.75
Additional Capitalisation	7,565.31	7,300.45	4,366.98	0.00	0.00
Closing Gross Block	166570.32	173870.77	178237.75	178237.75	178237.75
Average Gross Block	162787.66	170220.54	176054.26	178237.75	178237.75
Rate of Depreciation (%)	5.02%	5.02%	5.00%	4.99%	4.99%
Depreciable Value*	142547.12	149236.46	154486.81	155886.88	155886.88
Balance useful life of the asset	31	30	29	28	27
Elapsed life	-	1	2	3	4
Remaining Depreciable Value	142547.12	141056.40	137767.97	130367.86	121480.00
Depreciation during the year	8,180.07	8,538.76	8,800.18	8,887.86	8,887.86
Depreciation upto previous year	0.00	8180.07	16718.83	25519.01	34406.87
Cumulative depreciation	8180.07	16718.83	25519.01	34406.87	43294.73

*after adjusting free hold land



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

49. Clause 3(a) of Regulation 29 of the 2014 Tariff Regulations specify 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
Total O&M Expenses (₹ lakh)	2215.97	2289.43	2365.41	2444.05	2525.09

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.

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	184.66	190.79	197.12	203.67	210.42
Maintenance Spares	332.40	343.41	354.81	366.61	378.76
Receivables	4938.80	5043.00	5090.53	5034.71	4921.19
Total	5455.86	5577.20	5642.46	5604.99	5510.38
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	736.54	752.92	761.73	756.67	743.90

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:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	159005.01	166570.32	173870.77	178237.75	178237.75
Additional Capitalisation	7565.31	7300.45	4366.98	0.00	0.00
Closing Gross Block	166570.32	173870.77	178237.75	178237.75	178237.75
Average Gross Block	162787.66	170220.54	176054.26	178237.75	178237.75
Rate of Depreciation (%)	5.02	5.02	5.00	4.99	4.99
Depreciable Value	142547.12	149236.46	154486.81	155886.88	155886.88
Balance useful life of the	31	30	29	28	27



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
asset					
Elapsed life	0	1	2	3	4
Remaining Depreciable Value	142547.12	141056.40	137767.97	130367.86	121480.00
Depreciation during the year	8180.07	8538.76	8800.18	8887.86	8887.86
Cumulative depreciation	8180.07	16718.83	25519.01	34406.87	43294.73
Interest on Loan					
Gross Normative Loan	111303.51	116775.23	121885.55	124942.43	124942.43
Cumulative Repayments upto Previous Year	2413.86	10593.93	19132.70	27932.88	36820.74
Net Loan-Opening	108889.64	106181.30	102752.85	97009.56	88121.70
Additions	5471.73	5110.32	3056.89	0.00	0.00
Repayment during the year	8180.07	8538.76	8800.18	8887.86	8887.86
Net Loan-Closing	106181.30	102752.85	97009.56	88121.70	79233.84
Average Loan	107535.47	104467.08	99881.20	92565.63	83677.77
Weighted Average Rate of Interest on Loan (%)	8.3140	8.3252	8.3027	8.2841	8.2684
Interest on Loan	8940.47	8697.11	8292.88	7668.22	6918.81
Return on Equity					
Opening Equity	47701.50	49795.09	51985.22	53295.32	53295.32
Additions	2093.58	2190.14	1310.09	0.00	0.00
Closing Equity	49795.09	51985.22	53295.32	53295.32	53295.32
Average Equity	48748.29	50890.15	52640.27	53295.32	53295.32
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	9559.76	9979.79	10322.99	10451.45	10451.45
Interest on Working Capital					
O & M Expenses	184.66	190.79	197.12	203.67	210.42
Maintenance Spares	332.40	343.41	354.81	366.61	378.76
Receivables	4938.80	5043.00	5090.53	5034.71	4921.19
Total Working Capital	5455.86	5577.20	5642.46	5604.99	5510.38
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	736.54	752.92	761.73	756.67	743.90
Annual Transmission Charges					
Depreciation	8180.07	8538.76	8800.18	8887.86	8887.86
Interest on Loan	8940.47	8697.11	8292.88	7668.22	6918.81
Return on Equity	9559.76	9979.79	10322.99	10451.45	10451.45
Interest on Working Capital	736.54	752.92	761.73	756.67	743.90
O & M Expenses	2215.97	2289.43	2365.41	2444.05	2525.09
Total	29632.82	30258.02	30543.20	30208.25	29527.12



Deferred Tax Liability

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. The deferred tax liability shall be dealt as per Regulations 49 of the 2014 Tariff Regulations, as amended. Accordingly, the petitioner is entitled to recover the deferred tax liability upto 31.3.2009 whenever the same gets materialized directly from the beneficiaries or long term transmission customers /DICs.

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



Foreign Exchange Rate Variation

59. The petitioner has sought recovery of FERV on foreign loans deployed as provided in Clause 50 of the 2014 Tariff Regulations. The petitioner is entitled to recover the FERV directly from the beneficiaries or the long term transmission customers/DICs as the case may be, in accordance with Clause 1 of Regulation 51 of the 2014 Tariff Regulations.

Sharing of Transmission Charges

60. 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.

61. This order disposes of Petition No. 49/TT/2016.

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

Sd/-
(A.S. Bakshi)
Member



DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO 2014-19

Asset A				
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2013	Additions during the tariff period	Total
BOND-XXXIV-Loan-1-	8.84	630.00	0.00	630.00
BOND-XXXV-Loan-2-	9.64	8.00	0.00	8.00
BOND XXXVI-Loan-3-	9.35	52.00	0.00	52.00
BOND XXXVII-Loan-4-	9.25	400.00	0.00	400.00
BOND XXXIX-Loan-5-	9.40	330.00	0.00	330.00
SBI (21.03.2012)-Loan-6-	10.29	590.00	0.00	590.00
BOND XL-Loan-7-	9.30	1570.00	0.00	1570.00
BOND - XLI-Loan-8-	8.85	370.00	0.00	370.00
BOND - XLII-ADDCAP FOR 2013-2014 ADDCAP-	8.80	0.00	19.06	19.06
BOND XLII-Loan-9-	8.80	1216.08	0.00	1216.08
IFC (IFC-A LOAN) (31419-00)-LOAN-10- 54.91	3.31	471.68	0.00	471.68
FC - BOND (17.01.2013)-Loan-11-54.91	4.10	435.99	0.00	435.99
BOND - XLIV-ADDCAP FOR 2013-2014 AddCap-1-	8.70	0.00	1371.59	1371.59
Total		6073.75	1390.65	7464.40

Asset B				
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2013	Additions during the tariff period	Total
BOND-XXXIV-DOCO DRAWL ON 01- MAY-2013-	8.84	455.00	0.00	455.00
BOND-XXXV-DOCO DRAWL ON 01- MAY-2013-	9.64	6.00	0.00	6.00
BOND XXXVI-DOCO DRAWL ON 01- MAY-2013-	9.35	40.00	0.00	40.00
BOND XXXVII-DOCO DRAWL ON 01- MAY-2013-	9.25	290.00	0.00	290.00
BOND XXXIX-DOCO DRAWL ON 01- MAY-2013-	9.40	235.00	0.00	235.00
SBI (21.03.2012)-DOCO DRAWL ON 01- MAY-2013-	10.28	420.00	0.00	420.00
BOND XL-DOCO Loan-	9.30	1263.00	0.00	1263.00
BOND - XLI-DOCO DRAWL ON 01- MAY-2013-	8.85	270.00	0.00	270.00
BOND - XLII-ADDCAP FOR 2013-2014	8.80	0.00	62.83	62.83



Asset B				
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2013	Additions during the tariff period	Total
AddCap-				
BOND - XLII-Loan-9-	8.80	853.03	0.00	853.03
IFC (IFC - A LOAN) (31419-00)-DOCO DRAWL ON 01-MAY-2013-54.24	3.31	1017.54	0.00	1017.54
FC - BOND (17.01.2013)-DOCO DRAWL ON 01-MAY-2013 DRAWL ON 01-MAY-2013-54.24	4.10	363.41	0.00	363.41
BOND - XLIV-ADDCAP FOR 2013-2014 AddCap-1-	8.70	0.00	2049.90	2049.90
Total		5212.98	2112.73	7325.71

Asset C				
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2013	Additions during the tariff period	Total
BOND-XXXIV-Loan-1-	8.84	5820.00	0.00	5820.00
BOND-XXXV-Loan-2-	9.64	70.00	0.00	70.00
BOND XXXVI-Loan-3-	9.35	470.00	0.00	470.00
BOND XXXVII-Loan-4-	9.25	3970.00	0.00	3970.00
BOND XXXIX-Loan~5-	9.40	3385.00	0.00	3385.00
SBI (21.03.2012)-Loan-6-	10.25	5925.00	0.00	5925.00
BOND XL-Loan-7-	9.30	14010.00	0.00	14010.00
BOND - XLI-Loan-8-	8.85	3320.00	0.00	3320.00
BOND - XLII-ADDCAP FOR 2013-2014 AddCap-	8.80	0.00	595.51	595.51
BOND - XLII-Loan-9-	8.80	10403.71	0.00	10403.71
IFC (IFC - A LOAN) (31419-00)-Loan-11-63.12	3.27	3008.30	0.00	3008.30
FC - BOND (17.01.2013)-Loan-12-63.12	4.10	4492.88	0.00	4492.88
BOND - XLIV-ADDCAP FOR 2013-2014 AddCap-1-	8.70	0.00	2566.98	2566.98
BOND - XLIV-Loan-10-	8.70	7737.32	0.00	7737.32
Total		62612.21	3162.49	65774.70

Asset D				
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2013	Additions during the tariff period	Total
BOND-XXXIV-DOCO DRAWL ON 01-JUN-2013-	8.84	478.00	0.00	478.00
BOND-XXXV-DOCO DRAWL ON 01-JUN-2013 DRAWL ON 01-JUN-2013-	9.64	3.00	0.00	3.00
BOND XXXVI-DOCO DRAWL ON 01-	9.35	20.00	0.00	20.00



Asset D				
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2013	Additions during the tariff period	Total
JUN-2013-				
BOND XXXVII-DOCO DRAWL ON 01-JUN-2013-	9.25	200.00	0.00	200.00
BOND XXXIX-DOCO DRAWL ON 01-JUN-2013-	9.40	125.00	0.00	125.00
SBI (21.03.2012)-DOCO DRAWL ON 01-JUN-2013-	10.26	225.00	0.00	225.00
BOND XL-DOCO Loan-	9.30	952.50	0.00	952.50
BOND - XLI-DOCO DRAWL ON 01-JUN-2013-	8.85	140.00	0.00	140.00
BOND - XLII-ADDCAP FOR 2013-2014 AddCap-	8.80	0.00	86.84	86.84
BOND - XLII-Loan-9-	8.80	49.05	0.00	49.05
IFC (IFC - A LOAN) (31419-00)-DOCO DRAWL ON 01-JUN-2013 DRAWL ON 01-JUN-2013-56.95	3.30	813.25	0.00	813.25
FC - BOND (17.01.2013)-DOCO DRAWL ON 01-JUN-2013 DRAWL ON 01-JUN-2013-56.95	4.10	237.48	0.00	237.48
BOND - XLIV-ADDCAP FOR 2013-2014 AddCap-1-	8.70	0.00	3642.18	3642.18
Total		3243.28	3729.02	6972.30

Asset E				
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2013	Additions during the tariff period	Total
BOND-XXXIV-Loan-1-	8.84	500.00	0.00	500.00
BOND XXXVI-Loan-2-	9.35	50.00	0.00	50.00
BOND XXXVII-Loan-3-	9.25	50.00	0.00	50.00
BOND XXXIX-Loan-4-	9.40	50.00	0.00	50.00
SBI (21.03.2012)-Loan-5-	10.21	45.00	0.00	45.00
BOND XL-ADDCAP FOR 2013-2014 AddCap-	9.30	0.00	6.26	6.26
BOND XL-Loan-6-	9.30	1593.24	0.00	1593.24
BOND - XLI-ADDCAP FOR 2013-2014 AddCap-	8.85	0.00	30.00	30.00
BOND - XLI-Loan-7-	8.85	393.00	0.00	393.00
BOND - XLII-ADDCAP FOR 2013-2014 AddCap-	8.80	0.00	36.46	36.46
BOND - XLII-Loan-8-	8.80	736.69	0.00	736.69
IFC (IFC - A LOAN) (31419-00)-Loan-9-61.11	3.29	1515.53	0.00	1515.53
FC- BOND (17.01.2013)-Loan-10-61.11	4.10	207.16	0.00	207.16
BOND - XLIV-ADDCAP FOR 2013-2014	8.70	0.00	1708.87	1708.87



Asset E				
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2013	Additions during the tariff period	Total
Add Cap Loan-				
Total		5140.62	1781.59	6922.21

Asset F				
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2013	Additions during the tariff period	Total
BOND-XXXIV-Loan-1-	8.84	600.00	0.00	600.00
BOND-XXXV-Loan-2-	9.64	23.00	0.00	23.00
BOND XXXVI-Loan-3-	9.35	73.00	0.00	73.00
BOND XXXVII-Loan-4-	9.25	400.00	0.00	400.00
BOND XXXIX-Loan-5-	9.40	205.00	0.00	205.00
SBI (21.03.2012)-Loan-6-	10.25	645.00	0.00	645.00
BOND XL-Loan-7-	9.30	500.00	0.00	500.00
BOND - XLI-Loan-7-	8.85	230.00	0.00	230.00
BOND - XLII-ADDCAP FOR 2013-2014 AddCap-	8.80	0.00	54.57	54.57
BOND - XLII-Loan-	8.80	384.33	0.00	384.33
IFC (IFC - A LOAN) (31419-00)-Loan-11-62.87	3.28	440.09	0.00	440.09
FC - BOND (17.01.2013)-Loan-12-62.87	4.10	427.52	0.00	427.52
BOND - XLIV-ADDCAP FOR 2013-2014 AddCap-1-	8.70	0.00	1684.80	1684.80
BOND - XLIV-Loan-10-	8.70	1496.68	0.00	1496.68
Total		5424.62	1739.37	7163.99

Asset G				
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2013	Additions during the tariff period	Total
BOND-XXXIV-Loan-1-	8.84	200.00	0.00	200.00
BOND-XXXV-Loan-2-	9.64	2.00	0.00	2.00
BOND XXXVI-Loan-3-	9.35	10.00	0.00	10.00
BOND XXXVII-Loan-4-	9.25	100.00	0.00	100.00
BOND XXXIX-Loan-5-	9.40	70.00	0.00	70.00
SBI (21.03.2012)-Loan-6-	10.25	150.00	0.00	150.00
BOND XL-Loan-7-	9.30	1000.00	0.00	1000.00
BOND - XLI-Loan-8-	8.85	130.00	0.00	130.00
BOND - XLII-ADDCAP FOR 2013-2014 Loan-9-	8.80	0.00	11.95	11.95
BOND - XLII-Loan-9-	8.80	127.36	0.00	127.36
IFC (IFC - A LOAN) (31419-00)-Loan-11-62.65	3.26	356.48	0.00	356.48



Asset G				
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2013	Additions during the tariff period	Total
FC - BOND (17.01.2013)-Loan-12-62.65	4.10	192.96	0.00	192.96
BOND - XLIV-ADDCAP FOR 2013-2014 AddCap-1-	8.70	0.00	229.04	229.04
BOND - XLIV-Loan-10-	8.70	1147.50	0.00	1147.50
Total		3486.30	240.99	3727.29

Asset H				
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2013	Additions during the tariff period	Total
				(Rs in lakh)
BOND XXXVII-DOCO DRAWL ON 01-NOV-2013-	9.25	100.00	0.00	100.00
BOND XXXIX-DOCO DRAWL ON 01-NOV-2013-	9.40	100.00	0.00	100.00
SBI (21.03.2012)-DOCO DRAWL ON 01-NOV-2013-	10.24	100.00	0.00	100.00
BOND XL-DOCO DRAWL ON 01-NOV-2013-	9.30	750.00	0.00	750.00
BOND - XLI-DOCO DRAWL ON 01-NOV-2013-	8.85	250.00	0.00	250.00
BOND - XLII-ADDCAP FOR 2013-2014 AddCap-	8.80	0.00	78.46	78.46
BOND - XLII-Loan-	8.80	1492.86	0.00	1492.86
IFC (IFC - A LOAN) (31419-00)-DOCO DRAWL ON 01-NOV-2013 DRAWL ON 01-NOV-2013-62.36	3.28	1598.29	0.00	1598.29
FC - BOND (17.01.2013)-DOCO DRAWL ON 01-NOV-2013 DRAWL ON 01-NOV-2013-62.36	4.10	204.54	0.00	204.54
BOND - XLIV-ADDCAP FOR 2013-2014 Add Cap Loan-	8.70	0.00	936.29	936.29
BOND - XLIV-DOCO DRAWL ON 01-NOV-2013-	8.70	460.00	0.00	460.00
Total		5055.69	1014.75	6070.44



Combined Assets A to H for 2014-19 Tariff Period				
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
				(Rs in lakh)
BOND-XXXIV-Loan-1-	8.84	8683.00	0.00	8683.00
BOND-XXXV-Loan-2-	9.64	112.00	0.00	112.00
BOND XXXVI-Loan-3-	9.35	715.00	0.00	715.00
BOND XXXVII-Loan-4-	9.25	5510.00	0.00	5510.00
BOND XXXIX-Loan-5-	9.40	4500.00	0.00	4500.00
SBI (21.03.2012)-Loan-6-	10.25	8100.00	0.00	8100.00
BOND XL-Loan-7-	9.30	21645.00	0.00	21645.00
BOND - XLI-Loan-8-	8.85	5133.00	0.00	5133.00
BOND - XLII-ADDCAP FOR add-cap-13-14-	8.80	945.68	0.00	945.68
BOND - XLII-ADDCAP FOR 2014-2015 add-cap-14-15-	8.80	0.00	700.66	700.66
BOND - XLII-doco-	8.80	15263.11	0.00	15263.11
IFC (IFC - A LOAN) (31419-00)-Loan-11A-54.91	3.23	471.68	0.00	471.68
IFC (IFC - A LOAN) (31419-00)-Loan-11B-54.24	3.23	1017.54	0.00	1017.54
IFC (IFC - A LOAN) (31419-00)-Loan-11C-56.95	3.23	813.25	0.00	813.25
IFC (IFC - A LOAN) (31419-00) - Loan-11D-61.11	3.23	1515.53	0.00	1515.53
IFC (IFC - A LOAN) (31419-00)-Loan-11E-62.36	3.23	1598.29	0.00	1598.29
IFC (IFC - A LOAN) (31419-00)-Loan-11F-62.87	3.23	440.09	0.00	440.09
IFC (IFC - A LOAN) (31419-00)-Loan-11G-63.12	3.23	3008.30	0.00	3008.30
IFC (IFC - A LOAN) (31419-00)-Loan-11H-62.65	3.23	356.48	0.00	356.48
FC - BOND (17.01.2013)-Loan-12A-54.91	4.10	435.99	0.00	435.99
FC - BOND (17.01.2013)-Loan-12B-54.24	4.10	363.41	0.00	363.41
FC - BOND (17.01.2013)-Loan-12C-56.95	4.10	237.48	0.00	237.48
FC - BOND (17.01.2013)-Loan-12D-61.11	4.10	207.16	0.00	207.16
FC - BOND (17.01.2013)-Loan-12E-62.36	4.10	204.54	0.00	204.54
FC - BOND (17.01.2013)-Loan-12F-62.87	4.10	427.52	0.00	427.52
FC - BOND (17.01.2013)-Loan-12G-63.12	4.10	4492.88	0.00	4492.88
FC - BOND (17.01.2013)-Loan-12H-62.65	4.10	192.96	0.00	192.96
BOND - XLIV-ADDCAP FOR Addcap	8.70	14189.65	0.00	14189.65



Combined Assets A to H for 2014-19 Tariff Period				
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
Loan-1-				
BOND - XLIV-Loan-10-	8.70	10841.50	0.00	10841.50
BOND XLVI -ADDCAP FOR 2014-2015 Addcap Loan-2-	9.30	0.00	2655.20	2655.20
Bond XLVII-ADDCAP FOR 2014-2015 Addcap Loan-3-	8.93	0.00	1456.00	1456.00
Bond XLVIII-ADDCAP FOR 2014-2015 Addcap Loan-4-	8.20	0.00	483.86	483.86
Total		111421.04	5295.72	116716.76

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

Summary	2013-14			
	Asset A	Asset B	Asset C	Asset D
Gross Opening Loan	6073.75	5212.98	62612.21	3243.28
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00
Net Loans Opening	6073.75	5212.98	62612.21	3243.28
Add: Draw(s) during the Year	1390.65	2112.73	3162.49	3729.02
Less: Repayments of Loan during the year	0.00	0.00	0.00	0.00
Net Closing Loan	7464.40	7325.71	65774.70	6972.30
Average Net Loan	6769.08	6269.35	64193.46	5107.79
Rate of Interest on Loan (%)	8.4179	7.8727	8.5114	7.8677
Interest on Loan	569.82	493.57	5463.78	401.87

Summary	2013-14			
	Asset E	Asset F	Asset G	Asset H
Gross Opening Loan	5140.62	5424.62	3486.30	5055.69
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00
Net Loans Opening	5140.62	5424.62	3486.30	5055.69
Add: Draw(s) during the Year	1781.59	1739.37	240.99	1014.75



	2013-14			
Summary	Asset E	Asset F	Asset G	Asset H
Less: Repayments of Loan during the year	0.00	0.00	0.00	0.00
Net Closing Loan	6922.21	7163.99	3727.29	6070.44
Average Net Loan	6031.42	6294.31	3606.80	5563.07
Rate of Interest on Loan (%)	7.4027	8.3092	8.1951	7.1390
Interest on Loan	446.49	523.01	295.58	397.15

	Combine Assets A to H				
Summary	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	111421.04	116716.76	116716.76	116716.76	116716.76
Cumulative Repayments of Loans upto Previous Year	0.00	723.58	1915.66	6123.27	11252.99
Net Loans Opening	111421.04	115993.18	114801.10	110593.49	105463.77
Add: Draw(s) during the Year	5295.72	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	723.58	1192.08	4207.61	5129.72	13594.76
Net Closing Loan	115993.18	114801.10	110593.49	105463.77	91869.01
Average Net Loan	113707.11	115397.14	112697.30	108028.63	98666.39
Rate of Interest on Loan (%)	8.3139	8.3252	8.3027	8.2841	8.2684
Interest on Loan	9453.54	9607.03	9356.92	8949.16	8158.13

