

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 162/TT/2013**

**Coram:**

**Shri A.K. Singhal, Member**

**Shri A.S. Bakshi, Member**

**Date of Hearing: 03.03.2015**

**Date of Order : 18.06.2015**

**In the matter of:**

Approval for determination of transmission tariff for (1) 400 kV, D/C Raipur (Existing)-Raipur PS (Durg)) T/L with associated bays, (2) 400 kV, D/C Raigarh PS (Near Kotra)-Raigarh (Existing) Sub-station T/L with associated bays and (3) ICTs and Reactors at Raigarh (Kotra) and Raipur (Durg) with associated bays under Establishment of Pooling stations at Raigarh (Kotra) and Raipur for IPP Generation Projects in Chhattisgarh (set "A"/DPR-I) in Western Region for tariff block 2009-14, under Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009

**And in the matter of:**

Power Grid Corporation of India Limited,  
"Saudamini", Plot No.2,  
Sector-29, Gurgaon -122 001

.....**Petitioner**

**Vs**

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

4. Electricity Department, Government of Goa,  
Vidyut Bhawan, Panaji,  
Near Mandvi Hotel, Goa-403 001
5. Electricity Department,  
Administration of Daman and 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  
Chhattisgarh-492 013
8. Madhya Pradesh Audyogik Kendra,  
Vikas Nigam (Indore) Limited,  
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 Limited,  
400 kV GSS Building (Ground Floor), Ajmer Road,  
Heerapura, Jaipur
11. Jaipur Vidyut Vitran Nigam Limited,  
400 kV GSS Building (Ground Floor), Ajmer Road,  
Heerapura, Jaipur
12. Jodhpur Vidyut Vitran Nigam Limited,  
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 Department,  
Government of Jammu & Kashmir,  
Mini Secretariat, Jammu
17. Uttar Pradesh Power Corporation Limited,  
(Formerly Uttar Pradesh State Electricity Board),  
Shakti Bhawan, 14, Ashok Marg,  
Lucknow-226 001
18. Delhi Transco Limited,  
Shakti Sadan, Kotla Road,  
New Delhi-110 002
19. BSES Yamuna Power Limited,  
BSES Bhawan, Nehru Place  
New Delhi
20. BSES Rajdhani Power Limited,  
BSES Bhawan, Nehru Place,  
New Delhi
21. North Delhi Power Limited,  
Power Trading & Load Dispatch Group,  
Cennet Building, Adjacent to 66/11kV Pitampura-3,  
Grid Building, Near PP Jewellers,  
Pitampura, New Delhi-110 034
22. Chandigarh Administration,  
Sector-9, Chandigarh
23. Uttarakhand Power Corporation Limited,  
Urja Bhawan, Kanwali Road,  
Dehradun
24. North Central Railway,  
Allahabad
25. New Delhi Municipal Council,  
Palika Kendra, Sansad Marg,  
New Delhi-110 002
26. Karnataka Power Transmission Corporation Limited,  
(KPTCL), Kaveri Bhavan,  
Bangalore-560 009
27. Transmission Corporation of Andhra Pradesh Limited,  
(APTRANSCO), Vidyut Soudha,  
Hyderabad-500 082

28. Kerala State Electricity Board (KSEB),  
Vaidyuthi Bhavanam, Pattom,  
Thiruvananthapuram-695 004
29. Tamil Nadu Generation and Distribution Corporation Limited,  
(TANGEDCO), NPKRR Maaligai,  
800, Anna Salai, Chennai-600 002
30. Electricity Department,  
Govt. of Pondicherry,  
Pondicherry-605 001
31. Eastern Power Distribution Company of Andhra Pradesh Limited,  
(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), Opposite NIT Petrol Pump,  
Chaitanyapuri, Kazipet,  
Warangal-506 004, Andhra Pradesh
35. Bangalore Electricity Supply Company Limited, (BESCOM),  
Corporate Office, K.R. circle,  
Bangalore-560 001, Karnataka
36. Gulbarga Electricity Supply Company Limited, (GESCOM),  
Station Main Road, Gulbarga,  
Karnataka
37. Hubli Electricity Supply Company Limited, (HESCOM),  
Navanagar, PB Road, Hubli,  
Karnataka
38. MESCOM Corporate Office,  
Paradigm Plaza, AB Shetty Circle,  
Mangalore-575 5001, Karnataka
39. Chamundeswari Electricity Supply Corporation Limited,  
(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.)-492 004
41. Athena Chhattisgarh Power Private Limited,  
7-1-24 B Block, 5<sup>th</sup> Floor, 'Roxana Towers',  
Greenlands, Begumpet,  
Hyderabad-500 016
42. Jindal Power Limited,  
Post Box No.-16, Kharsia Road,  
Raigarh-496 001
43. SKS Power Generation (Chhattisgarh) Limited,  
501 B, Elegant Business Park, Andheri Kurla Road,  
J.B. Nagar, Andheri (East), Mumbai-400 059
44. Korba West Power Company Limited,  
2<sup>nd</sup> Floor, Centrum Plaza, Golf Course Road,  
Sector-53, Gurgaon-122 002
45. KSK Mahanadi Power Company Limited,  
8-2/293/82/A/431/A, Road No. 22, Jubilee Hills,  
Hyderabad-500 033
46. Bharat Aluminium Company Limited,  
Core-6, Scope Office Complex,  
Lodi Road, New Delhi-110 003
47. Visa Power Limited,  
HUL Building, 2<sup>nd</sup> Floor, 9,  
Shakespeare Sarani,  
Kolkata-700 071
48. GMR Chhattisgarh Energy Private Limited,  
10<sup>th</sup> Floor Tower, D Block,  
Knowledge Park, 4/1, Bannerghatta Road,  
Near Dairy Circle, Bangalore-560 029
49. D.B. Power Limited,  
Plot No.-813, Phase-V, Udyog Vihar,  
Gurgaon-122 016

.....Respondents

**For petitioner** : Shri S. K. Venkatesan, PGCIL  
Shri M. M. Mondal, PGCIL  
Shri Mohd. Mohsin, PGCIL  
Shri Prashant Sharma, PGCIL  
Shri Rakesh Prasad, PGCIL

**For respondents :** None

### **ORDER**

The petition has been filed by Power Grid Corporation of India Limited (PGCIL) for approval of transmission charges for (1) 400 kV, D/C Raipur (Existing)-Raipur PS (Durg)) T/L with associated bays, (2) 400 kV, D/C Raigarh PS (Near Kotra)-Raigarh (Existing) Sub-station T/L with associated bays and (3) ICTs and Reactors at Raigarh (Kotra) and Raipur (Durg) with associated bays (hereinafter referred to as "transmission assets") under Establishment of Pooling stations at Raigarh (Kotra) and Raipur for IPP Generation Projects in Chhattisgarh (set "A"/DPR-I) in Western Region from the date of commercial operation of all the assets to 31.3.2014 for tariff block 2009-14 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations' 2009 (hereinafter referred to as the "2009 Tariff Regulations").

2. The petitioner has been entrusted with the implementation of Establishment of Pooling Stations at Raigarh (Kotra) and Raipur for IPP Generation Projects in Chhattisgarh. The Investment approval (IA) of the project was accorded by the Board of Directors of PGCIL vide Memorandum 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). The project was scheduled to be commissioned within 32 months from the date of Investment Approval (IA) i.e. by 14.8.2013 say 1.9.2013.

3. The scope of project 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

**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

4. This order has been issued after considering PGCIL affidavits dated 7.8.2013, 27.8.2013, 19.12.2014 and 27.2.2015.

5. The petitioner filed the instant petition for eight assets on the basis of both actual (Asset-A, B and D) and anticipated dates of commercial operation (Asset-C, E, F, G and H) initially. The petitioner vide affidavit dated 19.12.2014 has submitted the details of actual dates of commercial operation. The details of assets covered and the scheduled and actual date of commercial operation are as given hereunder:-

Particulars	Schedule DOCO as per IA	Actual DOCO
<b>Asset-A:</b> Raipur (Existing S/S)-Raipur PS (Durg) 400 kV D/C Transmission Line along with associated bays	1.9.2013	1.4.2013
<b>Asset-B :</b> 400 kV D/C Raigarh PS (Near Kotra)-Raigarh (Existing) S/S Transmission Line along with associated bays		1.5.2013
<b>Asset-C:</b> 765 kV D/C Raigarh PS (Near Kotra)-Raipur PS (Durg) Transmission Line along with associated bays		1.2.2014
<b>Asset-D:</b> 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

Pooling Station along with associated bays		
<b>Asset-E:</b> 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		1.8.2013
<b>Asset-F:</b> 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		1.12.2013
<b>Asset-G:</b> 765/400 kV, 1500 MVA, ICT-III at Raigarh Pooling Station (Near Kotra) along with associated bays		1.3.2014
<b>Asset-H:</b> 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 Reactor along with associated bays		1.11.2013

6. The provisional tariff in respect of the above mentioned eight assets was approved vide order dated 9.9.2013 under Regulation 5(4) of the 2009 Tariff Regulations. This was subject to adjustment as provided under Regulation 5(3) of the 2009 Tariff Regulations.

7. In response to a query, the petitioner has submitted that Long Term Access Agreement has been entered into between the petitioner and IPPs situated in Chhattisgarh on 24.2.2010. The Regulatory Approval was granted vide order dated 31.5.2010 by the Commission for High Capacity Power Transmission Corridors to the petitioner.

8. The transmission charges have been claimed for instant assets as follows:-

Particulars	(₹ in lakh)			
	Asset-A 2013-14	Asset-B 2013-14	Asset-C 2013-14	Asset-D 2013-14
Depreciation	399.13	267.51	806.76	328.13
Interest on Loan	553.98	445.54	905.45	343.88
Return on Equity	524.20	446.70	829.11	346.43
Interest on working capital	48.27	39.29	61.35	34.10
O & M Expenses	278.62	244.53	77.48	207.28
<b>Total</b>	<b>1804.20</b>	<b>1443.57</b>	<b>2680.15</b>	<b>1259.82</b>
Particulars	Asset-E	Asset-F	Asset-G	Asset-H



	2013-14	2013-14	2013-14	2013-14
Depreciation	303.06	157.15	22.76	178.55
Interest on Loan	302.85	177.49	25.07	172.19
Return on Equity	321.86	167.21	23.72	187.73
Interest on working capital	35.48	15.77	2.32	19.77
O & M Expenses	270.56	82.91	13.09	141.83
<b>Total</b>	<b>1233.81</b>	<b>600.53</b>	<b>86.96</b>	<b>700.07</b>

9. The details submitted by the petitioner in support of its claim for interest on working capital are as under:-

(₹ in lakh)				
Particulars	Asset-A	Asset-B	Asset-C	Asset-D
	2013-14	2013-14	2013-14	2013-14
Maintenance Spares	41.79	40.01	69.73	37.31
O & M Expenses	23.22	22.23	38.74	20.73
Receivables	300.70	262.47	2680.15	251.96
<b>Total</b>	<b>365.71</b>	<b>324.71</b>	<b>2788.62</b>	<b>310.00</b>
Rate of Interest	13.20%	13.20%	13.20%	13.20%
<b>Interest</b>	<b>48.27</b>	<b>39.29</b>	<b>61.35</b>	<b>34.10</b>
Particulars	Asset-E	Asset-F	Asset-G	Asset-H
	2013-14	2013-14	2013-14	2013-14
Maintenance Spares	60.88	37.31	23.56	51.06
O & M Expenses	33.82	20.73	13.09	28.37
Receivables	308.45	300.27	173.92	280.03
<b>Total</b>	<b>403.15</b>	<b>358.31</b>	<b>210.57</b>	<b>359.46</b>
Rate of Interest	11.75%	13.20%	13.20%	13.20%
<b>Interest</b>	<b>35.48</b>	<b>15.77</b>	<b>2.32</b>	<b>19.77</b>

10. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act. Maharashtra State Electricity Distribution Company Limited (MSEDCL), Respondent No. 2, and Uttar Pradesh Power Corporation Limited (UPPCL), Respondent No. 17 have filed replies vide affidavits dated 6.9.2013 and 22.10.2013 respectively. The petitioner has not filed rejoinders to the reply of MSEDCL and UPPCL. The respondents have raised issues related to estimated/projected additional capitalisation cost, calculation of transmission charges, additional return on equity, service

tax/license fee/filing fee, sharing of transmission charges, grossing up of rate of return on equity and claim of floating rate of interest. The objections raised by the respondents are addressed in the relevant paragraphs of this order.

11. During the hearing on 3.3.2015, the petitioner was directed to furnish certain information for the purpose of determination of tariff but the petitioner has not submitted the information despite an extension. As such, this order is being issued on the basis of available information available on record. However, the petitioner is once again directed to submit all the information required at the time of truing up petition.

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

### **Capital Cost**

13. Regulation 7 of the 2009 Tariff Regulations provides as follows:-

**“(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 fund 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.

(2) The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff:

Provided that in case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out based on the benchmark norms to be specified by the Commission from time to time:

Provided further that in cases where benchmark norms have not been specified, prudence check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of tariff.”

14. The petitioner has initially submitted the capital cost incurred and the capital cost projected to be incurred as on the anticipated/actual date of commercial operation in the petition. Later, vide affidavit dated 19.12.2014, it has submitted the details of the capital cost. The details of apportioned approved cost, capital cost as on date of commercial operation and estimated additional capital expenditure incurred or projected to be incurred for the assets covered in the petition are as under:-

(₹ in lakh)

Particulars	Apportioned approved cost	Capital Cost as on COD	Add-cap for 2013-14	Capital Cost upto 31.3.2014	Projected Add-cap		Total estimated Cost
					2014-15	2015-16	
Asset-A	13867.10	8704.01	1959.41	10663.41	1917.15	1217.38	13797.95
Asset-B	<b>13328.94</b>	7537.22	2928.43	10465.65	1877.47	2386.39	<b>14729.51</b>
Asset-C	<b>83831.28</b>	90073.93	3667.11	<b>93741.04</b>	3839.24	2024.36	<b>99604.64</b>
Asset-D	14840.47	5077.35	5203.11	10280.46	700.22	231.34	11212.02
Asset-E	13009.26	7697.63	2441.25	10138.88	694.63	296.84	11130.35
Asset-F	14709.43	8064.70	2406.85	10471.55	1720.77	631.61	12823.93
Asset-G	6668.51	5094.66	327.20	5421.86	227.32	101.50	5750.68
Asset-H	11697.20	7653.72	1337.56	8991.28	597.09	247.96	9836.33
<b>Total</b>	<b>171952.20</b>	<b>139903.22</b>	<b>20270.92</b>	<b>160174.13</b>	<b>11573.89</b>	<b>7137.38</b>	<b>178885.41</b>

### **Cost Over-run**

15. The petitioner has commissioned all eight assets progressively and claimed tariff. As per original cost estimates, total estimated completion cost falls within the apportioned approved cost for all the assets except Asset-B and Asset-C. However, capital expenditure incurred up to 31.3.2014 exceeds the apportioned approved cost for Asset-C by ₹9909.76 lakh. The expenditure incurred up to 31.3.2014 for the rest of the seven assets covered in the instant petition, falls within the apportioned approved cost. In the case of Asset-B also there is cost over-run on comparison of apportioned approved cost estimate with total completion cost. The petitioner vide affidavit dated 28.2.2015 has submitted the Revised Cost Estimates (RCE) without the re-apportionment. In the absence of re-apportioned approved cost, it is not possible to determine the reallocated amount for each asset. Accordingly, Capital cost has been compared with the FR based apportioned approved cost for the purpose of determination of tariff. The petitioner, during the hearing on 3.3.2015 was directed to submit the reasons along with documentary evidence for cost over-run in the case of Asset-B and Asset-C but the petitioner has failed to submit the same. Thus, the capital cost of Asset-B and Asset-C is accordingly restricted. This approach has been upheld by the Appellate Tribunal for Electricity in its order dated 28.11.2013 in Appeal No. 165 of 2012. Subsequently, the Commission, in its order dated 18.2.2014 in Petition No. 216/TT/2012, has considered the apportioned approved cost of individual asset for restricting the capital expenditure due to cost over-run for the purpose of tariff determination. The same approach has been adopted in the present case

and capital expenditure has been restricted to apportioned approved cost. The petitioner is directed to submit the reasons for cost over-run in case of Asset-B and Asset-C at the time of truing up.

### **Time Over-run**

16. The project was scheduled to be commissioned within 32 months from the date of IA dated 15.12.2010. Accordingly, the schedule date of commercial operation works out to 14.8.2013 say 1.9.2013 against which Asset-A, Asset-B, Asset-C, Asset-D, Asset-E, Asset-F, Asset-G and Asset-H have been put under commercial operation on 1.4.2013, 1.5.2013, 1.2.2014, 1.6.2013, 1.8.2013, 1.12.2013, 1.3.2014 and 1.11.2013 respectively. Hence, there is delay of 5 months, 3 months, 6 months and 2 months in the commissioning of Asset-C, Asset-F, Asset-G and Asset-H respectively.

17. The petitioner vide affidavit dated 2.3.2015 has submitted that time over-run was due to severe RoW issues, court cases and prolonged monsoon. The petitioner has further made the following submissions:-

- a) As regards time over-run in case of Asset-C, RoW issues, court cases and prolonged monsoon has delayed the commissioning of the asset. Few locations at 765 kV D/C Raigarh-Raipur line were severely affected due to RoW issues. Work was stopped by villagers. The issue was taken up with State Administration at various levels and the work was intermittently hampered from February, 2012 to December, 2013. After resolution of issues, the line could be commissioned in January, 2014. Two cases were filed for insufficient

compensation in the Hon'ble High Court of Chhattisgarh hampering construction activities at some locations from February, 2012 to September, 2012 for about 7 months. The work could be resumed after vacation of stay orders on 25.7.2012 and 26.9.2012 and the line was commissioned in January, 2014. The prolonged monsoon in Chhattisgarh delayed the work related to foundation and subsequent activities of Raigarh-Raipur line and the associated bays.

- b) As regards Assets- F, G and H, work related to foundation and subsequent activities was delayed at Raigarh and Raipur Sub-stations under the project due to prolonged monsoon in the year 2013 in the State of Chhattisgarh. Materials could not reach at site due to water logging at various locations of line and sub-stations even after monsoon affecting the commissioning of the line.

18. The petitioner has enclosed copies of letters written to Government Authorities with regard to hindrance caused by the villagers at various locations and has also submitted the documentary evidence with regard to the two court cases filed for insufficient compensation against the petitioner in the Hon'ble High Court of Chhattisgarh in case of Asset-C. We have considered these submissions of the petitioner. We are of the view that RoW issues, court cases and monsoon are beyond the control of the petitioner and accordingly time over-run of 5 months from 1.9.2013 to 1.2.2104 in commissioning of Asset-C is condoned.

19. As regards F, G, and H, the petitioner has submitted that there was prolonged monsoon in the year 2013 in the State of Chhattisgarh. The

petitioner has submitted data downloaded from the website of Indian Metrological Department (IMD) indicating details of rainfall for the last 5 years. It is observed that the percentage departure of rainfall from the long period averages of rainfall in the Raipur district was of the order of 85%, 24% and 162% during June, July and October, 2013. Similarly, the percentage departure of rainfall from the long period averages of rainfall in the Raigarh district was of the order of 146%, 386%, 371%, 111% and 276% during June, July, August, September and October, 2013. The petitioner has also submitted photographs showing water logged transmission line and sub-stations. The petitioner has also submitted that even after monsoon the material could not be sent to the location of line and sub-stations due to water logging. We are of the view that unusual rains during June to October, 2013 have prevented the petitioner from carrying out the foundation works and subsequent activities at Raigarh and Raipur Sub-stations. Accordingly, time over-run of 3 months, 6 months and 2 months in commissioning of Asset-F, G and H respectively is also condoned.

### **Treatment of IDC and IEDC**

20. The details of the IDC claimed by the petitioner are as under:-

(₹ in lakh)	
<b>Particulars</b>	<b>Amount</b>
Asset-A	284.70
Asset-B	291.09
Asset-C	6347.52
Asset-D	604.50
Asset-E	643.58
Asset-F	752.05
Asset-G	349.41
Asset-H	617.48

<b>Total</b>	<b>9890.33</b>
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IDC claimed has been deducted from the element cost as on COD of the respective assets on pro-rata basis.

21. As per the 2009 Tariff Regulations, the claim of IDC and IEDC is allowable on cash basis and any undischarged IDC/IEDC on the date of commercial operation can be claimed as add-cap, but the petitioner has not submitted required details. The assets in the instant petition, as per Form-13, have been funded through foreign loan as well as domestic loans and some of the loans are carrying floating rate of interest and the IDC is to be verified with the loan deployed. In order to verify the claim of IDC, the petitioner was directed during the hearing on 3.3.2015 to furnish certain information by 3.4.2015 and the date was extended to 27.4.2015 but no information has been submitted by the petitioner.

22. Thus, it is not possible to ascertain the claim of IDC in the absence of adequate information regarding IDC computation e.g. interest payment date, exchange rate and interest rate for foreign loans. In case of domestic loans, the petitioner has deployed Bonds carrying fixed rate of interest and SBI loan carrying floating rate of interest but has not submitted the applicable interest rate from time to time for SBI loan. As such, certain assumptions have been made for determining the admissible IDC as on the date of commercial operation on cash basis and they are as follows:-

- a. Interest has been paid on time without any default;
- b. Foreign loans have not been considered;



- c. Out of three different rates of interest submitted by the petitioner for SBI loan, minimum interest rate i.e. 10.05% has been considered as the petition contains more than a single asset having SBI/any other corporate loan with different rate of interest for the assets with different CODs, for all such assets;

23. In view of non-submission of required information by the petitioner, the un-discharged liability pertaining to IDC would be considered once it is discharged subject to prudence check and submission of adequate information at the time of truing up. Therefore, the petitioner is directed to submit the detailed working corresponding to the loan deployed and actual cash expenditure in Form 14A at the time of truing up petition.

24. The details of the IDC on cash basis considered for tariff purpose is in the instant petition are as under:-

(₹ in lakh)	
Particulars	Amount*
Asset-A	248.84
Asset-B	171.21
Asset-C	5281.31
Asset-D	161.98
Asset-E	249.99
Asset-F	402.87
Asset-G	210.46
Asset-H	125.94
<b>Total</b>	<b>6852.60</b>

\*Admissible IDC on cash basis has been added to the element cost as on COD on pro-rata basis in the respective element of asset.

25. Similarly, the petitioner has not submitted details on cash basis for admissible IEDC. Therefore, IEDC has been worked out as 5% on Hard Cost submitted in the Abstract Cost Estimates by the petitioner. Thus, in the

absence of proper and sufficient details, IEDC claim is restricted to 5% of Hard Cost upto the date of commercial operation for computation tariff in the instant petition. The petitioner is directed to submit the month-wise/ head-wise details of the actual IEDC paid/incurred on cash basis.

### **Treatment of Initial Spares**

26. The details of initial spares claimed by the petitioner are as follows:-

(₹ in lakh)		
Particulars	Elements	Amount
Asset-A	Sub Station	317.28
	Transmission Line	41.55
Asset-B	Sub Station	164.77
Asset-C	Transmission Line	667.49
	Sub Station	16.77
Asset-D	Sub Station	356.56
Asset-E	Sub Station	143.84
Asset-F	Sub Station	412.9
Asset-H	Sub Station	162.73

27. The petitioner has not claimed any initial spares for Asset-G and the claims for the cost of the initial spares for Asset-B, Asset-D, Asset-E and Asset-H are within the ceiling limit specified in Regulation 8 of the 2009 Tariff Regulations, hence the same has been included in the capital cost.

28. The claim for the initial spares for Asset-A, Asset-C and Asset-F exceed the limit specified in Regulation 8 of the 2009 Tariff Regulations. The details of the amount of initial spares claimed by the petitioner and allowed are as follows:-

**Asset-A**

(₹ in lakh)

Particulars	Capital cost claimed up to 31.3.2014	Initial spares claimed	Capital cost up to 31.3.2014 considering IDC on cash basis	Proportionate initial spares	Ceiling limit	Initial spares worked out	Excess initial spares claimed
Sub-station	6738.74	317.28	6722.49	316.51	2.50%	164.256	152.259
Transmission line	3924.68	41.55	3905.07	41.34	0.75%	29.197	12.145

**Asset-F**

(₹ in lakh)

Particulars	Capital Cost claimed up to 31.3.2014	Initial Spares claimed	Capital Cost up to 31.3.2014 considering IDC on Cash basis	proportionate initial spares	Ceiling limit	Initial Spares worked out	Excess initial spares claimed
Sub-station	10471.55	412.90	9974.74	393.31	2.50%	245.678	147.633

29. There is cost over-run in the case of Asset-C. Accordingly, capital cost has been restricted to apportioned approved cost. The petitioner has claimed initial spares of ₹16.77 lakh for sub-station which falls within the ceiling limit specified under the 2009 Tariff Regulations, whereas in the case of transmission line, after adjusting the cost over-run, capital expenditure works out to ₹77172.10 lakh with admissible initial spares of ₹578.79 lakh against the claim of ₹667.49 lakh. However, no adjustment for excess initial spares has been considered in the instant petition as the capital cost has been restricted upto apportioned approved cost. This shall be considered at the time of truing-up petition subject to furnishing of all relevant information by the petitioner regarding capital cost as per para 16. Further, the cut-off date falls in the next tariff block in case of all the assets. Thus, admissible initial spares have been determined considering the capital cost only up to 31.3.2014 after taking into account the reduction in the capital cost due to

adjustment of IDC claimed and IDC worked out on cash basis. In view of above, the initial spares shall be subject to review in the next tariff block on the submission of the capital expenditure upto cut-off date.

### **Capital cost as on the date of commercial operation**

30. The capital cost as on date of commercial operation after taking into accounting cost over-run, time over-run, capitalization of IDC/IEDC and admissible cost of initial spares has been considered for the purpose of the determination of transmission tariff as under:-

#### **Asset-A**

Particulars	(₹ in lakh)		
	Capital cost as on COD as per Auditor's certificate dated 19.11.2014	Admissible capital cost considering IDC on Cash Basis and Adjusting IEDC, if any	Admissible capital cost after restricting initial spare as per ceiling limit
<b>Capital expenditures as on COD</b>	<b>1.4.2013</b>		
Freehold land	1605.30	1605.30	1605.30
Leasehold land	-	-	-
Building and Civil works	1099.78	1094.22	1094.22
Transmission Line	3881.56	3861.95	3849.81
Sub-Station Equipments	2117.37	2106.67	1954.41
PLCC	-	-	-
<b>Total</b>	<b>8704.01</b>	<b>8668.15</b>	<b>8503.74</b>

#### **Asset-B**

Particulars	(₹ in lakh)	
	Capital cost as on COD as per Auditor's certificate dated 19.11.2014	Admissible capital cost considering IDC on Cash Basis and Adjusting IEDC, if any
<b>Capital expenditures as on COD</b>	<b>1.5.2013</b>	
Freehold land	2772.62	2772.62
Leasehold land	-	-
Building and Civil works	1457.47	1420.80
Transmission Line	1042.44	1016.21
Sub-Station Equipments	2184.86	2129.89
PLCC	79.83	77.82
<b>Total</b>	<b>7537.22</b>	<b>7417.34</b>

**Asset-C**

(₹ in lakh)

Particulars	Capital cost as on COD as per Auditor's certificate dated 19.11.2014	Admissible capital cost considering IDC on Cash Basis	Capital cost restricted due to cost over-run*
<b>Capital expenditures as on COD</b>	<b>1.2.2014</b>		
Freehold land	-	-	-
Leasehold land	-	-	-
Building and Civil works	630.42	622.96	586.73
Transmission Line	82918.86	81937.35	77172.10
Sub-Station Equipments	6364.34	6289.01	5923.25
PLCC	160.31	158.41	149.20
<b>Total</b>	<b>90073.93</b>	<b>89007.72</b>	<b>83831.28</b>

\*There is cost over-run as on COD even after consideration of IDC on cash basis. Thus, the claim of capital cost of ₹90073.93 lakh has been restricted to approved apportioned cost of ₹83831.28 lakh subject to submission of details of revised apportioned approved cost and review of the same by the Commission at the time of truing-up petition.

**Asset-D**

(₹ in lakh)

Particulars	Capital cost as on COD as per Auditor's certificate dated 19.11.2014	Admissible capital cost considering IDC on Cash Basis	Admissible capital cost after restricting initial spare as per ceiling limit
<b>Capital Expenditures as on COD</b>	<b>1.6.2013</b>		
Freehold land	-	-	-
Leasehold land	-	-	-
Building and Civil works	262.46	239.59	239.59
Transmission Line	-	-	-
Sub-Station Equipments	4814.89	4395.25	4395.25
PLCC	-	-	-
<b>Total</b>	<b>5077.35</b>	<b>4634.83</b>	<b>4634.83</b>

**Asset-E**

(₹ in lakh)

Particulars	Capital cost as on COD as per Auditor's certificate dated 19.11.2014	Admissible capital cost considering IDC on Cash Basis
<b>Capital Expenditures as on COD</b>	<b>1.8.2013</b>	
Freehold land	-	-
Leasehold land	-	-

Building and Civil works	661.56	627.73
Transmission Line	-	-
Sub-Station Equipments	7036.07	6676.31
PLCC	-	-
<b>Total</b>	<b>7697.63</b>	<b>7304.04</b>

#### **Asset-F**

(₹ in lakh)			
Particulars	Capital cost as on COD as per Auditor's certificate dated 19.11.2014	Admissible capital cost considering IDC on Cash Basis	Admissible capital cost after restricting initial spare as per ceiling limit
<b>Capital Expenditures as on COD</b>	<b>1.12.2013</b>		
Freehold land	-	-	-
Leasehold land	-	-	-
Building and Civil works	809.78	774.72	774.72
Transmission Line	-	-	-
Sub-Station Equipments	7254.92	6940.80	6793.17
PLCC	-	-	-
<b>Total</b>	<b>8064.70</b>	<b>7715.52</b>	<b>7567.89</b>

#### **Asset-G**

(₹ in lakh)		
Particulars	Capital cost as on COD as per Auditor's certificate dated 19.11.2014	Admissible capital cost considering IDC on Cash Basis
<b>Capital Expenditures as on COD</b>	<b>1.3.2014</b>	
Freehold land	-	-
Leasehold land	-	-
Building and Civil works	179.18	174.29
Transmission Line	-	-
Sub-Station Equipments	4915.48	4781.42
PLCC	-	-
<b>Total</b>	<b>5094.66</b>	<b>4955.71</b>

#### **Asset-H**

(₹ in lakh)		
Particulars	Capital cost as on COD as per Auditor's certificate dated 19.11.2014	Admissible capital cost considering IDC on Cash Basis
<b>Capital Expenditures as on COD</b>	<b>1.11.2013</b>	
Freehold land	-	-

Leasehold land	-	-
Building and Civil works	375.88	351.74
Transmission Line	-	-
Sub-Station Equipments	7277.84	6810.44
PLCC	-	-
<b>Total</b>	<b>7653.72</b>	<b>7162.18</b>

### **Projected Additional Capital Expenditure**

31. Clause (1) of Regulation 9 of the 2009 Tariff Regulations provides as follows:-

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

- (i) Undischarged liabilities;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital Spares within the original scope of work, subject to the provisions of Regulation 8;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (v) Change in Law.”

32. Clause (11) of Regulation 3 of the 2009 Tariff Regulations defines

“cut-off” date as under:-

“cut-off date” means 31<sup>st</sup> March of the year closing after 2 years of the year of commercial operation of the project, and in case the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31<sup>st</sup> March of the year closing after 3 years of the year of commercial operation”.

33. Therefore, the cut-off date for the Asset-A, Asset-B, Asset-D, Asset-E, Asset-F and Asset-H is 31.3.2016 and for Asset-C and G is 31.3.2017.

34. The admissibility of additional capital expenditure incurred after date of commercial operation is to be dealt in accordance with the provisions of Regulation 9 (1) of the 2009 Tariff Regulations. The projected additional

capital expenditure claimed is mainly on account of balance and retention payments. The details of add-cap claimed by the petitioner upto 31.3.2014 are as follows:-

(₹ in lakh)								
Particulars	Asset-A	Asset-B	Asset-C	Asset-D	Asset-E	Asset-F	Asset-G	Asset-H
Freehold land	-	24.06	-	-	-	-	-	-
Leasehold land	-	-	-	-	-	-	-	-
Building & Other Civil Works	665.04	962.25	165.97	680.75	357.03	227.85	108.87	372.68
Transmission line	43.12	739.18	3356.60	-	-	-	-	-
Sub-station Equipments	1181.25	1135.44	139.54	4522.36	2084.22	2179.00	218.33	964.88
PLCC	70.00	67.50	5.00	-	-	-	-	-
<b>Total</b>	<b>1959.41</b>	<b>2928.43</b>	<b>3667.11</b>	<b>5203.11</b>	<b>2441.25</b>	<b>2406.85</b>	<b>327.20</b>	<b>1337.56</b>

35. MSEDCL has questioned the correctness of the total claim of additional capital expenditure. We have considered the submissions made by the petitioner. We have noted that the additional capital expenditure incurred and projected to be incurred for the transmission assets from the date of commercial operation to 31.3.2014 is on account of Balance/Retention payments. The additional capital expenditure claimed by the petitioner is within the cut-off date and accordingly it is allowed in terms of Regulation 9 (1) (i) of the 2009 Tariff Regulations except for Asset-C. As discussed earlier in this order at para 16, capital cost for Asset-C has been restricted to apportioned approved cost due to cost overrun. Hence, additional capital expenditure has not been considered for the purpose of tariff determination. Further, as discussed at para 23 and 24, IDC worked out on cash basis has been considered only upto respective COD(s) of the assets and both undischarged IDC and projected additional capital



expenditure will be allowed at the time of truing up on the submission of computation of IDC on cash basis and actual additional capital expenditure.

### **Capital cost as on 31.3.2014**

36. After considering the admitted capital cost as on the date of commercial operation and admissible additional capital expenditure, capital cost as on 31.3.2014 works out as follows:-

(₹ in lakh)								
Particulars	Asset-A	Asset-B	Asset-C	Asset-D	Asset-E	Asset-F	Asset-G	Asset-H
Freehold land	1605.30	2796.68	-	-	-	-	-	-
Leasehold land	-	-	-	-	-	-	-	-
Building & Other Civil Works	1759.26	2383.05	586.73	920.34	984.76	1002.57	283.16	724.42
Transmission line	3892.93	1755.39	77172.10	-	-	-	-	-
Sub-station Equipments	3135.66	3265.33	5923.25	8917.61	8760.53	8972.17	4999.75	7775.32
PLCC	70.00	145.32	149.20	-	-	-	-	-
<b>Total</b>	<b>10463.15</b>	<b>10345.77</b>	<b>83831.28</b>	<b>9837.94</b>	<b>9745.29</b>	<b>9974.74</b>	<b>5282.91</b>	<b>8499.74</b>

### **Debt-Equity Ratio**

37. Regulation 12 of the 2009 Tariff Regulations provides as follows:-

“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:

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

**Explanation-** The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal

resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

(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.”

38. The petitioner has claimed debt-equity ratio as on date of commercial operation of the assets, additional capitalization is 70:30 which is in accordance with the above regulations. The debt-equity ratio of 70:30 has been considered to work out the tariff as on the date of commercial operation, for add-cap and as on 31.3.2014 and is as under:-

(₹ in lakh)

<b>Asset-A</b>						
<b>Particulars</b>	<b>As on COD</b>		<b>Add-cap for 2013-14</b>		<b>As on 31.3.2014</b>	
	<b>Amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>
Debt	5952.62	70.00	1371.59	70.00	7324.21	70.00
Equity	2551.12	30.00	587.82	30.00	3138.95	30.00
<b>Total</b>	<b>8503.74</b>	<b>100.00</b>	<b>1959.41</b>	<b>100.00</b>	<b>10463.15</b>	<b>100.00</b>
<b>Asset-B</b>						
<b>Particulars</b>	<b>As on COD</b>		<b>Add-cap for 2013-14</b>		<b>As on 31.3.2014</b>	
	<b>Amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>
Debt	5192.14	70.00	2049.90	70.00	7242.04	70.00
Equity	2225.20	30.00	878.53	30.00	3103.73	30.00
<b>Total</b>	<b>7417.34</b>	<b>100.00</b>	<b>2928.43</b>	<b>100.00</b>	<b>10345.77</b>	<b>100.00</b>
<b>Asset-C</b>						
<b>Particulars</b>	<b>As on COD</b>		<b>Add-cap for 2013-14</b>		<b>As on 31.3.2014</b>	
	<b>Amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>
Debt	58684.50	70.00	-	-	58684.50	70.00
Equity	25146.78	30.00	-	-	25146.78	30.00
<b>Total</b>	<b>83831.28</b>	<b>100.00</b>	<b>-</b>	<b>-</b>	<b>83831.28</b>	<b>100.00</b>
<b>Asset-D</b>						
<b>Particulars</b>	<b>As on COD</b>		<b>Add-cap for 2013-14</b>		<b>As on 31.3.2014</b>	
	<b>Amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>
Debt	3244.38	70.00	3642.18	70.00	6886.56	70.00
Equity	1390.45	30.00	1560.93	30.00	2951.38	30.00
<b>Total</b>	<b>4634.83</b>	<b>100.00</b>	<b>5203.11</b>	<b>100.00</b>	<b>9837.94</b>	<b>100.00</b>
<b>Asset-E</b>						

Particulars	As on COD		Add-cap for 2013-14		As on 31.3.2014	
	Amount	%	Amount	%	Amount	%
Debt	5112.83	70.00	1708.88	70.00	6821.70	70.00
Equity	2191.21	30.00	732.38	30.00	2923.59	30.00
<b>Total</b>	<b>7304.04</b>	<b>100.00</b>	<b>2441.25</b>	<b>100.00</b>	<b>9745.29</b>	<b>100.00</b>
<b>Asset-F</b>						
Particulars	As on COD		Add-cap for 2013-14		As on 31.3.2014	
	Amount	%	Amount	%	Amount	%
Debt	5297.82	70.00	1684.80	70.00	6982.62	70.00
Equity	2270.07	30.00	722.06	30.00	2992.12	30.00
<b>Total</b>	<b>7567.89</b>	<b>100.00</b>	<b>2406.85</b>	<b>100.00</b>	<b>9974.74</b>	<b>100.00</b>
<b>Asset-G</b>						
Particulars	As on COD		Add-cap for 2013-14		As on 31.3.2014	
	Amount	%	Amount	%	Amount	%
Debt	3469.05	70.00	229.04	70.00	3698.09	70.00
Equity	1486.66	30.00	98.16	30.00	1584.82	30.00
<b>Total</b>	<b>4955.71</b>	<b>100.00</b>	<b>327.20</b>	<b>100.00</b>	<b>5282.91</b>	<b>100.00</b>
<b>Asset-H</b>						
Particulars	As on COD		Add-cap for 2013-14		As on 31.3.2014	
	Amount	%	Amount	%	Amount	%
Debt	5013.53	70.00	936.29	70.00	5949.82	70.00
Equity	2148.65	30.00	401.27	30.00	2549.92	30.00
<b>Total</b>	<b>7162.18</b>	<b>100.00</b>	<b>1337.56</b>	<b>100.00</b>	<b>8499.74</b>	<b>100.00</b>

### Return on Equity

39. Regulation 15 of the 2009 Tariff Regulations provides as under:-

“15. (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.

(2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% for thermal generating stations, transmission system and run of the river generating station, and 16.5% for the storage type generating stations including pumped storage hydro generating stations and run of river generating station with pondage and shall be grossed up as per clause (3) of this regulation:

Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in **Appendix-II**:

Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.

(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 financial year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations".

40. UPPCL has submitted that the petitioner may not be allowed to bill in case of a variation in the rates of Income Tax without filing a separate petition. The petitioner's prayer to recover the shortfall or refund the excess Annual Fixed Charges, on account on return on equity due to change in applicable Minimum Alternate Tax/Corporate Income Tax rate as per the Income Tax Act, 1961 of the respective financial year directly without making any application before the Commission shall be dealt under Regulation 15(5). Return on Equity has been computed @ 17.481% p.a on average equity as per Regulation 15 of the 2009 Tariff Regulations.

41. Regulation 15 of 2009 Tariff Regulation provides for working out return on equity. Accordingly, return on equity has been worked out as under:-

(₹ in lakh)				
Particulars	Asset-A	Asset-B	Asset-C	Asset-D
	2013-14	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)

Opening Equity	2551.12	225.20	25146.78	1390.45
Addition due to Additional Capitalization	587.82	878.53	-	1560.93
Closing Equity	3138.95	3103.73	25146.78	2951.38
Average Equity	2845.03	2664.47	25146.78	2170.92
Return on Equity (Base Rate )	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.330%	11.330%	11.330%	11.330%
Rate of Return on Equity (Pre Tax )	17.481%	17.481%	17.481%	17.481%
<b>Return on Equity (Pre Tax)</b>	<b>497.34</b>	<b>426.96</b>	<b>732.65</b>	<b>316.25</b>
<b>Particulars</b>	<b>Asset-E</b>	<b>Asset-F</b>	<b>Asset-G</b>	<b>Asset-H</b>
	<b>2013-14</b>	<b>2013-14</b>	<b>2013-14</b>	<b>2013-14</b>
	<b>(pro-rata)</b>	<b>(pro-rata)</b>	<b>(pro-rata)</b>	<b>(pro-rata)</b>
Opening Equity	2191.21	2270.07	1486.66	2148.65
Addition due to Additional Capitalization	732.38	722.06	98.16	401.27
Closing Equity	2923.59	2992.12	1584.82	2549.92
Average Equity	2557.40	2631.09	1535.74	2349.29
Return on Equity (Base Rate )	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.330%	11.330%	11.330%	11.330%
Rate of Return on Equity (Pre Tax )	17.481%	17.481%	17.481%	17.481%
<b>Return on Equity (Pre Tax)</b>	<b>298.04</b>	<b>153.31</b>	<b>22.37</b>	<b>171.12</b>

### **Additional Return on Equity (RoE)**

42. The petitioner in the instant case has claimed additional return of 0.5% for such elements which are completed within the time line specified. During the hearing on 3.3.2015, the Petitioner has further prayed for allowing additional RoE of 0.5% as provided under Regulation 15(2) of the 2009 Tariff Regulations as the assets were commissioned in 36 months which is within timeline of 40 months specified by the Commission.

43. MSEDCL has submitted that additional RoE may be allowed by the Commission only after a prudent check. Additional RoE of 0.5% is only permissible if all the assets in the project were completed within the stipulated time line mentioned in the Appendix-II of the 2009 Tariff Regulations. As per Appendix-II, the time line specified for new 765 kV AC sub-station in plain areas is 30 months and there is no timeline for 765 kV D/C transmission line. But, in the instant case the petitioner has

commissioned the new 765 kV sub-station in 38 months. Hence, additional RoE of 0.5% is not permissible as all the assets mentioned in the project have not been commissioned within the specified time mentioned in the Appendix-II of the 2009 Tariff Regulations. Therefore, the petitioner's claim for additional RoE of 0.5% has not been allowed.

### **Interest on Loan**

44. Regulation 16 of the 2009 Tariff Regulations provides as under:-

“16. **Interest on loan capital** (1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.

(3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year:

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:

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.

(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan.”

45. In keeping with the provisions of Regulation 16 of the 2009 Tariff Regulations, the petitioner's entitlement to interest on loan has been calculated on the following basis:-

(a) Gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual average loan have been considered as per the petition;

(b) The repayment for the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that period;

(c) Notwithstanding moratorium period availed by the transmission licensee, the repayment of the loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed;

(d) Weighted average rate of interest on actual average loan worked out as per (a) above is applied on the notional average loan during the year to arrive at the interest on loan.

46. Both MSEDCL and UPPCL have submitted that the impact of floating rate of interest on loan should not be allowed to be billed by the petitioner. The interest on loan has been calculated on the basis of prevailing rate

available as on the date of commercial operation. Any change in rate of interest subsequent to date of commercial operation will be considered at the time of truing up.

47. Detailed calculations in support of the weighted average rates of interest have been given at Annexure-I to Annexure-VIII.

48. Based on the above, interest on loan allowed is as given hereunder:-

(₹ in lakh)

Particulars	Asset-A	Asset-B	Asset-C	Asset-D
	2013-14	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Gross Normative Loan	5952.62	5192.14	58684.50	3244.38
Cumulative Repayment upto Previous Yr	-	-	-	-
Net Loan-Opening	5952.62	5192.14	58684.50	3244.38
Addition due to Additional Capitalisation	1371.59	2049.90	-	3642.18
Repayment during the year	380.62	258.85	685.06	291.22
Net Loan-Closing	6943.59	6983.19	57999.44	6595.34
Average Loan	6448.11	6087.66	58341.97	4919.86
Weighted Avg. Rate of Interest on Loan	8.4204%	7.8813%	8.4972%	7.9189%
<b>Interest</b>	<b>542.95</b>	<b>439.81</b>	<b>826.24</b>	<b>324.67</b>

(₹ in lakh)

Particulars	Asset-E	Asset-F	Asset-G	Asset-H
	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Gross Normative Loan	5112.83	5297.82	3469.05	5013.53
Cumulative Repayment upto Previous Yr	-	-	-	-
Net Loan-Opening	5112.83	5297.82	3469.05	5013.53
Addition due to Additional Capitalisation	1708.88	1684.80	229.04	936.29
Repayment during the year	276.86	140.66	21.57	158.01
Net Loan-Closing	6544.85	6841.96	3676.52	5791.81
Average Loan	5828.84	6069.89	3572.79	5402.67
Weighted Avg. Rate of Interest on Loan	7.4580%	8.3077%	8.1979%	7.2041%
<b>Interest</b>	<b>289.81</b>	<b>168.09</b>	<b>24.41</b>	<b>162.17</b>

### **Depreciation**

49. Regulation 17 of the 2009 Tariff Regulations provides as follows:-

“17. **Depreciation** (1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.



(2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site;

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.

(3) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the assets of the generating station and transmission system:

Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.

(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.

(6) 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.”

50. The petitioner has claimed actual depreciation as a component of Annual Fixed Charges. The instant transmission assets were put under commercial operation during 2013-14. Accordingly, all assets will complete 12 years beyond 2013-14. Thus, depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-III of the 2009 Tariff Regulations, as per details hereunder:-

(₹ in lakh)

Particulars	Asset-A	Asset-B	Asset-C	Asset-D
	2013-14	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)

Opening Gross Block	8503.74	7417.34	83831.28	4634.83
Additional Capital Expenditure	1959.41	2928.43	-	5203.11
Closing Gross Block	10463.15	10345.77	83831.28	9837.94
Average Gross Block	9483.45	8881.55	83831.28	7236.39
Rate of Depreciation	4.0135%	3.1794%	4.9032%	4.8292%
Depreciable Value	7090.33	5487.21	75448.15	6512.75
Remaining Depreciable Value	7090.33	5487.21	75448.15	6512.75
<b>Depreciation</b>	<b>380.62</b>	<b>258.85</b>	<b>685.06</b>	<b>291.22</b>
<b>Particulars</b>	<b>Asset-E</b>	<b>Asset-F</b>	<b>Asset-G</b>	<b>Asset-H</b>
	<b>2013-14</b>	<b>2013-14</b>	<b>2013-14</b>	<b>2013-14</b>
	<b>(pro-rata)</b>	<b>(pro-rata)</b>	<b>(pro-rata)</b>	<b>(pro-rata)</b>
Opening Gross Block	7304.04	7567.89	4955.71	7162.18
Additional Capital Expenditure	2441.25	2406.85	327.20	1337.56
Closing Gross Block	9745.29	9974.74	5282.91	8499.74
Average Gross Block	8524.67	8771.31	5119.31	7830.96
Rate of Depreciation	4.8716%	4.8110%	5.0561%	4.8427%
Depreciable Value	7672.20	7894.18	4607.38	7047.87
Remaining Depreciable Value	7672.20	7894.18	4607.38	7047.87
<b>Depreciation</b>	<b>276.86</b>	<b>140.66</b>	<b>21.57</b>	<b>158.01</b>

### **Operation & Maintenance Expenses (O&M Expenses)**

51. The norms for O&M Expenses for the transmission system based on the type of sub-station and the transmission line are specified vide clause (g) of Regulation 19 of the 2009 Tariff Regulations. The norms for assets covered in this petition are as under:-

#### **Norms for AC and HVDC lines:**

Element	(₹ lakh per km)				
	2009-10	2010-11	2011-12	2012-13	2013-14
S/C (Bundled Conductor with four or more sub-conductors)	0.537	0.568	0.600	0.635	0.671
S/C (Twin & Triple conductor)	0.358	0.378	0.400	0.423	0.447
D/C (Twin & Triple conductor)	0.627	0.663	0.701	0.741	0.783
D/C (Bundled with four or more conductors)	0.940	0.994	1.051	1.111	1.174

#### **Norms for Sub-station:**

Element	(₹ lakh per bay)				
	2009-10	2010-11	2011-12	2012-13	2013-14
400 kV bay	52.40	55.40	58.57	61.92	65.46
765 kV bay	73.36	77.56	81.99	86.68	91.64

52. The O&M Expenses allowed as per norms specified in 2009 Tariff Regulations are as given overleaf:-

(₹ in lakh)		
Particulars	2013-14 (Pro-rata)	2013-14
Asset-A	-	278.62
Asset-B	244.53	-
Asset-C	77.48	-
Asset-D	207.28	-
Asset-E	270.56	-
Asset-F	82.91	-
Asset-G	13.09	-
Asset-H	141.83	-

53. The petitioner has submitted that O&M Expenses for the year 2009-14 had been arrived at on the basis of normalized actual O&M Expenses during the period 2003-04 to 2007-08 and by escalating it by 5.72% per annum for arriving at norms for the years of tariff period. The wage hike of 50% on account of pay revision of the employees of public sector undertaking has also been considered while calculating the O&M Expenses for the tariff period 2009-14. The petitioner has further submitted that it may approach the Commission for suitable revision in norms for O&M Expenses in case the impact of wage hike with effect from 1.1.2007 is more than 50%.

54. While specifying the norms for the O & M Expenses, the Commission has in the 2009 Tariff Regulations, given effect to impact of pay revision by factoring 50% on account of pay revision of the employees of PSUs after extensive consultations with the stakeholders, as one time compensation for employee cost. We do not see any reason why the admissible amount is

inadequate to meet the requirement of the employee cost. In this order, we have allowed O&M Expenses as per the existing norms.

### **Interest on Working Capital**

55. The petitioner is entitled to claim interest on working capital as per the 2009 Tariff Regulations. The components of the working capital and the petitioner's entitlement to interest thereon are discussed hereunder:-

#### **(i) Receivables**

As per Regulation 18(1) (c) (i) of the 2009 Tariff Regulations, receivables as a component of working capital will be equivalent to two months of fixed cost. The petitioner has claimed the receivables on the basis of 2 months of annual transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis of 2 months transmission charges.

#### **(ii) Maintenance Spares**

Regulation 18 (1) (c) (ii) of the 2009 Tariff Regulations provides for maintenance spares @ 15% per annum of the O & M Expenses as part of the working capital from 1.4.2009. The value of maintenance spares has accordingly been worked out.

#### **(iii) O & M Expenses**

Regulation 18(1) (c) (iii) of the 2009 Tariff Regulations provides for O&M Expenses for one month to be included in the working capital. The petitioner has claimed O&M expenses for 1 month of the respective year. This has been considered in the working capital.

#### (iv) Rate of Interest on Working Capital

In accordance with clause (3) of Regulation 18 of the 2009 Tariff Regulations, as amended, rate of interest on working capital shall be on normative basis and shall be equal to State Bank of India Base Rate @ 13.20% (Base rate as on 1.4.2012 i.e. 9.70% and 350 basis points) for assets. The interest on working capital for the assets covered in the petition has been worked out accordingly.

56. Computations in support of interest on working capital allowed are as under:-

(₹ in lakh)				
Particulars	Asset-A	Asset-B	Asset-C	Asset-D
	2013-14	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Maintenance Spares	41.79	40.01	69.73	37.31
O & M Expenses	23.22	22.23	38.74	20.73
Receivables	291.09	256.12	2376.10	234.31
<b>Total</b>	<b>356.10</b>	<b>318.37</b>	<b>2484.57</b>	<b>292.35</b>
Rate of Interest	13.20%	13.20%	13.20%	13.20%
<b>Interest</b>	<b>47.01</b>	<b>38.52</b>	<b>54.66</b>	<b>32.16</b>
Particulars	Asset-E	Asset-F	Asset-G	Asset-H
	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Maintenance Spares	60.88	37.31	23.56	51.06
O & M Expenses	33.82	20.73	13.09	28.37
Receivables	292.33	279.92	167.37	260.74
<b>Total</b>	<b>387.03</b>	<b>337.96</b>	<b>204.02</b>	<b>340.16</b>
Rate of Interest	13.20%	13.20%	13.20%	13.20%
<b>Interest</b>	<b>34.06</b>	<b>14.87</b>	<b>2.24</b>	<b>18.71</b>

#### Transmission Charges

57. MSEDCL has submitted that the Commission may carry out a prudence check for allowing the transmission charges. We have considered the various parameters as submitted by the petitioner and the transmission charges allowed for the instant assets are given as overleaf:-

(₹ in lakh)

Particulars	Asset-A	Asset-B	Asset-C	Asset-D
	2013-14	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Depreciation	380.62	258.85	685.06	291.22
Interest on Loan	542.95	439.81	826.24	324.67
Return on Equity	497.34	426.96	732.65	316.25
Interest on Working Capital	47.01	38.52	54.66	32.16
O & M Expenses	278.62	244.53	77.48	207.28
<b>Total</b>	<b>1746.54</b>	<b>1408.67</b>	<b>2376.10</b>	<b>1171.57</b>

Particulars	Asset-E	Asset-F	Asset-G	Asset-H
	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Depreciation	276.86	140.66	21.57	158.01
Interest on Loan	289.81	168.09	24.41	162.17
Return on Equity	298.04	153.31	22.37	171.12
Interest on Working Capital	34.06	14.87	2.24	18.71
O & M Expenses	270.56	82.91	13.09	141.83
<b>Total</b>	<b>1169.32</b>	<b>559.85</b>	<b>83.68</b>	<b>651.84</b>

### **Filing Fee and the Publication Expenses**

58. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. MSEDCL has opposed grant of filing fee and publication expenses. The petitioner has clarified that reimbursement of expenditure has been claimed in terms of Regulation 42 of the 2009 Tariff Regulations. 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 42A (1) (a) of the 2009 Tariff Regulations.

### **Licence Fee**

59. The petitioner has submitted that in O&M norms for tariff block 2009-14, the cost associated with license fees had not been captured and the license fee may be allowed to be recovered separately from the respondents.

The petitioner has submitted that the licence fee has been a new component of cost to the transmission licence under O&M stage of the project and has become incidental to the petitioner only from 2008-09. UPPCL has submitted that licence fee is the eligibility fee and the petitioner should bear the same. UPPCL has further submitted that it has filed an appeal before APTEL against the orders of the Commission in Petition Nos. 21 and 22 of 2011 allowing licence fee and the licence fee should not be allowed till the disposal of the appeal by APTEL. We would like to clarify that Appeal No.87/2012 filed by UPPCL has been dismissed by APTEL vide judgement dated 3.12.2013. MSEDCL has also opposed grant of licence fee. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42A (1) (b) of the 2009 Tariff Regulations.

### **Service Tax**

60. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if it is subjected to such service tax in future. The petitioner submitted that service tax on transmission has been put on negative list w.e.f. 1.4.2012 and therefore the transmission charges, is exclusive of service tax and shall be born and additionally paid by the respondents. Both MSEDCL and UPPCL have raised objection to this prayer of the petitioner. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

### **Sharing of Transmission Charges**

61. MSEDCL has submitted that the details of transmission charges need to be clearly specified in the order. UPPCL has submitted that the instant

assets have been commissioned pursuant to the Bulk Power Agreement entered into by the petitioner and twelve generating companies and the beneficiaries of Northern Region are not parties. As such, the transmission charges should not be borne by Northern Region beneficiaries.

62. We have considered the submissions of the respondents. 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.

63. This order disposes of Petition No. 162/TT/2013.

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

sd/-  
**(A.K. Singhal)**  
**Member**



**Annexure-I**

(₹ in lakh)

<b>CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN</b>		
	<b>Details of Loan</b>	<b>2013-14</b>
<b>1</b>	<b>Bond XXXIV</b>	
	Gross loan opening	630.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	630.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	630.00
	Average Loan	630.00
	Rate of Interest	8.84%
	Interest	55.69
	Rep Schedule	12 Annual instalments from 21.10.2014
<b>2</b>	<b>Bond XXXV</b>	
	Gross loan opening	8.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	8.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	8.00
	Average Loan	8.00
	Rate of Interest	9.64%
	Interest	0.77
	Rep Schedule	12 Annual instalments from 31.5.2015
<b>3</b>	<b>Bond XXXVI</b>	
	Gross loan opening	52.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	52.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	52.00
	Average Loan	52.00
	Rate of Interest	9.35%
	Interest	4.86
	Rep Schedule	15 Annual instalments from 29.8.2016
<b>4</b>	<b>Bond XXXVII</b>	
	Gross loan opening	400.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	400.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	400.00
	Average Loan	400.00

	Rate of Interest	9.25%
	Interest	37.00
	Rep Schedule	12 Annual instalments from 26.12.2015
<b>5</b>	<b>Bond XXXIX</b>	
	Gross loan opening	330.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	330.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	330.00
	Average Loan	330.00
	Rate of Interest	9.40%
	Interest	31.02
	Rep Schedule	29.3.2027 Bullet Payment
<b>6</b>	<b>SBI (21.3.2012)</b>	
	Gross loan opening	590.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	590.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	590.00
	Average Loan	590.00
	Rate of Interest	10.45%
	Interest	61.66
	Rep Schedule	22 annual instalments from 31.8.2016
<b>7</b>	<b>Bond XL</b>	
	Gross loan opening	1570.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1570.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1570.00
	Average Loan	1570.00
	Rate of Interest	9.30%
	Interest	146.01
	Rep Schedule	12 Annual instalments from 28.6.2016
<b>8</b>	<b>Bond XLI</b>	
	Gross loan opening	370.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	370.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	370.00
	Average Loan	370.00
	Rate of Interest	8.8500%

	Interest	32.75
	Rep Schedule	12 annual instalments from 19.10.2016
<b>9</b>	<b>Bond XLII</b>	
	Gross loan opening	1235.14
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1235.14
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1235.14
	Average Loan	1235.14
	Rate of Interest	8.80%
	Interest	108.69
	Rep Schedule	13.3.2023 Bullet Payment
<b>10</b>	<b>IFC (IFC-A Loan) (31419-00)</b>	
	Gross loan opening	471.68
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	471.68
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	471.68
	Average Loan	471.68
	Rate of Interest	3.35%
	Interest	15.78
	Rep Schedule	20 half yearly from 15.9.2017
<b>11</b>	<b>FC Bond (17.1.2013)</b>	
	Gross loan opening	435.99
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	435.99
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	435.99
	Average Loan	435.99
	Rate of Interest	3.875%
	Interest	16.89
	Rep Schedule	Bullet payment on 17.1.2023
<b>12</b>	<b>Bond XLIV (Add Cap for 2013-14 Drawl on 31.3.2014)</b>	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	1371.59
	Repayment during the year	0.00
	Net Loan-Closing	1371.59
	Average Loan	685.80
	Rate of Interest	8.700%
	Interest	59.66
	Rep Schedule	3 instalments on 15.7.2018,

		15.7.2023, 15.7.2028
	<b>Total Loan</b>	
	Gross loan opening	6092.81
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	6092.81
	Additions during the year	1371.59
	Repayment during the year	0.00
	Net Loan-Closing	7464.40
	Average Loan	6778.61
	<b>Weighted Average Rate of Interest</b>	<b>8.4204%</b>
	<b>Interest</b>	<b>570.78</b>

**Annexure-II**

(₹ in lakh)

<b>CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN</b>		
	<b>Details of Loan</b>	<b>2013-14</b>
<b>1</b>	<b>Bond XXXIV</b>	
	Gross loan opening	455.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	455.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	455.00
	Average Loan	455.00
	Rate of Interest	8.84%
	Interest	40.22
	Rep Schedule	12 Annual instalments from 21.10.2014
<b>2</b>	<b>Bond XXXV</b>	
	Gross loan opening	6.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	6.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	6.00
	Average Loan	6.00
	Rate of Interest	9.64%
	Interest	0.58
	Rep Schedule	12 Annual instalments from 31.5.2015
<b>3</b>	<b>Bond XXXVI</b>	
	Gross loan opening	40.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	40.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	40.00
	Average Loan	40.00
	Rate of Interest	9.35%
	Interest	3.74
	Rep Schedule	15 Annual instalments from 29.8.2016
<b>4</b>	<b>Bond XXXVII</b>	
	Gross loan opening	290.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	290.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	290.00
	Average Loan	290.00

	Rate of Interest	9.25%
	Interest	26.83
	Rep Schedule	12 Annual instalments from 26.12.2015
<b>5</b>	<b>Bond XXXIX</b>	
	Gross loan opening	235.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	235.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	235.00
	Average Loan	235.00
	Rate of Interest	9.40%
	Interest	22.09
	Rep Schedule	29.3.2027 Bullet Payment
<b>6</b>	<b>SBI (21.3.2012)</b>	
	Gross loan opening	420.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	420.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	420.00
	Average Loan	420.00
	Rate of Interest	10.45%
	Interest	43.89
	Rep Schedule	22 annual instalments from 31.8.2016
<b>7</b>	<b>Bond XL</b>	
	Gross loan opening	1263.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1263.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1263.00
	Average Loan	1263.00
	Rate of Interest	9.30%
	Interest	117.46
	Rep Schedule	12 Annual instalments from 28.6.2016
<b>8</b>	<b>Bond XLI</b>	
	Gross loan opening	270.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	270.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	270.00
	Average Loan	270.00
	Rate of Interest	8.8500%

	Interest	23.90
	Rep Schedule	12 annual instalments from 19.10.2016
<b>9</b>	<b>Bond XLII</b>	
	Gross loan opening	915.86
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	915.86
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	915.86
	Average Loan	915.86
	Rate of Interest	8.80%
	Interest	80.60
	Rep Schedule	13.3.2023 Bullet Payment
<b>10</b>	<b>IFC (IFC-A Loan) (31419-00)</b>	
	Gross loan opening	1017.54
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1017.54
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1017.54
	Average Loan	1017.54
	Rate of Interest	3.345%
	Interest	34.04
	Rep Schedule	20 half yearly from 15.9.2017
<b>11</b>	<b>FC Bond (17.1.2013)</b>	
	Gross loan opening	363.41
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	363.41
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	363.41
	Average Loan	363.41
	Rate of Interest	3.88%
	Interest	14.08
	Rep Schedule	Bullet payment on 17.1.2023
<b>12</b>	<b>Bond XLIV (Add Cap for 2013-14 Drawl on 31.3.2014)</b>	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	2049.90
	Repayment during the year	0.00
	Net Loan-Closing	2049.90
	Average Loan	1024.95
	Rate of Interest	8.70%
	Interest	89.17
	Rep Schedule	3 instalments on 15.7.2018,

		15.7.2023, 15.7.2028
	<b>Total Loan</b>	
	Gross loan opening	5275.81
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	5275.81
	Additions during the year	2049.90
	Repayment during the year	0.00
	Net Loan-Closing	7325.71
	Average Loan	6300.76
	<b>Weighted Average Rate of Interest</b>	<b>7.8813%</b>
	<b>Interest</b>	<b>496.58</b>



**Annexure-III**

(₹ in lakh)

<b>CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN</b>		
	<b>Details of Loan</b>	<b>2013-14</b>
<b>1</b>	<b>Bond XXXIV</b>	
	Gross loan opening	5820.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	5820.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	5820.00
	Average Loan	5820.00
	Rate of Interest	8.84%
	Interest	514.49
	Rep Schedule	12 Annual instalments from 21.10.2014
<b>2</b>	<b>Bond XXXV</b>	
	Gross loan opening	70.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	70.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	70.00
	Average Loan	70.00
	Rate of Interest	9.64%
	Interest	6.75
	Rep Schedule	12 Annual instalments from 31.5.2015
<b>3</b>	<b>Bond XXXVI</b>	
	Gross loan opening	470.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	470.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	470.00
	Average Loan	470.00
	Rate of Interest	9.35%
	Interest	43.95
	Rep Schedule	15 Annual instalments from 29.8.2016
<b>4</b>	<b>Bond XXXVII</b>	
	Gross loan opening	3970.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	3970.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	3970.00
	Average Loan	3970.00
	Rate of Interest	9.25%
	Interest	367.23
	Rep Schedule	12 Annual instalments

		from 26.12.2015
<b>5</b>	<b>Bond XXXIX</b>	
	Gross loan opening	3385.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	3385.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	3385.00
	Average Loan	3385.00
	Rate of Interest	9.40%
	Interest	318.19
	Rep Schedule	29.3.2027 Bullet Payment
<b>6</b>	<b>SBI (21.3.2012)</b>	
	Gross loan opening	5925.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	5925.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	5925.00
	Average Loan	5925.00
	Rate of Interest	10.25%
	Interest	607.31
	Rep Schedule	22 annual instalments from 31.8.2016
<b>7</b>	<b>Bond XL</b>	
	Gross loan opening	14010.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	14010.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	14010.00
	Average Loan	14010.00
	Rate of Interest	9.30%
	Interest	1302.93
	Rep Schedule	12 Annual instalments from 28.6.2016
<b>8</b>	<b>Bond XLI</b>	
	Gross loan opening	3320.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	3320.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	3320.00
	Average Loan	3320.00
	Rate of Interest	8.8500%
	Interest	293.82
	Rep Schedule	12 annual instalments from 19.10.2016
<b>9</b>	<b>Bond XLII</b>	
	Gross loan opening	10951.37
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	10951.37

	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	10951.37
	Average Loan	10951.37
	Rate of Interest	8.80%
	Interest	963.72
	Rep Schedule	13.3.2023 Bullet Payment
<b>10</b>	<b>IFC (IFC-A Loan) (31419-00)</b>	
	Gross loan opening	3008.30
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	3008.30
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	3008.30
	Average Loan	3008.30
	Rate of Interest	3.285%
	Interest	98.82
	Rep Schedule	20 half yearly from 15.9.2017
<b>11</b>	<b>FC Bond (17.1.2013)</b>	
	Gross loan opening	4492.88
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	4492.88
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	4492.88
	Average Loan	4492.88
	Rate of Interest	3.88%
	Interest	174.10
	Rep Schedule	Bullet payment on 17.1.2023
<b>12</b>	<b>Bond XLIV</b>	
	Gross loan opening	7632.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	7632.00
	Additions during the year	2566.98
	Repayment during the year	0.00
	Net Loan-Closing	10198.98
	Average Loan	8915.49
	Rate of Interest	8.70%
	Interest	775.65
	Rep Schedule	3 instalments on 15.7.2018, 15.7.2023, 15.7.2028
	<b>Total Loan</b>	
	Gross loan opening	63054.55
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	63054.55
	Additions during the year	2566.98
	Repayment during the year	0.00
	Net Loan-Closing	65621.53

	Average Loan	64338.04
	<b>Weighted Average Rate of Interest</b>	<b>8.4972%</b>
	<b>Interest</b>	<b>5466.95</b>

**Annexure-IV**

(₹ in lakh)

<b>CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN</b>		
	<b>Details of Loan</b>	<b>2013-14</b>
<b>1</b>	<b>Bond XXXIV</b>	
	Gross loan opening	478.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	478.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	478.00
	Average Loan	478.00
	Rate of Interest	8.84%
	Interest	42.26
	Rep Schedule	12 Annual instalments from 21.10.2014
<b>2</b>	<b>Bond XXXV</b>	
	Gross loan opening	3.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	3.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	3.00
	Average Loan	3.00
	Rate of Interest	9.64%
	Interest	0.29
	Rep Schedule	12 Annual instalments from 31.5.2015
<b>3</b>	<b>Bond XXXVI</b>	
	Gross loan opening	20.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	20.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	20.00
	Average Loan	20.00
	Rate of Interest	9.35%
	Interest	1.87
	Rep Schedule	15 Annual instalments from 29.8.2016
<b>4</b>	<b>Bond XXXVII</b>	
	Gross loan opening	200.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	200.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	200.00
	Average Loan	200.00
	Rate of Interest	9.25%
	Interest	18.50

	Rep Schedule	12 Annual instalments from 26.12.2015
<b>5</b>	<b>Bond XXXIX</b>	
	Gross loan opening	125.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	125.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	125.00
	Average Loan	125.00
	Rate of Interest	9.40%
	Interest	11.75
	Rep Schedule	29.3.2027 Bullet Payment
<b>6</b>	<b>SBI (21.3.2012)</b>	
	Gross loan opening	225.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	225.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	225.00
	Average Loan	225.00
	Rate of Interest	10.45%
	Interest	23.51
	Rep Schedule	22 annual instalments from 31.8.2016
<b>7</b>	<b>Bond XL</b>	
	Gross loan opening	952.50
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	952.50
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	952.50
	Average Loan	952.50
	Rate of Interest	9.30%
	Interest	88.58
	Rep Schedule	12 Annual instalments from 28.6.2016
<b>8</b>	<b>Bond XLI</b>	
	Gross loan opening	140.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	140.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	140.00
	Average Loan	140.00
	Rate of Interest	8.8500%
	Interest	12.39
	Rep Schedule	12 annual instalments from 19.10.2016
<b>9</b>	<b>Bond XLII</b>	
	Gross loan opening	359.70
	Cumulative Repayment upto DOCO/previous year	0.00

	Net Loan-Opening	359.70
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	359.70
	Average Loan	359.70
	Rate of Interest	8.80%
	Interest	31.65
	Rep Schedule	13.3.2023 Bullet Payment
<b>10</b>	<b>IFC (IFC-A Loan) (31419-00)</b>	
	Gross loan opening	813.25
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	813.25
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	813.25
	Average Loan	813.25
	Rate of Interest	3.345%
	Interest	27.20
	Rep Schedule	20 half yearly from 15.9.2017
<b>11</b>	<b>FC Bond (17.1.2013)</b>	
	Gross loan opening	237.48
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	237.48
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	237.48
	Average Loan	237.48
	Rate of Interest	3.88%
	Interest	9.20
	Rep Schedule	Bullet payment on 17.1.2023
<b>12</b>	<b>Bond XLIV</b>	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	3642.18
	Repayment during the year	0.00
	Net Loan-Closing	3642.18
	Average Loan	1821.09
	Rate of Interest	8.70%
	Interest	158.43
	Rep Schedule	3 instalments on 15.7.2018, 15.7.2023, 15.7.2028
	<b>Total Loan</b>	
	Gross loan opening	3553.93
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	3553.93
	Additions during the year	3642.18
	Repayment during the year	0.00

	Net Loan-Closing	7196.11
	Average Loan	5375.02
	<b>Weighted Average Rate of Interest</b>	<b>7.9189%</b>
	<b>Interest</b>	<b>425.64</b>



**Annexure-V**

(₹ in lakh)

<b>CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN</b>		
	<b>Details of Loan</b>	<b>2013-14</b>
<b>1</b>	<b>Bond XXXIV</b>	
	Gross loan opening	500.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	500.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	500.00
	Average Loan	500.00
	Rate of Interest	8.84%
	Interest	44.20
	Rep Schedule	12 Annual instalments from 21.10.2014
<b>2</b>	<b>Bond XXXV</b>	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	0.00
	Average Loan	0.00
	Rate of Interest	9.64%
	Interest	0.00
	Rep Schedule	12 Annual instalments from 31.5.2015
<b>3</b>	<b>Bond XXXVI</b>	
	Gross loan opening	50.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	50.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	50.00
	Average Loan	50.00
	Rate of Interest	9.35%
	Interest	4.68
	Rep Schedule	15 Annual instalments from 29.8.2016
<b>4</b>	<b>Bond XXXVII</b>	
	Gross loan opening	50.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	50.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	50.00
	Average Loan	50.00
	Rate of Interest	9.25%
	Interest	4.63

	Rep Schedule	12 Annual instalments from 26.12.2015
<b>5</b>	<b>Bond XXXIX</b>	
	Gross loan opening	50.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	50.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	50.00
	Average Loan	50.00
	Rate of Interest	9.40%
	Interest	4.70
	Rep Schedule	29.3.2027 Bullet Payment
<b>6</b>	<b>SBI (21.3.2012)</b>	
	Gross loan opening	45.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	45.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	45.00
	Average Loan	45.00
	Rate of Interest	10.45%
	Interest	4.70
	Rep Schedule	22 annual instalments from 31.8.2016
<b>7</b>	<b>Bond XL</b>	
	Gross loan opening	1599.50
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1599.50
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1599.50
	Average Loan	1599.50
	Rate of Interest	9.30%
	Interest	148.75
	Rep Schedule	12 Annual instalments from 28.6.2016
<b>8</b>	<b>Bond XLI</b>	
	Gross loan opening	423.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	423.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	423.00
	Average Loan	423.00
	Rate of Interest	8.8500%
	Interest	37.44
	Rep Schedule	12 annual instalments from 19.10.2016
<b>9</b>	<b>Bond XLII</b>	
	Gross loan opening	947.96
	Cumulative Repayment upto DOCO/previous year	0.00

	Net Loan-Opening	947.96
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	947.96
	Average Loan	947.96
	Rate of Interest	8.80%
	Interest	83.42
	Rep Schedule	13.3.2023 Bullet Payment
<b>10</b>	<b>IFC (IFC-A Loan) (31419-00)</b>	
	Gross loan opening	1515.53
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1515.53
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1515.53
	Average Loan	1515.53
	Rate of Interest	3.345%
	Interest	50.69
	Rep Schedule	20 half yearly from 15.9.2017
<b>11</b>	<b>FC Bond (17.1.2013)</b>	
	Gross loan opening	207.16
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	207.16
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	207.16
	Average Loan	207.16
	Rate of Interest	3.88%
	Interest	8.03
	Rep Schedule	Bullet payment on 17.1.2023
<b>12</b>	<b>Bond XLIV</b>	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	1708.87
	Repayment during the year	0.00
	Net Loan-Closing	1708.87
	Average Loan	854.44
	Rate of Interest	8.70%
	Interest	74.34
	Rep Schedule	3 instalments on 15.7.2018, 15.7.2023, 15.7.2028
	<b>Total Loan</b>	
	Gross loan opening	5388.15
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	5388.15
	Additions during the year	1708.87
	Repayment during the year	0.00
	Net Loan-Closing	7097.02

	Average Loan	6242.59
	<b>Weighted Average Rate of Interest</b>	<b>7.4580%</b>
	<b>Interest</b>	<b>465.57</b>

**Annexure-VI**

(₹ in lakh)

<b>CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN</b>		
	<b>Details of Loan</b>	<b>2013-14</b>
<b>1</b>	<b>Bond XXXIV</b>	
	Gross loan opening	600.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	600.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	600.00
	Average Loan	600.00
	Rate of Interest	8.84%
	Interest	53.04
	Rep Schedule	12 Annual instalments from 21.10.2014
<b>2</b>	<b>Bond XXXV</b>	
	Gross loan opening	23.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	23.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	23.00
	Average Loan	23.00
	Rate of Interest	9.64%
	Interest	2.22
	Rep Schedule	12 Annual instalments from 31.5.2015
<b>3</b>	<b>Bond XXXVI</b>	
	Gross loan opening	73.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	73.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	73.00
	Average Loan	73.00
	Rate of Interest	9.35%
	Interest	6.83
	Rep Schedule	15 Annual instalments from 29.8.2016
<b>4</b>	<b>Bond XXXVII</b>	
	Gross loan opening	400.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	400.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	400.00
	Average Loan	400.00
	Rate of Interest	9.25%
	Interest	37.00
	Rep Schedule	12 Annual instalments

		from 26.12.2015
<b>5</b>	<b>Bond XXXIX</b>	
	Gross loan opening	205.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	205.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	205.00
	Average Loan	205.00
	Rate of Interest	9.40%
	Interest	19.27
	Rep Schedule	29.3.2027 Bullet Payment
<b>6</b>	<b>SBI (21.3.2012)</b>	
	Gross loan opening	645.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	645.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	645.00
	Average Loan	645.00
	Rate of Interest	10.25%
	Interest	66.11
	Rep Schedule	22 annual instalments from 31.8.2016
<b>7</b>	<b>Bond XL</b>	
	Gross loan opening	500.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	500.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	500.00
	Average Loan	500.00
	Rate of Interest	9.30%
	Interest	46.50
	Rep Schedule	12 Annual instalments from 28.6.2016
<b>8</b>	<b>Bond XLI</b>	
	Gross loan opening	230.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	230.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	230.00
	Average Loan	230.00
	Rate of Interest	8.8500%
	Interest	20.36
	Rep Schedule	12 annual instalments from 19.10.2016
<b>9</b>	<b>Bond XLII</b>	
	Gross loan opening	500.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	500.00

	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	500.00
	Average Loan	500.00
	Rate of Interest	8.80%
	Interest	44.00
	Rep Schedule	13.3.2023 Bullet Payment
<b>10</b>	<b>IFC (IFC-A Loan) (31419-00)</b>	
	Gross loan opening	440.09
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	440.09
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	440.09
	Average Loan	440.09
	Rate of Interest	3.285%
	Interest	14.46
	Rep Schedule	20 half yearly from 15.9.2017
<b>11</b>	<b>FC Bond (17.1.2013)</b>	
	Gross loan opening	427.52
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	427.52
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	427.52
	Average Loan	427.52
	Rate of Interest	3.88%
	Interest	16.57
	Rep Schedule	Bullet payment on 17.1.2023
<b>12</b>	<b>Bond XLIV</b>	
	Gross loan opening	1602.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1602.00
	Additions during the year	1684.80
	Repayment during the year	0.00
	Net Loan-Closing	3286.80
	Average Loan	2444.40
	Rate of Interest	8.70%
	Interest	212.66
	Rep Schedule	3 instalments on 15.7.2018, 15.7.2023, 15.7.2028
	<b>Total Loan</b>	
	Gross loan opening	5645.61
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	5645.61
	Additions during the year	1684.80
	Repayment during the year	0.00
	Net Loan-Closing	7330.41

	Average Loan	6488.01
	<b>Weighted Average Rate of Interest</b>	<b>8.3077%</b>
	<b>Interest</b>	<b>539.01</b>



**Annexure-VII**

(₹ in lakh)

<b>CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN</b>		
	<b>Details of Loan</b>	<b>2013-14</b>
<b>1</b>	<b>Bond XXXIV</b>	
	Gross loan opening	200.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	200.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	200.00
	Average Loan	200.00
	Rate of Interest	8.84%
	Interest	17.68
	Rep Schedule	12 Annual instalments from 21.10.2014
<b>2</b>	<b>Bond XXXV</b>	
	Gross loan opening	2.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	2.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	2.00
	Average Loan	2.00
	Rate of Interest	9.64%
	Interest	0.19
	Rep Schedule	12 Annual instalments from 31.5.2015
<b>3</b>	<b>Bond XXXVI</b>	
	Gross loan opening	10.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	10.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	10.00
	Average Loan	10.00
	Rate of Interest	9.35%
	Interest	0.94
	Rep Schedule	15 Annual instalments from 29.8.2016
<b>4</b>	<b>Bond XXXVII</b>	
	Gross loan opening	100.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	100.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	100.00
	Average Loan	100.00
	Rate of Interest	9.25%
	Interest	9.25

	Rep Schedule	12 Annual instalments from 26.12.2015
<b>5</b>	<b>Bond XXXIX</b>	
	Gross loan opening	70.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	70.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	70.00
	Average Loan	70.00
	Rate of Interest	9.40%
	Interest	6.58
	Rep Schedule	29.3.2027 Bullet Payment
<b>6</b>	<b>SBI (21.3.2012)</b>	
	Gross loan opening	150.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	150.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	150.00
	Average Loan	150.00
	Rate of Interest	10.25%
	Interest	15.38
	Rep Schedule	22 annual instalments from 31.8.2016
<b>7</b>	<b>Bond XL</b>	
	Gross loan opening	1000.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1000.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1000.00
	Average Loan	1000.00
	Rate of Interest	9.30%
	Interest	93.00
	Rep Schedule	12 Annual instalments from 28.6.2016
<b>8</b>	<b>Bond XLI</b>	
	Gross loan opening	130.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	130.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	130.00
	Average Loan	130.00
	Rate of Interest	8.8500%
	Interest	11.51
	Rep Schedule	12 annual instalments from 19.10.2016
<b>9</b>	<b>Bond XLII</b>	
	Gross loan opening	207.38
	Cumulative Repayment upto DOCO/previous year	0.00

	Net Loan-Opening	207.38
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	207.38
	Average Loan	207.38
	Rate of Interest	8.80%
	Interest	18.25
	Rep Schedule	13.3.2023 Bullet Payment
<b>10</b>	<b>IFC (IFC-A Loan) (31419-00)</b>	
	Gross loan opening	356.48
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	356.48
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	356.48
	Average Loan	356.48
	Rate of Interest	3.285%
	Interest	11.71
	Rep Schedule	20 half yearly from 15.9.2017
<b>11</b>	<b>FC Bond (17.1.2013)</b>	
	Gross loan opening	192.96
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	192.96
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	192.96
	Average Loan	192.96
	Rate of Interest	3.875%
	Interest	7.48
	Rep Schedule	Bullet payment on 17.1.2023
<b>12</b>	<b>Bond XLIV</b>	
	Gross loan opening	1147.50
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1147.50
	Additions during the year	229.04
	Repayment during the year	0.00
	Net Loan-Closing	1376.54
	Average Loan	1262.02
	Rate of Interest	8.70%
	Interest	109.80
	Rep Schedule	3 instalments on 15.7.2018, 15.7.2023, 15.7.2028
	<b>Total Loan</b>	
	Gross loan opening	3566.32
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	3566.32
	Additions during the year	229.04
	Repayment during the year	0.00

	Net Loan-Closing	3795.36
	Average Loan	3680.84
	<b>Weighted Average Rate of Interest</b>	<b>8.1979%</b>
	<b>Interest</b>	<b>301.75</b>

**Annexure-VIII**

(₹ in lakh)

<b>CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN</b>		
	<b>Details of Loan</b>	<b>2013-14</b>
<b>1</b>	<b>Bond XXXVII</b>	
	Gross loan opening	100.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	100.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	100.00
	Average Loan	100.00
	Rate of Interest	9.25%
	Interest	9.25
	Rep Schedule	12 Annual instalments from 26.12.2015
<b>2</b>	<b>Bond XXXIX</b>	
	Gross loan opening	100.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	100.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	100.00
	Average Loan	100.00
	Rate of Interest	9.40%
	Interest	9.40
	Rep Schedule	29.3.2027 Bullet Payment
<b>3</b>	<b>SBI (21.3.2012)</b>	
	Gross loan opening	100.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	100.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	100.00
	Average Loan	100.00
	Rate of Interest	10.05%
	Interest	10.05
	Rep Schedule	22 annual instalments from 31.8.2016
<b>4</b>	<b>Bond XL</b>	
	Gross loan opening	750.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	750.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	750.00
	Average Loan	750.00
	Rate of Interest	9.30%
	Interest	69.75
	Rep Schedule	12 Annual instalments from 28.6.2016

<b>5</b>	<b>Bond XLI</b>	
	Gross loan opening	250.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	250.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	250.00
	Average Loan	250.00
	Rate of Interest	8.8500%
	Interest	22.13
	Rep Schedule	12 annual instalments from 19.10.2016
<b>6</b>	<b>Bond XLII</b>	
	Gross loan opening	1794.59
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1794.59
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1794.59
	Average Loan	1794.59
	Rate of Interest	8.80%
	Interest	157.92
	Rep Schedule	13.3.2023 Bullet Payment
<b>7</b>	<b>IFC (IFC-A Loan) (31419-00)</b>	
	Gross loan opening	1598.29
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1598.29
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1598.29
	Average Loan	1598.29
	Rate of Interest	3.285%
	Interest	52.50
	Rep Schedule	20 half yearly from 15.9.2017
<b>8</b>	<b>FC Bond (17.1.2013)</b>	
	Gross loan opening	204.54
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	204.54
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	204.54
	Average Loan	204.54
	Rate of Interest	3.875%
	Interest	7.93
	Rep Schedule	Bullet payment on 17.1.2023
<b>9</b>	<b>Bond XLIV</b>	
	Gross loan opening	460.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	460.00
	Additions during the year	936.29

	Repayment during the year	0.00
	Net Loan-Closing	1396.29
	Average Loan	928.15
	Rate of Interest	8.70%
	Interest	80.75
	Rep Schedule	3 instalments on 15.7.2018, 15.7.2023, 15.7.2028
	<b>Total Loan</b>	
	Gross loan opening	5357.42
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	5357.42
	Additions during the year	936.29
	Repayment during the year	0.00
	Net Loan-Closing	6293.71
	Average Loan	5825.57
	<b>Weighted Average Rate of Interest</b>	<b>7.2041%</b>
	<b>Interest</b>	<b>419.68</b>