

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO. 14/TT/2015

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

Date of Hearing : 20.01.2016
Date of Order : 15.03.2016

In the Matter of:

Truing up of transmission tariff for 2009-14 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 and determination of transmission tariff for 2014-19 tariff block under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for Combined Assets associated with Northern Region System Strengthening Scheme – VIII (NRSS-VIII) (Effective COD 1.11.2009) and Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999

And in the Matter of:

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

.....Petitioner

Versus

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Vidyut Marg, Jaipur - 302005
2. Ajmer Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur
3. Jaipur Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur
4. Jodhpur Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur



5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171 004
6. Punjab State Power Corporation Limited,
Thermal Shed TIA,
Near 22 Phatak, Patiala-147001
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula, Haryana - 134109
8. Power Development Department,
Govt. Of Jammu & Kashmir,
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board),
Shakti Bhawan, 14, Ashok Marg,
Lucknow - 226 001
10. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110002
11. BSES Yamuna Power Limited,
BSES Bhawan, Nehru Place , New Delhi.
12. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place, New Delhi
13. North Delhi Power Limited,
Power Trading & Load Dispatch Group Cennet Building,
Adjacent To 66/11 kV Pitampura-3,
Grid Building, Near PP Jewellers Pitampura,
New Delhi - 110034
14. Chandigarh Administration,
Sector -9, Chandigarh
15. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road, Dehradun
16. North Central Railway,
Allahabad
17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002

....Respondent(s)



The following were present:

For Petitioner: Shri Rakesh Prasad, PGCIL
Shri M.M. Mondal, PGCIL
Shri S.S. Raju, PGCIL
Shri S.C. Taneja, PGCIL
Shri S.K. Venkatasan, PGCIL
Smt. Sangeeta Edwards, PGCIL
Shri Jasbir Singh, PGCIL
Shri Y.K. Sehgal, PGCIL
Shri Nitish Kumar, PGCIL
Shri G.C. Dhal, PGCIL
Shri Amit Yadav, PGCIL
Shri Anshul Garg, PGCIL

For Respondents: Shri Vinod Kumar Yadav, Rajasthan Discoms

ORDER

The petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as “the petitioner”) for revision of tariff under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 Tariff Regulations”) based on truing up of capital expenditure for the period from COD to 31.3.2014 and for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) for the period from 1.4.2014 to 31.3.2019 in respect of Combined Assets associated with Northern Region System Strengthening Scheme – VIII (NRSS-VIII) (with effective COD as 1.11.2009) (referred to as “the transmission assets”).

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

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

| Assets | Description | COD |
|---------------|---|------------|
| Asset A | LILO of one Circuit of 400 kV D/C Kankroli-Zerda Line at Bhinmal along with 80 MVAR Bus Reactor at Bhinmal (hereinafter referred to as Asset A) | 1.9.2009 |
| Asset B | 315 MVA 400/220 kV ICT-I at Bhinmal along associated bays (hereinafter referred to as Asset B) | 1.9.2009 |
| Asset C | 315 MVA 400/220 kV ICT-II at Bhinmal along associated bays (hereinafter referred to as Asset C) | 1.4.2010 |
| Asset D | 315 MVA 400/220 kV ICT-III at Hissar along with associated bays at Hissar (hereinafter referred to as Asset D) | 1.4.2010 |
| Asset E | Two Nos. 220 kV Bays at Hissar Sub-station (hereinafter referred to as Asset E) | 1.8.2010 |

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

a) The investment approval for the scheme was accorded by Board of Directors of petitioner company vide letter dated 26.10.2006 at an estimated cost of ₹22069 lakh including IDC of ₹1144 lakh based on the 2nd Quarter price level of 2006.

b) The transmission tariff was determined vide order dated 16.5.2011 in Petition No. 224/2010 and order dated 28.7.2011 in Petition No. 330/2010. The capital cost as on COD was considered as under:-

| As approved in order in Petition No. 224/2010 | | |
|--|---------------------------|-----------------------|
| Capital cost admitted as on COD | Amount (₹ in lakh) | Percentage (%) |
| Asset A | | |
| Debt | 6349.00 | 70.00 |
| Equity | 2720.67 | 30.00 |
| Total | 9069.67 | 100.00 |
| Asset B | | |
| Debt | 1508.05 | 70.00 |
| Equity | 646.31 | 30.00 |
| Total | 2154.36 | 100.00 |

| As approved in order in Petition No. 330/2010 | | |
|--|---------------------------|-----------------------|
| Capital cost admitted as on COD | Amount (₹ in lakh) | Percentage (%) |
| Combined Assets B & C | | |
| Debt | 4162.04 | 70.00 |
| Equity | 1783.73 | 30.00 |
| Total | 5945.77 | 100.00 |
| Asset D | | |
| Debt | 1249.40 | 70.00 |
| Equity | 535.42 | 30.00 |
| Total | 1784.82 | 100.00 |
| Combined Assets D & E | | |
| Debt | 1530.34 | 70.00 |
| Equity | 655.82 | 30.00 |
| Total | 2186.17 | 100.00 |

c) There was time over-run of two months in case of Asset E and the same was considered and disallowed in order dated 28.7.2011 in Petition No. 330/2010. The corresponding IDC and IEDC of ₹3.39 lakh was deducted from the capital cost as on COD.

d) The additional capital expenditure for 2009-14 period was considered for determination of tariff in its order dated 16.5.2011 in Petition No. 224/2010 and order dated 28.7.2011 in Petition No. 330/2010 as under:-

| Assets | Approved add. cap. during 2009-14 (₹ in lakh) | | |
|--|--|----------------|----------------|
| | 2009-10 | 2010-11 | 2011-12 |
| As approved in order in Petition No. 224/2010 | | | |
| Asset A | 652.71 | - | - |
| Asset B | 1288.55 | - | - |
| As approved in order in Petition No. 224/2010 | | | |
| Combined Assets B & C | - | 848.52 | 205.53 |
| Asset D | - | 272.01 | 132.76 |
| Combined Assets D & E | - | 347.01 | 190.13 |

e) The transmission tariff determined in order dated 16.5.2011 in Petition No. 224/2010 and order dated 28.7.2011 in Petition No. 330/2010 is depicted below:-

(₹ in lakh)

| Asset A | | | | | |
|-----------------------------|-------------------------------|----------------|----------------|----------------|----------------|
| Particulars | 2009-10 (pro-rata) | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Depreciation | 286.68 | 507.71 | 507.71 | 507.71 | 507.71 |
| Interest on Loan | 347.76 | 580.52 | 533.48 | 486.35 | 439.22 |
| Return on Equity | 287.42 | 509.83 | 509.83 | 509.83 | 509.83 |
| Interest on Working Capital | 26.34 | 46.22 | 45.97 | 45.77 | 45.61 |
| O & M Expenses | 142.39 | 258.07 | 272.84 | 288.44 | 304.91 |
| Total | 1090.58 | 1902.35 | 1869.84 | 1838.11 | 1807.29 |

(₹ in lakh)

| Asset B | | | | | |
|-----------------------------|-------------------------------|----------------|----------------|----------------|----------------|
| Particulars | 2009-10 (pro-rata) | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Depreciation | 84.38 | 177.15 | 177.15 | 177.15 | 177.15 |
| Interest on Loan | 101.33 | 202.73 | 186.67 | 170.52 | 154.37 |
| Return on Equity | 85.62 | 180.56 | 180.56 | 180.56 | 180.56 |
| Interest on Working Capital | 10.4 | 20.27 | 20.43 | 20.61 | 20.82 |
| O & M Expenses | 94.76 | 171.74 | 181.57 | 191.94 | 202.92 |
| Total | 376.48 | 752.44 | 746.37 | 740.77 | 735.82 |

(₹ in lakh)

| Combined Assets B & C | | | | |
|----------------------------------|----------------|----------------|----------------|----------------|
| Particulars | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Depreciation | 324.75 | 347.51 | 352.07 | 352.07 |
| Interest on Loan | 382.39 | 385.37 | 359.95 | 327.8 |
| Return on Equity | 334.06 | 361.7 | 367.09 | 367.09 |
| Interest on Working Capital | 37.26 | 39.27 | 39.96 | 40.37 |
| O & M Expenses | 343.48 | 363.14 | 383.88 | 405.84 |
| Total | 1421.95 | 1497.00 | 1502.94 | 1493.16 |

(₹ in lakh)

| Asset D | |
|-----------------------------|-----------------------|
| Particulars | 2010-11 (pro-rata) |
| Depreciation | 33.81 |
| Interest on Loan | 38.17 |
| Return on Equity | 33.58 |
| Interest on Working Capital | 3.61 |
| O & M Expenses | 31.39 |
| Total | 140.56 |

(₹ in lakh)

| Combined Assets D & E | | | | |
|-----------------------------|-----------------------|---------------|---------------|---------------|
| Particulars | 2010-11 (pro-rata) | 2011-12 | 2012-13 | 2013-14 |
| Depreciation | 83.02 | 138.91 | 143.94 | 143.94 |
| Interest on Loan | 93.02 | 146.35 | 139.71 | 126.96 |
| Return on Equity | 82.5 | 137.83 | 142.81 | 142.81 |
| Interest on Working Capital | 9.96 | 16.04 | 16.57 | 16.82 |
| O & M Expenses | 114.49 | 181.57 | 191.94 | 202.92 |
| Total | 382.99 | 620.70 | 634.97 | 633.45 |

5. As per Regulation 6 of the 2009 Tariff Regulations, the Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up. Further, as per Regulation 15 of the 2009 Tariff Regulations, the petitioner is required to adjust the yearly impact of MAT rate in the truing up petition for 2009-14 tariff period.

6. In this context, the petitioner has filed the instant petition on 19.12.2014, for revision of tariff for the tariff period 2009-14 in accordance with Regulation 6 of the 2009 Tariff Regulations.

7. The petitioner has served the petition on the respondents and notice of this application has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003 ("the Act"). No comments/objections have been received from the public in response to the notice in newspaper. No submissions have been made by the respondents. The hearing in this matter was held on 20.1.2016.

8. The petitioner was directed, vide letter 16.1.2016, to submit an undertaking/certificate depicting the actual equity infused during the tariff period 2009-14 and 2014-19, details depicting the un-discharged liabilities, if any, to be recovered in future in respect of the assets covered in the instant petition and submit whether the entire work as per project scope is completed or not, details of the balance/retention payments claimed during 2009-14 tariff period. In response, the petitioner has submitted the additional information vide affidavit dated 11.2.2016.

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

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

10. Clause (3) of the Regulation 6 of the 2009 Tariff Regulations provides as under:-

“(3) The generating company or the transmission licensee, as the case may be, shall submit for the purpose of truing up, details of capital expenditure and additional capital expenditure incurred for the period from 1.4.2009 to 31.3.2014, duly audited and certified by the auditors”.

11. The petitioner has submitted the information as required under the 2009 Tariff Regulations for truing up of annual fixed charges for 2009-14 tariff period. The tariff for 2009-14 tariff period has been trued up in the subsequent paragraphs.

Capital Cost

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

| Assets | Capital cost (₹ in lakh) |
|-----------------------|---------------------------------|
| Asset A | 9069.67 |
| Asset B | 2160.17 |
| Combined Assets B & C | 4726.38 |
| Asset D | 1784.82 |
| Combined Assets D & E | 2233.76 |

13. Clause (1) of Regulation 7 of the 2009 Tariff Regulations provides that:-

“(1) Capital cost for a project shall include:

(a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan - (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;

(b) capitalised initial spares subject to the ceiling rates specified in regulation 8; and

(c) additional capital expenditure determined under regulation 9:

Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost.”

14. We have considered the submissions of the petitioner with regard to the capital cost. The capital cost of the transmission assets admitted as on COD have been worked out in the subsequent paragraphs taking into consideration the IEDC/IDC and initial spares allowed for the instant assets.

IDC and IEDC

15. There is no time over-run in case of Asset A, B, C and D. In case of Asset E, there was a time over-run of two months. The time over-run of two months in case of Asset E

was not condoned in order dated 28.7.2011 in Petition No. 330/2010 and the corresponding IDC and IEDC of ₹3.39 lakh was deducted from the capital cost of Asset E as on COD.

16. The petitioner has submitted the actual capital cost including IDC and IEDC vide Auditor Certificate dated 12.9.2014. It is observed that the petitioner has submitted IDC and IEDC upto COD. In order dated 28.7.2011 in Petition No. 330/2010, the petitioner has submitted the break-up of the IDC and IEDC upto 31.3.2010 and from 1.4.2010 to COD. Since the IDC and IEDC certified by the Auditor in the instant petition is same as claimed in the previous petition, we have considered the break-up of IDC and IEDC as considered in the previous petition for the purpose of disallowing corresponding to the period of time over-run. The petitioner has also considered the same IDC and IEDC for the purpose of capital cost. The details of IDC and IEDC disallowed is as under:-

| | IEDC | IDC |
|--|-------------|--------------|
| From Date of Investment Approval to 31.03.2010 | 5.07 | 11.72 |
| From 01.04.2010-31.07.2010 | 1.19 | 6.79 |
| Total IDC and IEDC Claimed | 6.26 | 18.51 |
| Detail of IDC Disallowed for 2 months | | |
| From July'10 to August'10 (for 2 months) | 0.00 | 3.39 |
| Total Disallowed IDC (for 2 months) | 0.00 | 3.39 |

17. The capital cost worked out after disallowing the IDC and IEDC amount is shown below:-

(₹ in lakh)

| Assets | Capital cost claimed | Disallowed IDC/IEDC | Capital cost after disallowing IDC/IEDC |
|---------------|-----------------------------|----------------------------|--|
| Asset A | 9069.67 | - | 9069.67 |
| Asset B | 2160.17 | - | 2160.17 |
| Asset C | 2502.85 | - | 2502.85 |
| Asset D | 1784.82 | - | 1784.82 |
| Asset E | 404.74 | 3.39 | 401.35 |

Treatment of Initial Spares

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

| Assets | Amount (₹ in lakh) |
|---------|-----------------------|
| Asset A | 103.01 |
| Asset B | 36.48 |
| Asset C | - |
| Asset D | 52.43 |
| Asset E | - |

19. We have considered the claim of the petitioner for initial spares for the transmission assets. The initial spares claimed by the petitioner are within the normative limit and hence the same is allowed. The capital cost allowed as on COD for the transmission assets for computation of tariff is mentioned below:-

(₹ in lakh)

| Assets | Capital cost after adjusting IEDC/IDC | Excess initial spares disallowed | Capital cost allowed as on COD |
|---------|---------------------------------------|----------------------------------|--------------------------------|
| Asset A | 9069.67 | - | 9069.67 |
| Asset B | 2160.17 | - | 2160.17 |
| Asset C | 2502.85 | - | 2502.85 |
| Asset D | 1784.82 | - | 1784.82 |
| Asset E | 401.35 | - | 401.35 |

Additional Capital Expenditure

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

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

Further, Clause (1), sub-clause(i) 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...;”

Sub clause (viii) of Clause (2) of Regulation 9 of the 2009 Tariff Regulations provides that :-

(2) The capital expenditure incurred on the following counts after the cut-off date may, in its discretion, be admitted by the Commission, subject to prudence check:

.....
.....

(viii) Any undischarged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date, after prudence check of the details of such deferred liability, total estimated cost of package, reason for such withholding of payment and release of such payments etc.”

21. The additional capital expenditure approved in order dated 16.5.2011 in Petition No. 224/2010 and order dated 28.7.2011 in Petition No. 330/2010 and that claimed by the petitioner are depicted below:-

| Assets | Approved / Claimed | Capital cost as on COD | Additional Capital expenditure | | | | | Total | Capital as on 31.3.2014 |
|---------|--|------------------------|--------------------------------|---------|---------|---------|---------|---------|-------------------------|
| | | | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | | |
| Asset A | Approved in order in Petition No. 224/2010 | 9069.67 | 652.71 | - | - | - | - | 652.71 | 9722.38 |
| | Claimed by Petitioner | 9069.67 | 113.27 | 17.79 | 50.96 | 32.58 | 15.66 | 230.26 | 9299.93 |
| Asset B | Approved in order in Petition No. 224/2010 | 2154.36 | 1288.55 | - | - | - | - | 1288.55 | 3442.91 |
| | Claimed by Petitioner | 2160.17 | 63.36 | 111.03 | 167.41 | 32.57 | 74.00 | 448.37 | 2608.54 |

(₹ in lakh)

| Assets | Approved / Claimed | Capital cost as on COD | Additional Capital expenditure | | | | | Capital as on 31.3.2014 | |
|-----------------------|--|------------------------|--------------------------------|---------|---------|---------|---------|-------------------------|---------|
| | | | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | | Total |
| Combined Assets B & C | Approved in order in Petition No. 330/2010 | 5945.77 | - | 848.52 | 205.53 | - | - | 1054.05 | 6999.82 |
| | Claimed by Petitioner | 4726.38 | - | 222.06 | 334.82 | 65.14 | 148.00 | 770.02 | 5496.40 |
| Asset D | Approved in order in Petition No. 330/2010 | 1784.82 | - | 272.01 | 132.76 | - | - | 404.77 | 2189.59 |
| | Claimed by Petitioner | 1784.82 | - | 194.26 | 261.41 | - | - | 455.67 | 2240.49 |
| Combined Assets D & E | Approved in order in Petition No. 330/2010 | 2186.17 | - | 347.01 | 190.13 | - | - | 537.14 | 2723.31 |
| | Claimed by Petitioner | 2233.76 | - | 190.90 | 352.24 | - | - | 543.14 | 2776.90 |

22. The petitioner has submitted the Auditor's Certificates dated 24.9.2014, 11.8.2014 and 12.11.2014 certifying the actual capital cost incurred towards additional capitalization. The petitioner has submitted the additional capital expenditure during 2009-14 tariff period is on account of balance and retention payments towards the transmission assets within the cut-off date under Regulation 9 (1)(i) and after the cut-off date within the meaning of Regulation 9(2)(viii) of the 2009 Tariff Regulations.

23. We have considered the submissions of the petitioner with regard to the actual capital expenditure during 2009-14 tariff period. The capital addition claimed by the petitioner is based on actual capital expenditure incurred as per the Auditor Certificates

dated 24.9.2014, 11.8.2014 and 12.11.2014 and is within the original scope of work. The additional capital expenditure claimed by the petitioner towards balance and retention payments is allowed for truing up under Regulation 9(1)(i) and 9 (2)(viii) of 2009 Tariff Regulations.

24. The additional capital expenditure allowed during 2009-14 tariff period for truing up is as follows:-

(₹ in lakh)

| Assets | Capital cost as on COD | Additional Capital expenditure | | | | | | Capital as on 31.3.2014 |
|-----------------------|------------------------|--------------------------------|---------|---------|---------|---------|--------|-------------------------|
| | | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | Total | |
| Asset A | 9069.67 | 113.27 | 17.79 | 50.96 | 32.58 | 15.66 | 230.26 | 9299.93 |
| Asset B | 2160.17 | 63.36 | 0.00 | 0.00 | 0.00 | 0.00 | 63.36 | 2223.53 |
| Combined Assets B & C | 4726.38 | 0.00 | 222.06 | 334.82 | 65.14 | 148.00 | 770.02 | 5496.40 |
| Asset D | 1784.82 | 0.00 | 64.75 | 0.00 | 0.00 | 0.00 | 64.75 | 1849.57 |
| Combined Assets D & E | 2250.92 | 0.00 | 173.74 | 352.24 | 0.00 | 0.00 | 525.98 | 2776.90 |

25. The debt:equity ratio of 70:30 for additional capital expenditure as claimed by the petitioner is in accordance with the Regulation 12 (3) of the 2009 Tariff Regulations and hence, same has been considered towards financing of the additional capital expenditure. However the petitioner has considered the debt:equity ratio of 11.34:88.66 for additional capital expenditure of Combined Assets B & C in 2013-14.

Debt: Equity

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

“12. Debt-Equity Ratio. (1) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff:

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

(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”

27. The admitted debt:equity ratio of 70.00:30.00 as on COD was considered by the Commission in order dated 16.5.2011 in Petition No. 224/2010 and order dated 28.7.2011 in Petition No. 330/2010 in line with the Regulation 12 of the 2009 Tariff Regulations. In respect of the additional capitalization, debt: equity ratio of 70:30 has been considered in line with the 2009 Tariff Regulations except where the equity is less than 30%.

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

(₹ in lakh)

| Funding | Capital cost as on COD | (%) | Additional capital expenditure during 2009-14 | (%) | Total Cost as on 31.3.2014 | (%) |
|----------------------------------|------------------------|---------------|---|---------------|----------------------------|---------------|
| Asset A | | | | | | |
| Debt | 6348.77 | 70.00 | 161.18 | 70.00 | 6509.95 | 70.00 |
| Equity | 2720.90 | 30.00 | 69.08 | 30.00 | 2789.98 | 30.00 |
| Total | 9069.67 | 100.00 | 230.26 | 100.00 | 9299.93 | 100.00 |
| Asset B | | | | | | |
| Debt | 1512.12 | 70.00 | 44.35 | 70.00 | 1556.47 | 70.00 |
| Equity | 648.05 | 30.00 | 19.01 | 30.00 | 667.06 | 30.00 |
| Total | 2160.17 | 100.00 | 63.36 | 100.00 | 2223.53 | 100.00 |
| Combined Assets B & C | | | | | | |
| Debt | 3308.47 | 70.00 | 566.62 | 73.59 | 3875.09 | 70.50 |
| Equity | 1417.91 | 30.00 | 203.40 | 26.41 | 1621.31 | 29.50 |
| Total | 4726.38 | 100.00 | 770.02 | 100.00 | 5496.40 | 100.00 |
| | | | | | | |

| Funding | Capital cost as on COD | (%) | Additional capital expenditure during 2009-14 | (%) | Total Cost as on 31.3.2014 | (%) |
|----------------------------------|------------------------|---------------|---|---------------|----------------------------|---------------|
| Asset D | | | | | | |
| Debt | 1249.37 | 70.00 | 45.33 | 70.00 | 1294.70 | 70.00 |
| Equity | 535.45 | 30.00 | 19.43 | 30.00 | 554.87 | 30.00 |
| Total | 1784.82 | 100.00 | 64.75 | 100.00 | 1849.57 | 100.00 |
| Combined Assets D & E | | | | | | |
| Debt | 1575.65 | 70.00 | 368.18 | 70.00 | 1943.83 | 70.00 |
| Equity | 675.28 | 30.00 | 157.79 | 30.00 | 833.07 | 30.00 |
| Total | 2250.92 | 100.00 | 525.98 | 100.00 | 2776.90 | 100.00 |

Return on Equity ("ROE")

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

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

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

Rate of pre-tax return on equity = Base rate / (1-t)

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

(5) The generating company or the transmission licensee, as the case maybe, shall recover the shortfall or refund the excess Annual Fixed Charge on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission:

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

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

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

31. The petitioner has claimed the additional capital expenditure in the debt:equity ratio of 70:30, which is in line with Regulation 12 of the 2009 Tariff Regulations. The ROE as trued up and allowed is as follows:-

(₹ in lakh)

| Asset A | | | | | |
|--|--------------------|---------|---------|---------|---------|
| Return on Equity | 2009-10 (pro-rata) | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| As approved vide Order dated 16.5.2011 | 287.42 | 509.83 | 509.83 | 509.83 | 509.83 |
| Claimed by the petitioner | 298.22 | 533.76 | 536.29 | 538.71 | 546.61 |
| Allowed after true up in this order | 298.24 | 533.81 | 536.33 | 538.76 | 546.67 |

(₹ in lakh)

| Asset B | |
|--|--------------------|
| Return on Equity | 2009-10 (pro-rata) |
| As approved vide Order dated 16.5.2011 | 85.62 |
| Claimed by the petitioner | 71.63 |
| Allowed after true up in this order | 71.63 |

(₹ in lakh)

| Combined Assets B & C | | | | |
|--|---------|---------|---------|---------|
| Return on Equity | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| As approved vide Order dated 28.7.2011 | 334.06 | 361.70 | 367.09 | 367.09 |
| Claimed by the petitioner | 280.93 | 297.39 | 309.01 | 316.29 |
| Allowed after true up in this order | 280.93 | 297.39 | 309.01 | 316.30 |

(₹ in lakh)

| Asset D | |
|--|--------------------|
| Return on Equity | 2010-11 (pro-rata) |
| As approved vide Order dated 28.7.2011 | 33.58 |
| Claimed by the petitioner | 36.43 |
| Allowed after true up in this order | 35.18 |



(₹ in lakh)

| Combined Assets D & E | | | | |
|--|-----------------------|---------|---------|---------|
| Return on Equity | 2010-11 (pro-rata) | 2011-12 | 2012-13 | 2013-14 |
| As approved vide Order dated 28.7.2011 | 82.50 | 137.83 | 142.81 | 142.81 |
| Claimed by the petitioner | 90.18 | 151.18 | 161.42 | 163.36 |
| Allowed after true up in this order | 90.51 | 151.19 | 161.42 | 163.37 |

The difference in the approved ROE and that allowed after trueing up is on account of actual grossed up ROE based on actual MAT rate.

Interest on Loan (“IoL”)

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

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

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

(₹ in lakh)

| Asset A | | | | | |
|--|-----------------------|---------|---------|---------|---------|
| Interest on Loan | 2009-10 (pro-rata) | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| As approved vide Order dated 16.5.2011 | 347.76 | 580.52 | 533.48 | 486.35 | 439.22 |
| Claimed by the petitioner | 337.67 | 547.73 | 505.25 | 463.01 | 419.49 |
| Allowed after true up in this order | 337.66 | 547.71 | 505.23 | 462.99 | 419.47 |



(₹ in lakh)

| Asset B | |
|--|---------------------------|
| Interest on Loan | 2009-10 (pro-rata) |
| As approved vide Order dated 16.5.2011 | 101.33 |
| Claimed by the petitioner | 79.32 |
| Allowed after true up in this order | 79.32 |

(₹ in lakh)

| Combined Assets B & C | | | | |
|--|----------------|----------------|----------------|----------------|
| Interest on Loan | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| As approved vide Order dated 28.7.2011 | 382.39 | 385.37 | 359.95 | 327.80 |
| Claimed by the petitioner | 289.80 | 284.41 | 273.18 | 256.59 |
| Allowed after true up in this order | 289.80 | 284.40 | 273.18 | 256.59 |

(₹ in lakh)

| Asset D | |
|--|---------------------------|
| Interest on Loan | 2010-11 (pro-rata) |
| As approved vide Order dated 28.7.2011 | 38.17 |
| Claimed by the petitioner | 38.37 |
| Allowed after true up in this order | 37.05 |

(₹ in lakh)

| Combined Assets D & E | | | | |
|--|---------------------------|----------------|----------------|----------------|
| Interest on Loan | 2010-11 (pro-rata) | 2011-12 | 2012-13 | 2013-14 |
| As approved vide Order dated 28.7.2011 | 93.02 | 146.35 | 139.71 | 126.96 |
| Claimed by the petitioner | 91.84 | 145.29 | 143.98 | 130.93 |
| Allowed after true up in this order | 92.25 | 145.36 | 144.05 | 131.01 |

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

Depreciation

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

(₹ in lakh)

| Asset A | | | | | |
|--|-------------------------------|----------------|----------------|----------------|----------------|
| Depreciation | 2009-10 (pro-rata) | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| As approved vide Order dated 16.5.2011 | 286.68 | 507.71 | 507.71 | 507.71 | 507.71 |
| Claimed by the petitioner | 278.94 | 481.64 | 483.44 | 485.37 | 486.32 |
| Allowed after true up in this order | 278.93 | 481.63 | 483.45 | 485.37 | 486.32 |

(₹ in lakh)

| Asset B | |
|--|---------------------------|
| Depreciation | 2009-10 (pro-rata) |
| As approved vide Order dated 16.5.2011 | 84.38 |
| Claimed by the petitioner | 66.59 |
| Allowed after true up in this order | 66.59 |

(₹ in lakh)

| Combined Assets B & C | | | | |
|--|----------------|----------------|----------------|----------------|
| Depreciation | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| As approved vide Order dated 28.7.2011 | 324.75 | 347.51 | 352.07 | 352.07 |
| Claimed by the petitioner | 249.24 | 260.39 | 268.65 | 272.59 |
| Allowed after true up in this order | 249.23 | 260.39 | 268.65 | 272.59 |

(₹ in lakh)

| Asset D | |
|--|--------------------------|
| Depreciation | 2010-11(pro-rata) |
| As approved vide Order dated 28.7.2011 | 33.81 |
| Claimed by the petitioner | 33.12 |
| Allowed after true up in this order | 31.98 |

(₹ in lakh)

| Combined Assets D & E | | | | |
|--|-------------------------------|----------------|----------------|----------------|
| Depreciation | 2010-11 (pro-rata) | 2011-12 | 2012-13 | 2013-14 |
| As approved vide Order dated 28.7.2011 | 83.02 | 138.91 | 143.94 | 143.94 |
| Claimed by the petitioner | 82.07 | 137.45 | 146.78 | 146.78 |
| Allowed after true up in this order | 82.36 | 137.45 | 146.77 | 146.77 |

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

Operation & Maintenance Expenses (O&M Expenses)

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

(₹ in lakh)

| Asset A | | | | | |
|--|---------------------------|----------------|----------------|----------------|----------------|
| O&M Expenses | 2009-10 (pro-rata) | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| As approved vide Order dated 16.5.2011 | 142.39 | 258.07 | 272.84 | 288.44 | 304.91 |
| Claimed by the petitioner | 142.39 | 258.07 | 272.84 | 288.44 | 304.91 |
| Allowed after true up in this order | 142.39 | 258.07 | 272.84 | 288.44 | 304.91 |

(₹ in lakh)

| Asset B | |
|--|---------------------------|
| O&M Expenses | 2009-10 (pro-rata) |
| As approved vide Order dated 16.5.2011 | 94.76 |
| Claimed by the petitioner | 94.76 |
| Allowed after true up in this order | 94.76 |

(₹ in lakh)

| Combined Assets B & C | | | | |
|--|----------------|----------------|----------------|----------------|
| O&M Expenses | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| As approved vide Order dated 28.7.2011 | 343.48 | 363.14 | 383.88 | 405.84 |
| Claimed by the petitioner | 343.48 | 363.14 | 383.88 | 405.84 |
| Allowed after true up in this order | 343.48 | 363.14 | 383.88 | 405.84 |

(₹ in lakh)

| Asset D | |
|--|--------------------------|
| O&M Expenses | 2010-11(pro-rata) |
| As approved vide Order dated 28.7.2011 | 31.39 |
| Claimed by the petitioner | 31.39 |
| Allowed after true up in this order | 31.39 |

(₹ in lakh)

| Combined Assets D & E | | | | |
|--|-------------------------------|----------------|----------------|----------------|
| O&M Expenses | 2010-11 (pro-rata) | 2011-12 | 2012-13 | 2013-14 |
| As approved vide Order dated 28.7.2011 | 114.49 | 181.57 | 191.94 | 202.92 |
| Claimed by the petitioner | 114.49 | 181.57 | 191.94 | 202.92 |
| Allowed after true up in this order | 114.49 | 181.57 | 191.94 | 202.92 |

Interest on Working Capital (IWC)

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

(₹ in lakh)

| Asset A | | | | | |
|--|-------------------------------|----------------|----------------|----------------|----------------|
| Interest on Working Capital | 2009-10 (pro-rata) | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| As approved vide Order dated 16.5.2011 | 26.34 | 46.22 | 45.97 | 45.77 | 45.61 |
| Claimed by the petitioner | 26.19 | 45.49 | 45.43 | 45.42 | 45.52 |
| Allowed after true up in this order | 26.19 | 45.49 | 45.43 | 45.42 | 45.52 |

(₹ in lakh)

| Asset B | |
|--|---------------------------|
| Interest on Working Capital | 2009-10 (pro-rata) |
| As approved vide Order dated 16.5.2011 | 10.40 |
| Claimed by the petitioner | 9.28 |
| Allowed after true up in this order | 9.27 |

(₹ in lakh)

| Combined Assets B & C | | | | |
|--|----------------|----------------|----------------|----------------|
| Interest on Working Capital | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| As approved vide Order dated 28.7.2011 | 37.26 | 39.27 | 39.96 | 40.37 |
| Claimed by the petitioner | 32.84 | 34.23 | 35.40 | 36.34 |
| Allowed after true up in this order | 32.84 | 34.23 | 35.40 | 36.34 |

(₹ in lakh)

| Asset D | |
|--|-------------------------------|
| Interest on Working Capital | 2010-11 (pro-rata) |
| As approved vide Order dated 28.7.2011 | 3.61 |
| Claimed by the petitioner | 3.66 |
| Allowed after true up in this order | 3.59 |

(₹ in lakh)

| Combined Assets D & E | | | | |
|--|-------------------------------|----------------|----------------|----------------|
| Interest on Working Capital | 2010-11 (pro-rata) | 2011-12 | 2012-13 | 2013-14 |
| As approved vide Order dated 28.7.2011 | 9.96 | 16.04 | 16.57 | 16.82 |
| Claimed by the petitioner | 10.07 | 16.24 | 17.05 | 17.33 |
| Allowed after true up in this order | 11.25 | 18.13 | 19.03 | 19.34 |

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

APPROVED ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

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

(₹ in lakh)

| Asset A | | | | | |
|----------------------------------|-------------------------------|----------------|----------------|----------------|----------------|
| Particulars | 2009-10 (pro-rata) | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Depreciation | | | | | |
| Opening Gross Block | 9069.67 | 9182.94 | 9200.73 | 9251.69 | 9284.27 |
| Additional Capitalisation | 113.27 | 17.79 | 50.96 | 32.58 | 15.66 |
| Closing Gross Block | 9182.94 | 9200.73 | 9251.69 | 9284.27 | 9299.93 |
| Average Gross Block | 9126.31 | 9191.84 | 9226.21 | 9267.98 | 9292.10 |
| Rate of Depreciation (%) | 5.24 | 5.24 | 5.24 | 5.24 | 5.23 |
| Depreciable Value | 8179.67 | 8289.62 | 8277.59 | 8330.11 | 8343.55 |
| Balance useful life of the asset | 29.00 | 28.00 | 27.00 | 26.00 | 25.00 |
| Elapsed life | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 |
| Remaining Depreciable Value | 8179.67 | 7959.72 | 7509.02 | 7063.17 | 6599.51 |



| Asset A | | | | | |
|---|-------------------------------|----------------|----------------|----------------|----------------|
| Particulars | 2009-10 (pro-rata) | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Depreciation during the year | 278.93 | 481.63 | 483.45 | 485.37 | 486.32 |
| Cumulative depreciation (incl. of AAD) | 278.93 | 760.57 | 1244.01 | 1729.38 | 2215.70 |
| Interest on Loan | | | | | |
| Gross Normative Loan | 6348.77 | 6428.06 | 6440.51 | 6476.18 | 6498.99 |
| Cumulative Repayments upto Previous Year | 0.00 | 278.93 | 760.57 | 1244.01 | 1729.38 |
| Net Loan-Opening | 6348.77 | 6149.12 | 5679.95 | 5232.17 | 4769.61 |
| Additions | 79.29 | 12.45 | 35.67 | 22.81 | 10.96 |
| Repayment during the year | 278.93 | 481.63 | 483.45 | 485.37 | 486.32 |
| Net Loan-Closing | 6149.12 | 5679.95 | 5232.17 | 4769.61 | 4294.25 |
| Average Loan | 6248.95 | 5914.53 | 5456.06 | 5000.89 | 4531.93 |
| Weighted Average Rate of Interest on Loan (%) | 9.2631 | 9.2604 | 9.2600 | 9.2581 | 9.2559 |
| Interest on Loan | 337.66 | 547.71 | 505.23 | 462.99 | 419.47 |
| Return on Equity | | | | | |
| Opening Equity | 2720.90 | 2754.88 | 2760.22 | 2775.51 | 2785.28 |
| Additions | 33.98 | 5.34 | 15.29 | 9.77 | 4.70 |
| Closing Equity | 2754.88 | 2760.22 | 2775.51 | 2785.28 | 2789.98 |
| Average Equity | 2737.89 | 2757.55 | 2767.86 | 2780.39 | 2787.63 |
| Return on Equity (Base Rate) (%) | 15.500 | 15.500 | 15.500 | 15.500 | 15.500 |
| MAT Rate for respective year (%) | 16.995 | 19.931 | 20.008 | 20.008 | 20.961 |
| Rate of Return on Equity (%) | 18.674 | 19.358 | 19.377 | 19.377 | 19.610 |
| Return on Equity | 298.24 | 533.81 | 536.33 | 538.76 | 546.67 |
| Interest on Working Capital | | | | | |
| O & M Expenses | 20.34 | 21.51 | 22.74 | 24.04 | 25.41 |
| Maintenance Spares | 36.61 | 38.71 | 40.93 | 43.27 | 45.74 |
| Receivables | 309.54 | 311.12 | 307.21 | 303.50 | 300.48 |
| Total Working Capital | 366.50 | 371.33 | 370.88 | 370.80 | 371.63 |
| Rate of Interest (%) | 12.25 | 12.25 | 12.25 | 12.25 | 12.25 |
| Interest of working capital | 26.19 | 45.49 | 45.43 | 45.42 | 45.52 |
| Annual Transmission Charges | | | | | |
| Depreciation | 278.93 | 481.63 | 483.45 | 485.37 | 486.32 |
| Interest on Loan | 337.66 | 547.71 | 505.23 | 462.99 | 419.47 |
| Return on Equity | 298.24 | 533.81 | 536.33 | 538.76 | 546.67 |
| Interest on Working Capital | 26.19 | 45.49 | 45.43 | 45.42 | 45.52 |
| O & M Expenses | 142.39 | 258.07 | 272.84 | 288.44 | 304.91 |
| Total | 1083.41 | 1866.71 | 1843.28 | 1820.97 | 1802.90 |

(₹ in lakh)

| Asset B | |
|---|-------------------------------|
| Particulars | 2009-10 (pro-rata) |
| Depreciation | |
| Opening Gross Block | 2160.17 |
| Additional Capitalisation | 63.36 |
| Closing Gross Block | 2223.53 |
| Average Gross Block | 2191.85 |
| Rate of Depreciation (%) | 5.21 |
| Depreciable Value | 1961.33 |
| Balance useful life of the asset | 24.00 |
| Elapsed life | 1.00 |
| Remaining Depreciable Value | 1961.33 |
| Depreciation during the year | 66.59 |
| Cumulative depreciation (incl. of AAD) | 66.59 |
| Interest on Loan | |
| Gross Normative Loan | 1512.12 |
| Cumulative Repayments upto Previous Year | 0.00 |
| Net Loan-Opening | 1512.12 |
| Additions | 44.35 |
| Repayment during the year | 66.59 |
| Net Loan-Closing | 1489.88 |
| Average Loan | 1501.00 |
| Weighted Average Rate of Interest on Loan (%) | 9.0590 |
| Interest on Loan | 79.32 |
| Return on Equity | |
| Opening Equity | 648.05 |
| Additions | 19.01 |
| Closing Equity | 667.06 |
| Average Equity | 657.56 |
| Return on Equity (Base Rate) (%) | 15.500 |
| MAT Rate for respective year (%) | 16.995 |
| Rate of Return on Equity (%) | 18.674 |
| Return on Equity | 71.63 |
| Interest on Working Capital | |
| O & M Expenses | 13.54 |
| Maintenance Spares | 24.37 |
| Receivables | 91.88 |
| Total Working Capital | 129.78 |
| Rate of Interest (%) | 12.25 |



| Asset B | |
|------------------------------------|-------------------------------|
| Particulars | 2009-10 (pro-rata) |
| Interest of working capital | 9.27 |
| Annual Transmission Charges | |
| Depreciation | 66.59 |
| Interest on Loan | 79.32 |
| Return on Equity | 71.63 |
| Interest on Working Capital | 9.27 |
| O & M Expenses | 94.76 |
| Total | 321.57 |

(₹ in lakh)

| Combined Assets B & C | | | | |
|---|----------------|----------------|----------------|----------------|
| Particulars | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Depreciation | | | | |
| Opening Gross Block | 4726.38 | 4948.44 | 5283.26 | 5348.40 |
| Additional Capitalisation | 222.06 | 334.82 | 65.14 | 148.00 |
| Closing Gross Block | 4948.44 | 5283.26 | 5348.40 | 5496.40 |
| Average Gross Block | 4837.41 | 5115.85 | 5315.83 | 5422.40 |
| Rate of Depreciation (%) | 5.15 | 5.09 | 5.05 | 5.03 |
| Depreciable Value | 4306.19 | 4656.71 | 4887.43 | 4861.99 |
| Balance useful life of the asset | 24.00 | 23.00 | 22.00 | 21.00 |
| Elapsed life | 0.00 | 1.00 | 2.00 | 3.00 |
| Remaining Depreciable Value | 4239.60 | 4240.96 | 4160.55 | 3987.82 |
| Depreciation during the year | 249.23 | 260.39 | 268.65 | 272.59 |
| Cumulative depreciation (incl. of AAD) | 315.82 | 576.21 | 844.85 | 1117.44 |
| Interest on Loan | | | | |
| Gross Normative Loan | 3308.47 | 3463.91 | 3698.28 | 3743.88 |
| Cumulative Repayments upto Previous Year | 66.59 | 315.82 | 576.21 | 844.85 |
| Net Loan-Opening | 3241.88 | 3148.09 | 3122.07 | 2899.03 |
| Additions | 155.44 | 234.37 | 45.60 | 131.21 |
| Repayment during the year | 249.23 | 260.39 | 268.65 | 272.59 |
| Net Loan-Closing | 3148.09 | 3122.07 | 2899.03 | 2757.65 |
| Average Loan | 3194.98 | 3135.08 | 3010.55 | 2828.34 |
| Weighted Average Rate of Interest on Loan (%) | 9.0704 | 9.0717 | 9.0740 | 9.0720 |
| Interest on Loan | 289.80 | 284.40 | 273.18 | 256.59 |
| Return on Equity | | | | |
| Opening Equity | 1417.91 | 1484.53 | 1584.98 | 1604.52 |
| Additions | 66.62 | 100.45 | 19.54 | 16.79 |
| Closing Equity | 1484.53 | 1584.98 | 1604.52 | 1621.31 |



| Combined Assets B & C | | | | |
|------------------------------------|----------------|----------------|----------------|----------------|
| Particulars | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Average Equity | 1451.22 | 1534.76 | 1594.75 | 1612.92 |
| Return on Equity (Base Rate) (%) | 15.500 | 15.500 | 15.500 | 15.500 |
| MAT Rate for respective year (%) | 19.931 | 20.008 | 20.008 | 20.961 |
| Rate of Return on Equity (%) | 19.358 | 19.377 | 19.377 | 19.610 |
| Return on Equity | 280.93 | 297.39 | 309.01 | 316.30 |
| Interest on Working Capital | | | | |
| O & M Expenses | 28.61 | 30.25 | 31.98 | 33.81 |
| Maintenance Spares | 51.52 | 54.47 | 57.58 | 60.88 |
| Receivables | 199.38 | 206.59 | 211.69 | 214.61 |
| Total Working Capital | 279.52 | 291.31 | 301.24 | 309.29 |
| Rate of Interest (%) | 11.75 | 11.75 | 11.75 | 11.75 |
| Interest of working capital | 32.84 | 34.23 | 35.40 | 36.34 |
| Annual Transmission Charges | | | | |
| Depreciation | 249.23 | 260.39 | 268.65 | 272.59 |
| Interest on Loan | 289.80 | 284.40 | 273.18 | 256.59 |
| Return on Equity | 280.93 | 297.39 | 309.01 | 316.30 |
| Interest on Working Capital | 32.84 | 34.23 | 35.40 | 36.34 |
| O & M Expenses | 343.48 | 363.14 | 383.88 | 405.84 |
| Total | 1196.29 | 1239.55 | 1270.11 | 1287.66 |

(₹ in lakh)

| Asset D | |
|--|-------------------------------|
| Particulars | 2010-11 (pro-rata) |
| Depreciation | |
| Opening Gross Block | 1784.82 |
| Additional Capitalisation | 64.75 |
| Closing Gross Block | 1849.57 |
| Average Gross Block | 1817.20 |
| Rate of Depreciation (%) | 5.28 |
| Depreciable Value | 1635.48 |
| Balance useful life of the asset | 24.00 |
| Elapsed life | 1.00 |
| Remaining Depreciable Value | 0.00 |
| Depreciation during the year | 31.98 |
| Cumulative depreciation (incl. of AAD) | 31.98 |
| Interest on Loan | |
| Gross Normative Loan | 1249.37 |
| Cumulative Repayments upto Previous Year | 0.00 |
| Net Loan-Opening | 1249.37 |



| Asset D | |
|---|-------------------------------|
| Particulars | 2010-11 (pro-rata) |
| Additions | 45.33 |
| Repayment during the year | 31.98 |
| Net Loan-Closing | 1262.72 |
| Average Loan | 1256.05 |
| Weighted Average Rate of Interest on Loan (%) | 8.8501 |
| Interest on Loan | 37.05 |
| Return on Equity | |
| Opening Equity | 535.45 |
| Additions | 19.43 |
| Closing Equity | 554.87 |
| Average Equity | 545.16 |
| Return on Equity (Base Rate) (%) | 15.500 |
| MAT Rate for respective year (%) | 19.931 |
| Rate of Return on Equity (%) | 19.358 |
| Return on Equity | 35.18 |
| Interest on Working Capital | |
| O & M Expenses | 7.85 |
| Maintenance Spares | 14.13 |
| Receivables | 69.60 |
| Total Working Capital | 91.57 |
| Rate of Interest (%) | 11.75 |
| Interest of working capital | 3.59 |
| Annual Transmission Charges | |
| Depreciation | 31.98 |
| Interest on Loan | 37.05 |
| Return on Equity | 35.18 |
| Interest on Working Capital | 3.59 |
| O & M Expenses | 31.39 |
| Total | 139.19 |

(₹ in lakh)

| Combined Assets D & E | | | | |
|----------------------------------|-------------------------------|----------------|----------------|----------------|
| Particulars | 2010-11 (pro-rata) | 2011-12 | 2012-13 | 2013-14 |
| Depreciation | | | | |
| Opening Gross Block | 2250.92 | 2424.66 | 2776.90 | 2776.90 |
| Additional Capitalisation | 173.74 | 352.24 | 0.00 | 0.00 |
| Closing Gross Block | 2424.66 | 2776.90 | 2776.90 | 2776.90 |
| Average Gross Block | 2337.79 | 2600.78 | 2776.90 | 2776.90 |
| Rate of Depreciation (%) | 5.28 | 5.29 | 5.29 | 5.29 |



| Combined Assets D & E | | | | |
|---|-------------------------------|----------------|----------------|----------------|
| Particulars | 2010-11 (pro-rata) | 2011-12 | 2012-13 | 2013-14 |
| Depreciable Value | 2104.01 | 2418.88 | 2657.72 | 2499.21 |
| Balance useful life of the asset | 24.00 | 23.00 | 22.00 | 21.00 |
| Elapsed life | 0.00 | 1.00 | 2.00 | 3.00 |
| Remaining Depreciable Value | 2072.03 | 2226.36 | 2247.41 | 2100.64 |
| Depreciation during the year | 82.36 | 137.45 | 146.77 | 146.77 |
| Cumulative depreciation (incl. of AAD) | 114.35 | 251.80 | 398.57 | 545.35 |
| Interest on Loan | | | | |
| Gross Normative Loan | 1575.65 | 1697.26 | 1943.83 | 1943.83 |
| Cumulative Repayments upto Previous Year | 31.98 | 114.35 | 251.80 | 398.57 |
| Net Loan-Opening | 1543.66 | 1582.92 | 1692.03 | 1545.26 |
| Additions | 121.62 | 246.57 | 0.00 | 0.00 |
| Repayment during the year | 82.36 | 137.45 | 146.77 | 146.77 |
| Net Loan-Closing | 1582.92 | 1692.03 | 1545.26 | 1398.48 |
| Average Loan | 1563.29 | 1637.47 | 1618.64 | 1471.87 |
| Weighted Average Rate of Interest on Loan (%) | 8.8514 | 8.8772 | 8.8996 | 8.9006 |
| Interest on Loan | 92.25 | 145.36 | 144.05 | 131.01 |
| Return on Equity | | | | |
| Opening Equity | 675.28 | 727.40 | 833.07 | 833.07 |
| Additions | 52.12 | 105.67 | 0.00 | 0.00 |
| Closing Equity | 727.40 | 833.07 | 833.07 | 833.07 |
| Average Equity | 701.34 | 780.23 | 833.07 | 833.07 |
| Return on Equity (Base Rate) (%) | 15.500 | 15.500 | 15.500 | 15.500 |
| MAT Rate for respective year (%) | 19.931 | 20.008 | 20.008 | 20.961 |
| Rate of Return on Equity (%) | 19.358 | 19.377 | 19.377 | 19.610 |
| Return on Equity | 90.51 | 151.19 | 161.42 | 163.37 |
| Interest on Working Capital | | | | |
| O & M Expenses | 14.31 | 15.13 | 16.00 | 16.91 |
| Maintenance Spares | 25.76 | 27.24 | 28.79 | 30.44 |
| Receivables | 97.72 | 105.62 | 110.54 | 110.57 |
| Total Working Capital | 137.79 | 147.98 | 155.32 | 157.92 |
| Rate of Interest (%) | 12.25 | 12.25 | 12.25 | 12.25 |
| Interest of working capital | 11.25 | 18.13 | 19.03 | 19.34 |
| Annual Transmission Charges | | | | |
| Depreciation | 82.36 | 137.45 | 146.77 | 146.77 |
| Interest on Loan | 92.25 | 145.36 | 144.05 | 131.01 |
| Return on Equity | 90.51 | 151.19 | 161.42 | 163.37 |
| Interest on Working Capital | 11.25 | 18.13 | 19.03 | 19.34 |
| O & M Expenses | 114.49 | 181.57 | 191.94 | 202.92 |
| Total | 390.87 | 633.70 | 663.22 | 663.41 |



DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

38. The petitioner has combined the Asset A, B, C, D & E on 1.4.2014. The effective COD considered for the Combined Assets for computation tariff is 1.11.2009. The tariff charges claimed by the petitioner for 2014-19 tariff period is as follows:-

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|
| Depreciation | 931.79 | 954.69 | 954.69 | 954.69 | 954.69 |
| Interest on Loan | 757.28 | 698.79 | 611.49 | 524.19 | 436.89 |
| Return on Equity | 1053.88 | 1079.40 | 1079.40 | 1079.40 | 1079.40 |
| Interest on Working Capital | 109.59 | 110.90 | 110.49 | 110.12 | 109.81 |
| O & M Expenses | 840.88 | 868.80 | 897.66 | 927.42 | 958.20 |
| Total | 3693.42 | 3712.58 | 3653.73 | 3595.82 | 3538.99 |

39. The details submitted by the petitioner in support of its claim for interest on working capital are given hereunder:-

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|
| O&M Expenses | 70.07 | 72.40 | 74.81 | 77.29 | 79.85 |
| Maintenance Spares | 126.13 | 130.32 | 134.65 | 139.11 | 143.73 |
| Receivables | 615.57 | 618.76 | 608.96 | 599.30 | 589.83 |
| Total working capital | 811.77 | 821.48 | 818.42 | 815.70 | 813.41 |
| Rate of Interest | 13.50 | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest of working capital | 109.59 | 110.90 | 110.49 | 110.12 | 109.81 |

Capital Cost

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

- “(3) The Capital cost of an existing project shall include the following:
- (a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;
 - (b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and
 - (c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15.”

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

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

41. The capital cost of Combined Assets as on 31.3.2014 is mentioned below:-

| (₹ in lakh) | |
|--------------------------------|-------------------------------------|
| Assets | Capital cost as on 31.3.2014 |
| Asset A | 9299.93 |
| Combined Asset B & C | 5496.40 |
| Combined Asset D & E | 2776.90 |
| Total (Combined Assets) | 17573.23 |

42. The capital cost of ₹17573.23 lakh worked out as on 31.3.2014 for Combined Assets has been considered as opening capital cost as on 1.4.2014 for determination of tariff in accordance with Regulation 9 of the 2014 Tariff Regulations.

Additional Capital Expenditure

43. Clause (1) of Regulation 14 of the 2014 Tariff Regulations provides as under:-

“(1) The capital expenditure in respect of the new project or an existing project 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 recognized to be payable at a future date;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and
- (v) Change in law or compliance of any existing law.”

44. Clause 13 of Regulation 3 of the 2014 Tariff Regulations defines

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

year, the cut - off date shall be 31st March of the year closing after three years of the year of commercial operation.”

45. The petitioner has claimed additional capital expenditure amounting to ₹867.48 lakh during 2014-15 in Asset A, B and C as mentioned below:-

| Assets | Additional Capital Expenditure during 2014-19 (₹ in lakh) | Reasons |
|--------------------------------|--|--|
| Asset A | 298.94 | Towards balance and retention payments |
| Asset B | 284.27 | |
| Asset C | 284.27 | |
| Asset D | - | - |
| Asset E | - | - |
| Total (Combined Assets) | 867.48 | Towards balance and retention payments |

46. The petitioner in its reply in affidavit dated 11.2.2016 and has submitted details of balance expenditure of ₹867.48 lakh to be discharged during 2014-19.

47. We have considered the submissions of the petitioner. The additional capital expenditure projected for 2014-19 tariff period is allowed under Regulation 14 (1)(i) of 2014 Tariff Regulations subject to true up on actual basis.

Debt: Equity

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

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

“(3) In case of the generating station and the transmission system including communication system declared under commercial operation

prior to 1.4.2014, debt equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered.”

“(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as maybe admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”

49. The petitioner has considered the debt:equity ratio of 70.00:30.00 as on 31.3.2014 for Combined Asset I & II, which is in line with the 2014 Tariff Regulations. The details of the debt:equity considered for the purpose of tariff for 2014-19 tariff period is as follows:-

(₹ in lakh)

| Funding | Capital cost as on 1.4.2014 | (%) | Additional capital expenditure during 2014-19 | (%) | Total Cost as on 31.3.2019 | (%) |
|----------------|------------------------------------|---------------|--|---------------|-----------------------------------|---------------|
| Debt | 12301.26 | 70.00 | 607.24 | 70.00 | 12908.50 | 70.00 |
| Equity | 5271.97 | 30.00 | 260.24 | 30.00 | 5532.21 | 30.00 |
| Total | 17573.23 | 100.00 | 867.48 | 100.00 | 18440.71 | 100.00 |

Return on Equity (ROE)

50. Clause (1) and (2) of Regulations 24 and Clause (2) of Regulation 25 of the 2014 Tariff Regulations specify as under:-

“24. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system”

“25. Tax on Return on Equity:

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

Rate of pre-tax return on equity = Base rate / (1-t)

Where “t” is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be,

and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.”

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

(₹ in lakh)

| Return on Equity | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|----------------------------------|----------------|----------------|----------------|----------------|----------------|
| Opening Equity | 5271.97 | 5532.21 | 5532.21 | 5532.21 | 5532.21 |
| Additions | 260.24 | 0.00 | 0.00 | 0.00 | 0.00 |
| Closing Equity | 5532.21 | 5532.21 | 5532.21 | 5532.21 | 5532.21 |
| Average Equity | 5402.09 | 5532.21 | 5532.21 | 5532.21 | 5532.21 |
| Return on Equity (Base Rate) (%) | 15.500 | 15.500 | 15.500 | 15.500 | 15.500 |
| MAT Rate for respective year (%) | 20.961 | 20.961 | 20.961 | 20.961 | 20.961 |
| Rate of Return on Equity (%) | 19.610 | 19.610 | 19.610 | 19.610 | 19.610 |
| Return on Equity | 1059.37 | 1084.89 | 1084.89 | 1084.89 | 1084.89 |

Interest on Loan (“IoL”)

52. Clause 5 and Clause 6 of Regulation 26 of the 2014 Tariff Regulations provides that:-

“(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.”

53. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2014. The petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2014-19 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up or next revision of tariff. By considering above, the IoL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of weighted average rate of interest for 2014-19 tariff period are placed in Annexure-2 and the IoL has been worked out and allowed as follows:-

| | (₹ in lakh) | | | | |
|---|----------------|----------------|----------------|----------------|----------------|
| Interest on Loan | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Gross Normative Loan | 12301.26 | 12908.50 | 12908.50 | 12908.50 | 12908.50 |
| Cumulative Repayment upto Previous Year | 3878.49 | 4810.28 | 5764.97 | 6719.67 | 7674.36 |
| Net Loan-Opening | 8422.77 | 8098.21 | 7143.52 | 6188.83 | 5234.14 |
| Additions | 607.24 | 0.00 | 0.00 | 0.00 | 0.00 |
| Repayment during the year | 931.79 | 954.69 | 954.69 | 954.69 | 954.69 |
| Net Loan-Closing | 8098.21 | 7143.52 | 6188.83 | 5234.14 | 4279.45 |
| Average Loan | 8260.49 | 7620.87 | 6666.18 | 5711.49 | 4756.80 |
| Weighted Average Rate of Interest on Loan (%) | 9.1376 | 9.1371 | 9.1360 | 9.1346 | 9.1327 |
| Interest on Loan | 754.81 | 696.32 | 609.02 | 521.72 | 434.42 |

Depreciation

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

"27. Depreciation:

...(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis"

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

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

(6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets.”

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

(₹ in lakh)

| Depreciation | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|----------|----------|----------|----------|----------|
| Opening Gross Block | 17573.23 | 18440.71 | 18440.71 | 18440.71 | 18440.71 |
| Additional Capitalization | 867.48 | 0.00 | 0.00 | 0.00 | 0.00 |
| Closing Gross Block | 18440.71 | 18440.71 | 18440.71 | 18440.71 | 18440.71 |
| Average Gross Block | 18006.97 | 18440.71 | 18440.71 | 18440.71 | 18440.71 |
| Freehold Land (Av. Cost) | 90.54 | 90.54 | 90.54 | 90.54 | 90.54 |
| Rate of Depreciation (%) | 5.17 | 5.18 | 5.18 | 5.18 | 5.18 |
| Elapsed life | 5 | 6 | 7 | 8 | 9 |
| Balance Useful life of the asset | 23 | 22 | 21 | 20 | 19 |
| Remaining Depreciable Value | 12246.29 | 11704.87 | 10750.18 | 9795.49 | 8840.80 |
| Depreciation during the year | 931.79 | 954.69 | 954.69 | 954.69 | 954.69 |
| Cumulative depreciation (incl. of AAD) | 4810.28 | 5764.97 | 6719.67 | 7674.36 | 8629.05 |

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

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

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---------------------|---------|---------|---------|---------|---------|
| 220 kV Bays: | | | | | |
| No. of Bays | 9 | 9 | 9 | 9 | 9 |
| Norms (₹ lakh/Bay) | 42.210 | 43.610 | 45.060 | 46.550 | 48.100 |
| 400 kV Bays: | | | | | |
| No. of Bays | 7 | 7 | 7 | 7 | 7 |
| Norms (₹ lakh/Bay) | 60.300 | 62.300 | 64.370 | 66.510 | 68.710 |

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|---------------|---------------|---------------|---------------|---------------|
| Line: D/C (Twin Conductor): | | | | | |
| Line Length (km) | 55.01 | 55.01 | 55.01 | 55.01 | 55.01 |
| Norms (₹ lakh/km) | 0.707 | 0.731 | 0.755 | 0.780 | 0.806 |
| Total O&M Expenses (₹ lakh) | 840.88 | 868.80 | 897.66 | 927.42 | 958.20 |

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

58. We would like to clarify that any application filed by the petitioner for revision of O&M Expenses on account of wage revision will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations. The O&M Expenses are allowed for the instant transmission asset as per prevailing norms.

Interest on Working Capital (“IWC”)

59. Clause 1 (c) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specifies as follows:

“28. Interest on Working Capital

- (c) (i) Receivables equivalent to two months of fixed cost;
(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and
(iii) Operation and maintenance expenses for one month”

“(5) ‘Bank Rate’ means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;”

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

61. The interest on working capital is worked out in accordance with Regulation 28 of the 2014 Tariff Regulations. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points). The components of the working capital and interest thereon have been worked as follows:-

(₹ in lakh)

| Interest on Working Capital | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|------------------------------------|----------------|----------------|----------------|----------------|----------------|
| O & M expenses | 70.07 | 72.40 | 74.80 | 77.29 | 79.85 |
| Maintenance Spares | 126.13 | 130.32 | 134.65 | 139.11 | 143.73 |
| Receivables | 616.09 | 619.28 | 609.47 | 599.82 | 590.35 |
| Total | 812.29 | 822.00 | 818.92 | 816.22 | 813.93 |
| Rate of Interest (%) | 13.50 | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 109.66 | 110.97 | 110.55 | 110.19 | 109.88 |

ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

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

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|----------------------------------|----------------|----------------|----------------|----------------|----------------|
| Depreciation | | | | | |
| Opening Gross Block | 17573.23 | 18440.71 | 18440.71 | 18440.71 | 18440.71 |
| Additional Capitalisation | 867.48 | 0.00 | 0.00 | 0.00 | 0.00 |
| Closing Gross Block | 18440.71 | 18440.71 | 18440.71 | 18440.71 | 18440.71 |
| Average Gross Block | 18006.97 | 18440.71 | 18440.71 | 18440.71 | 18440.71 |
| Rate of Depreciation (%) | 5.17 | 5.18 | 5.18 | 5.18 | 5.18 |
| Depreciable Value | 16124.79 | 16905.52 | 16515.15 | 16515.15 | 16515.15 |
| Balance useful life of the asset | 23.00 | 22.00 | 21.00 | 20.00 | 19.00 |
| Elapsed life | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 |
| Remaining Depreciable Value | 12246.29 | 11704.87 | 10750.18 | 9795.49 | 8840.80 |
| Depreciation during the year | 931.79 | 954.69 | 954.69 | 954.69 | 954.69 |

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---|----------------|----------------|----------------|----------------|----------------|
| Cumulative depreciation (incl. of AAD) | 4810.28 | 5764.97 | 6719.67 | 7674.36 | 8629.05 |
| Interest on Loan | | | | | |
| Gross Normative Loan | 12301.26 | 12908.50 | 12908.50 | 12908.50 | 12908.50 |
| Cumulative Repayments upto Previous Year | 3878.49 | 4810.28 | 5764.97 | 6719.67 | 7674.36 |
| Net Loan-Opening | 8422.77 | 8098.21 | 7143.52 | 6188.83 | 5234.14 |
| Additions | 607.24 | 0.00 | 0.00 | 0.00 | 0.00 |
| Repayment during the year | 931.79 | 954.69 | 954.69 | 954.69 | 954.69 |
| Net Loan-Closing | 8098.21 | 7143.52 | 6188.83 | 5234.14 | 4279.45 |
| Average Loan | 8260.49 | 7620.87 | 6666.18 | 5711.49 | 4756.80 |
| Weighted Average Rate of Interest on Loan (%) | 9.1376 | 9.1371 | 9.1360 | 9.1346 | 9.1327 |
| Interest on Loan | 754.81 | 696.32 | 609.02 | 521.72 | 434.42 |
| Return on Equity | | | | | |
| Opening Equity | 5271.97 | 5532.21 | 5532.21 | 5532.21 | 5532.21 |
| Additions | 260.24 | 0.00 | 0.00 | 0.00 | 0.00 |
| Closing Equity | 5532.21 | 5532.21 | 5532.21 | 5532.21 | 5532.21 |
| Average Equity | 5402.09 | 5532.21 | 5532.21 | 5532.21 | 5532.21 |
| Return on Equity (Base Rate) (%) | 15.500 | 15.500 | 15.500 | 15.500 | 15.500 |
| MAT Rate for respective year (%) | 20.961 | 20.961 | 20.961 | 20.961 | 20.961 |
| Rate of Return on Equity (%) | 19.610 | 19.610 | 19.610 | 19.610 | 19.610 |
| Return on Equity | 1059.37 | 1084.89 | 1084.89 | 1084.89 | 1084.89 |
| Interest on Working Capital | | | | | |
| O & M Expenses | 70.07 | 72.40 | 74.80 | 77.29 | 79.85 |
| Maintenance Spares | 126.13 | 130.32 | 134.65 | 139.11 | 143.73 |
| Receivables | 616.09 | 619.28 | 609.47 | 599.82 | 590.35 |
| Total Working Capital | 812.29 | 822.00 | 818.92 | 816.22 | 813.93 |
| Rate of Interest (%) | 13.50 | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest of working capital | 109.66 | 110.97 | 110.55 | 110.19 | 109.88 |
| Annual Transmission Charges | | | | | |
| Depreciation | 931.79 | 954.69 | 954.69 | 954.69 | 954.69 |
| Interest on Loan | 754.81 | 696.32 | 609.02 | 521.72 | 434.42 |
| Return on Equity | 1059.37 | 1084.89 | 1084.89 | 1084.89 | 1084.89 |
| Interest on Working Capital | 109.66 | 110.97 | 110.55 | 110.19 | 109.88 |
| O & M Expenses | 840.88 | 868.80 | 897.66 | 927.42 | 958.20 |
| Total | 3696.51 | 3715.68 | 3656.82 | 3598.92 | 3542.09 |

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

Filing Fee and the Publication Expenses

64. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 52 (1) of the 2014 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

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

Service Tax

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

Sharing of Transmission Charges

67. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time as provided in Regulation 43 of the 2014 Tariff Regulations.

68. This order disposes of Petition No. 14/TT/2015.

Sd/-

(Dr. M.K. Iyer)
Member

Sd/-

(A.S. Bakshi)
Member

Annexure – 1

ASSET A - DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2009-14

(₹ in lakh)

| Particulars | Interest Rate (%) | Loan deployed as on COD | Additions during the tariff period | Total |
|---|-------------------|-------------------------|------------------------------------|----------------|
| BOND XXVIII-ADDCAP FOR 2009-2010 Addcap loan 4- | 9.33 | 0.00 | 8.00 | 8.00 |
| BOND XXVIII-DOCO DRAWL ON 01-SEP-2009- | 9.33 | 4800.00 | 0.00 | 4800.00 |
| BOND XXIX-ADDCAP FOR 2009-2010 Addcap loan 5- | 9.20 | 0.00 | 2.00 | 2.00 |
| BOND XXIX-DOCO DRAWL ON 01-SEP-2009- | 9.20 | 1030.00 | 0.00 | 1030.00 |
| BOND XXX-ADDCAP FOR 2009-2010 Addcap loan 6- | 8.80 | 0.00 | 64.00 | 64.00 |
| BOND XXX-DOCO DRAWL ON 01-SEP-2009- | 8.80 | 519.00 | 0.00 | 519.00 |
| BOND XXXI-ADDCAP FOR 2009-2010 Addcap loan 7- | 8.90 | 0.00 | 5.29 | 5.29 |
| BOND XXXI-ADDCAP FOR 2010-2011 Modified Add Cap Loan 2010-11- | 8.90 | 0.00 | 12.45 | 12.45 |
| BOND XXXVII-ADDCAP FOR 2011-2012 Addcap loan 9- | 9.25 | 0.00 | 35.67 | 35.67 |
| BOND XXXVII-ADDCAP FOR 2012-2013 Addcap loan 10- | 9.25 | 0.00 | 22.80 | 22.80 |
| BOND XXXVII-ADDCAP FOR 2013-2014 Addcap loan 11- | 9.25 | 0.00 | 10.96 | 10.96 |
| Total | | 6349.00 | 161.17 | 6510.17 |

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

(₹ in lakh)

| Particulars | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|---|----------------|----------------|----------------|----------------|----------------|
| Gross Opening Loan | 6349.00 | 6428.29 | 6440.74 | 6476.41 | 6499.21 |
| Cumulative Repayments of Loans upto Previous Year | 0.00 | 0.00 | 0.00 | 0.00 | 486.67 |
| Net Loans Opening | 6349.00 | 6428.29 | 6440.74 | 6476.41 | 6012.54 |
| Add: Draw(s) during the Year | 79.29 | 12.45 | 35.67 | 22.80 | 10.96 |
| Less: Repayments of Loan during the year | 0.00 | 0.00 | 0.00 | 486.67 | 536.73 |
| Net Closing Loan | 6428.29 | 6440.74 | 6476.41 | 6012.54 | 5486.77 |
| Average Net Loan | 6388.65 | 6434.52 | 6458.58 | 6244.48 | 5749.66 |
| Rate of Interest on Loan (%) | 9.2631 | 9.2604 | 9.2600 | 9.2581 | 9.2559 |
| Interest on Loan | 591.79 | 595.86 | 598.06 | 578.12 | 532.18 |



ASSET B - DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2009-14

(₹ in lakh)

| Particulars | Interest Rate (%) | Loan deployed as on COD | Additions during the tariff period | Total |
|--|-------------------|-------------------------|------------------------------------|----------------|
| BOND XXVIII-DOCO Loan 1- | 9.33 | 640.00 | 0.00 | 640.00 |
| BOND XXIX-DOCO Loan 2- | 9.20 | 140.00 | 0.00 | 140.00 |
| BOND XXX-Modified DOCO Funding 01- | 8.80 | 732.00 | 0.00 | 732.00 |
| BOND XXXI-ADDCAP FOR 2009-2010 ADDCAP Loan 4- | 8.90 | 0.00 | 44.35 | 44.35 |
| BOND XXXI-ADDCAP FOR 2010-2011 Modified Add Cap Funding 01- | 8.90 | 0.00 | 46.26 | 46.26 |
| BOND-XXXIV-ADDCAP FOR 2010-2011 Modified Add Cap Funding 02- | 8.84 | 0.00 | 31.46 | 31.46 |
| BOND XXXVII-ADDCAP FOR 2011-2012 ADDCAP Loan 6- | 9.25 | 0.00 | 117.19 | 117.19 |
| BOND XXXVII-ADDCAP FOR 2012-2013 ADDCAP Loan 7- | 9.25 | 0.00 | 22.80 | 22.80 |
| BOND XXXVII-ADDCAP FOR 2013-2014 Modified Add Cap Funding 03- | 9.25 | 0.00 | 1.21 | 1.21 |
| BOND XXXVIII-ADDCAP FOR 2013-2014 Modified Add Cap Funding 04- | 9.25 | 0.00 | 50.59 | 50.59 |
| BOND - XLI-ADDCAP FOR 2013-2014 Modified Add Cap Funding 05- | 8.85 | 0.00 | 5.41 | 5.41 |
| Total | | 1512.00 | 319.27 | 1831.27 |

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

(₹ in lakh)

| Particulars | 2009-10 |
|---|----------------|
| Gross Opening Loan | 1512.00 |
| Cumulative Repayments of Loans upto Previous Year | 0.00 |
| Net Loans Opening | 1512.00 |
| Add: Draw(s) during the Year | 44.35 |
| Less: Repayments of Loan during the year | 0.00 |
| Net Closing Loan | 1556.35 |
| Average Net Loan | 1534.18 |
| Rate of Interest on Loan (%) | 9.0590 |
| Interest on Loan | 138.98 |



**COMBINED ASSETS B & C - DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO
FOR 2009-14**

(₹ in lakh)

| Particulars | Interest Rate (%) | Loan deployed as on COD | Additions during the tariff period | Total |
|---|-------------------|-------------------------|------------------------------------|----------------|
| BOND XXVIII-I.DOCO Loan 1- | 9.33 | 640.00 | 0.00 | 640.00 |
| BOND XXVIII-13.DOCO Loan 1- | 9.33 | 744.00 | 0.00 | 744.00 |
| BOND XXIX-14.DOCO Loan 2- | 9.20 | 155.00 | 0.00 | 155.00 |
| BOND XXIX-2.DOCO Loan 2- | 9.20 | 140.00 | 0.00 | 140.00 |
| BOND XXX-15.DOCO Loan 3- | 8.80 | 301.00 | 0.00 | 301.00 |
| BOND XXX-7.Modified DOCO Funding 01- | 8.80 | 732.00 | 0.00 | 732.00 |
| BOND XXXI-16.DOCO Loan 4- | 8.90 | 552.00 | 0.00 | 552.00 |
| BOND XXXI-4.ADDCAP FOR 2009-2010 ADDCAP Loan 4- | 8.90 | 44.35 | 0.00 | 44.35 |
| BOND XXXI-8.ADDCAP FOR 2010-2011 Modified Add Cap Funding 01- | 8.90 | 0.00 | 46.26 | 46.26 |
| BOND-XXXIV-17.ADDCAP FOR DOCO Loan 5- | 8.84 | 0.00 | 77.72 | 77.72 |
| BOND-XXXIV-9.ADDCAP FOR 2010-2011 Modified Add Cap Funding 02- | 8.84 | 0.00 | 31.46 | 31.46 |
| BOND XXXVI1-10.ADDCAP FOR 2013-2014 Modified Add Cap Funding 03- | 9.25 | 0.00 | 1.21 | 1.21 |
| BOND XXXVII-18.ADDCAP FOR 2012-2013 ADDCAP Loan 8- | 9.25 | 0.00 | 22.80 | 22.80 |
| BOND XXXVII-20.ADDCAP FOR 2011-2012 ADDCAP Loan7- | 9.25 | 0.00 | 117.19 | 117.19 |
| BOND XXXVII-5.ADDCAP FOR 2011-2012 ADDCAP Loan 6- | 9.25 | 0.00 | 117.19 | 117.19 |
| BOND XXXVII-6.ADDCAP FOR 2012-2013 ADDCAP Loan 7- | 9.25 | 0.00 | 22.80 | 22.80 |
| BOND XXXVIII-11.ADDCAP FOR 2013-2014 Modified Add Cap Funding 04- | 9.25 | 0.00 | 50.59 | 50.59 |
| BOND XXXVIII-21.ADDCAP FOR 2013-2014 App Cap Loan 6- | 9.25 | 0.00 | 27.41 | 27.41 |
| BOND XL-19.ADDCAP FOR 2013-2014 ADDCAP Loan 10- | 9.30 | 0.00 | 18.00 | 18.00 |
| BOND - XLI-12.ADDCAP FOR 2013-2014 Modified Add Cap Funding 05- | 8.85 | 0.00 | 5.41 | 5.41 |
| BOND - XLI-22.ADDCAP FOR 2013-2014 App Cap Loan 11- | 8.85 | 0.00 | 28.59 | 28.59 |
| Total | | 3308.35 | 566.63 | 3874.98 |



**COMBINED ASSETS B & C - WEIGHTED AVERAGE RATE OF INTEREST ON LOAN
DURING 2009-14 TARIFF PERIOD**

(₹ in lakh)

| Particulars | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|---|----------------|----------------|----------------|----------------|
| Gross Opening Loan | 3308.35 | 3463.79 | 3698.17 | 3743.77 |
| Cumulative Repayments of Loans upto Previous Year | 0.00 | 0.00 | 0.00 | 139.92 |
| Net Loans Opening | 3308.35 | 3463.79 | 3698.17 | 3603.85 |
| Add: Draw(s) during the Year | 155.44 | 234.38 | 45.60 | 131.21 |
| Less: Repayments of Loan during the year | 0.00 | 0.00 | 139.92 | 279.56 |
| Net Closing Loan | 3463.79 | 3698.17 | 3603.85 | 3455.50 |
| Average Net Loan | 3386.07 | 3580.98 | 3651.01 | 3529.68 |
| Rate of Interest on Loan (%) | 9.0704 | 9.0717 | 9.0740 | 9.0720 |
| Interest on Loan | 307.13 | 324.86 | 331.29 | 320.21 |

ASSET D - DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2009-14

(₹ in lakh)

| Particulars | Interest Rate (%) | Loan deployed as on COD | Additions during the tariff period | Total |
|--|--------------------------|--------------------------------|---|----------------|
| BOND XXVIII-DOCO Loan 1- | 9.33 | 47.00 | 0.00 | 47.00 |
| BOND XXIX-DOCO Loan 2- | 9.20 | 10.00 | 0.00 | 10.00 |
| BOND XXX-DOCO Loan 3- | 8.80 | 859.00 | 0.00 | 859.00 |
| BOND XXXI-ADDCAP FOR 2010-2011 Add Cap Loan 1- | 8.90 | 0.00 | 33.31 | 33.31 |
| BOND XXXI-DOCO Loan 4- | 8.90 | 333.40 | 0.00 | 333.40 |
| BOND-XXXIV-ADDCAP FOR 2010-2011 Add Cap Loan 2 - | 8.84 | 0.00 | 102.67 | 102.67 |
| BOND-XXXIV-ADDCAP FOR 2011-2012 Add Cap Loan 3- | 8.84 | 0.00 | 74.19 | 74.19 |
| BOND-XXXV-ADDCAP FOR 2011-2012 Add Cap Loan 4- | 9.64 | 0.00 | 40.00 | 40.00 |
| BOND XXXVI-ADDCAP FOR 2011-2012 Add Cap Loan 5- | 9.35 | 0.00 | 68.80 | 68.80 |
| Total | | 1249.40 | 318.97 | 1568.37 |



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

(₹ in lakh)

| Particulars | 2010-11 |
|---|----------------|
| Gross Opening Loan | 1249.40 |
| Cumulative Repayments of Loans upto Previous Year | 0.00 |
| Net Loans Opening | 1249.40 |
| Add: Draw(s) during the Year | 135.98 |
| Less: Repayments of Loan during the year | 0.00 |
| Net Closing Loan | 1385.38 |
| Average Net Loan | 1317.39 |
| Rate of Interest on Loan (%) | 8.8501% |
| Interest on Loan | 116.59 |

COMBINED ASSETS D & E - DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO
FOR 2009-14

(₹ in lakh)

| Particulars | Interest Rate (%) | Loan deployed as on COD | Additions during the tariff period | Total |
|---|--------------------------|--------------------------------|---|----------------|
| BOND XXVIII-1.DOCO Loan 1- | 9.33 | 11.00 | 0.00 | 11.00 |
| BOND XXVIII-8.DOCO Loan 1- | 9.33 | 47.00 | 0.00 | 47.00 |
| BOND XXIX-2.DOCO Loan 2- | 9.20 | 2.00 | 0.00 | 2.00 |
| BOND XXIX-9.DOCO Loan 2- | 9.20 | 10.00 | 0.00 | 10.00 |
| BOND XXX-10.DOCO Loan 3- | 8.80 | 859.00 | 0.00 | 859.00 |
| BOND XXX-3.DOCO Loan 3- | 8.80 | 179.00 | 0.00 | 179.00 |
| BOND XXXI-11.DOCO Loan 4- | 8.90 | 333.40 | 0.00 | 333.40 |
| BOND XXXI-4.DOCO Loan 4- | 8.90 | 88.94 | 0.00 | 88.94 |
| BOND XXXI-ADDCAP FOR 2010-2011 ADD CAP- | 8.90 | 33.31 | 0.00 | 33.31 |
| BOND-XXXIV-12.ADDCAP FOR 2010-2011 Add Cap Loan 2 - | 8.84 | 0.00 | 102.67 | 102.67 |
| BOND-XXXIV-13.ADDCAP FOR 2011-2012 Add Cap Loan 3- | 8.84 | 0.00 | 74.19 | 74.19 |
| BOND-XXXIV-5.ADDCAP FOR 2010-2011 Add Cap Loan 1- | 8.84 | 0.00 | 30.96 | 30.96 |
| BOND-XXXV-14.ADDCAP FOR 2011-2012 Add Cap Loan 4- | 9.64 | 0.00 | 40.00 | 40.00 |
| BOND XXXVI-15.ADDCAP FOR 2011-2012 Add Cap Loan 5- | 9.35 | 0.00 | 68.80 | 68.80 |
| BOND XXXVI-6.ADDCAP FOR 2011-2012 Add Cap Loan 2- | 9.35 | 0.00 | 53.20 | 53.20 |
| BOND XXXVII-7.ADDCAP FOR 2011-2012 Add Cap Loan 3- | 9.25 | 0.00 | 10.38 | 10.38 |
| Total | | 1563.65 | 380.20 | 1943.85 |



COMBINED ASSETS D & E - WEIGHTED AVERAGE RATE OF INTEREST ON LOAN
DURING 2009-14 TARIFF PERIOD

(₹ in lakh)

| Particulars | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|---|----------------|----------------|----------------|----------------|
| Gross Opening Loan | 1563.65 | 1697.28 | 1943.85 | 1943.85 |
| Cumulative Repayments of Loans upto Previous Year | 0.00 | 0.00 | 0.00 | 5.84 |
| Net Loans Opening | 1563.65 | 1697.28 | 1943.85 | 1938.01 |
| Add: Draw(s) during the Year | 133.63 | 246.57 | 0.00 | 0.00 |
| Less: Repayments of Loan during the year | 0.00 | 0.00 | 5.84 | 130.31 |
| Net Closing Loan | 1697.28 | 1943.85 | 1938.01 | 1807.70 |
| Average Net Loan | 1630.47 | 1820.57 | 1940.93 | 1872.86 |
| Rate of Interest on Loan (%) | 8.8514 | 8.8772 | 8.8996 | 8.9006 |
| Interest on Loan | 144.32 | 161.62 | 172.73 | 166.70 |

COMBINED ASSETS - DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2014-19

(₹ in lakh)

| Particulars | Interest Rate (%) | Loan deployed as on 1.4.2014 | Additions during the tariff period | Total |
|---|-------------------|------------------------------|------------------------------------|---------|
| BOND XXVIII-1.DOCO DRAWL ON 01-SEP-2009- | 9.33 | 4800.00 | 0.00 | 4800.00 |
| BOND XXVIII-12.1.DOCO Loan 1- | 9.33 | 640.00 | 0.00 | 640.00 |
| BOND XXVIII-23.13.DOCO Loan 1- | 9.33 | 744.00 | 0.00 | 744.00 |
| BOND XXVIII-33.1.DOCO Loan 1- | 9.33 | 11.00 | 0.00 | 11.00 |
| BOND XXVIII-4.ADDCAP FOR 2009-2010 Addcap loan 4- | 9.33 | 8.00 | 0.00 | 8.00 |
| BOND XXVIII-40.8.DOCO Loan 1- | 9.33 | 47.00 | 0.00 | 47.00 |
| BOND XXIX-13.2.DOCO Loan 2- | 9.20 | 140.00 | 0.00 | 140.00 |
| BOND XXIX-2.DOCO DRAWL ON 01-SEP-2009- | 9.20 | 1030.00 | 0.00 | 1030.00 |
| BOND XXIX-24.14.DOCO Loan 2- | 9.20 | 155.00 | 0.00 | 155.00 |
| BOND XXIX-34.2.DOCO Loan 2- | 9.20 | 2.00 | 0.00 | 2.00 |
| BOND XXIX-41.9.DOCO Loan 2- | 9.20 | 10.00 | 0.00 | 10.00 |
| BOND XXIX-5.ADDCAP FOR 2009-2010 Addcap loan 5- | 9.20 | 2.00 | 0.00 | 2.00 |
| BOND XXX-17.7.Modified DOCO Funding 01- | 8.80 | 732.00 | 0.00 | 732.00 |
| BOND XXX-25.15.DOCO Loan 3- | 8.80 | 301.00 | 0.00 | 301.00 |
| BOND XXX-3.DOCO DRAWL ON 01-SEP-2009- | 8.80 | 519.00 | 0.00 | 519.00 |
| BOND XXX-35.3.DOCO Loan 3- | 8.80 | 179.00 | 0.00 | 179.00 |
| BOND XXX-42.10.DOCO Loan 3- | 8.80 | 859.00 | 0.00 | 859.00 |
| BOND XXX-6.ADDCAP FOR 2009-2010 Addcap loan 6- | 8.80 | 64.00 | 0.00 | 64.00 |
| BOND XXXI-11.ADDCAP FOR 2010-2011 Modified Add Cap Loan 2010-11- | 8.90 | 12.45 | 0.00 | 12.45 |
| BOND XXXI-14.4.ADDCAP FOR 2009-2010 ADDCAP Loan 4- | 8.90 | 44.35 | 0.00 | 44.35 |
| BOND XXXI-18.8.ADDCAP FOR 2010-2011 Modified Add Cap Funding 01- | 8.90 | 46.26 | 0.00 | 46.26 |
| BOND XXXI-26.16.DOCO Loan 4- | 8.90 | 552.00 | 0.00 | 552.00 |
| BOND XXXI-36.4.DOCO Loan 4- | 8.90 | 88.94 | 0.00 | 88.94 |
| BOND XXXI-43.11.DOCO Loan 4- | 8.90 | 333.40 | 0.00 | 333.40 |
| BOND XXXI-48.16.ADDCAP FOR 2010-2011 Add Cap Loan 1- | 8.90 | 33.31 | 0.00 | 33.31 |
| BOND XXXI-7.ADDCAP FOR 2009-2010 Addcap loan 7- | 8.90 | 5.29 | 0.00 | 5.29 |
| BOND-XXXIV-19.9.ADDCAP FOR 2010-2011 Modified Add Cap Funding 02- | 8.84 | 31.46 | 0.00 | 31.46 |
| BOND-XXXIV-27.17.ADDCAP FOR DOCO | 8.84 | 77.72 | 0.00 | 77.72 |

| Particulars | Interest Rate (%) | Loan deployed as on 1.4.2014 | Additions during the tariff period | Total |
|--|-------------------|------------------------------|------------------------------------|-----------------|
| Loan 5- | | | | |
| BOND-XXXIV-37.5.ADDCAP FOR 2010-2011 Add Cap Loan 1- | 8.84 | 30.96 | 0.00 | 30.96 |
| BOND-XXXIV-44.12. ADDCAP FOR 2010-2011 Add Cap Loan 2 - | 8.84 | 102.67 | 0.00 | 102.67 |
| BOND-XXXIV-45.13.ADDCAP FOR 2011-2012 Add Cap Loan 3- | 8.84 | 74.19 | 0.00 | 74.19 |
| BOND-XXXV-46.14. ADDCAP FOR 2011-2012 Add Cap Loan 4- | 9.64 | 40.00 | 0.00 | 40.00 |
| BOND XXXVI-38.6.ADDCAP FOR 2011-2012 Add Cap Loan 2- | 9.35 | 53.20 | 0.00 | 53.20 |
| BOND XXXVI-47.15.ADDCAP FOR 2011-2012 Add Cap Loan 5- | 9.35 | 68.80 | 0.00 | 68.80 |
| BOND XXXVII-10.ADDCAP FOR 2013-2014 Addcap loan 11- | 9.25 | 10.96 | 0.00 | 10.96 |
| BOND XXXVII-15.5.ADDCAP FOR 2011-2012 ADDCAP Loan 6- | 9.25 | 117.19 | 0.00 | 117.19 |
| BOND XXXVII-16.6.ADDCAP FOR 2012-2013 ADDCAP Loan 7- | 9.25 | 22.80 | 0.00 | 22.80 |
| BOND XXXVII-20.10.ADDCAP FOR 2013-2014 Modified Add Cap Funding 03- | 9.25 | 1.21 | 0.00 | 1.21 |
| BOND XXXVII-28.18. ADDCAP FOR 2012-2013 ADDCAP Loan 8- | 9.25 | 22.80 | 0.00 | 22.80 |
| BOND XXXVII-30.20.ADDCAP FOR 2011-2012 ADDCAP Loan7- | 9.25 | 117.19 | 0.00 | 117.19 |
| BOND XXXVII-39.7.ADDCAP FOR 2011-2012 Add Cap Loan 3- | 9.25 | 10.38 | 0.00 | 10.38 |
| BOND XXXVII-8. ADDCAP FOR 2011-2012 Addcap loan 9- | 9.25 | 35.67 | 0.00 | 35.67 |
| BOND XXXVII-9.ADDCAP FOR 2012-2013 Addcap loan 10- | 9.25 | 22.80 | 0.00 | 22.80 |
| BOND XXXVIII-21.11.ADDCAP FOR 2013-2014 Modified Add Cap Funding 04- | 9.25 | 50.59 | 0.00 | 50.59 |
| BOND XXXVIII-31.21.ADDCAP FOR 2013-2014 App Cap Loan 6- | 9.25 | 27.41 | 0.00 | 27.41 |
| BOND XL-29.19.ADDCAP FOR 2013-2014 ADDCAP Loan 10- | 9.30 | 18.00 | 0.00 | 18.00 |
| BOND - XLI-22.12.ADDCAP FOR 2013-2014 Modified Add Cap Funding 05- | 8.85 | 5.41 | 0.00 | 5.41 |
| BOND - XLI-32.22.ADDCAP FOR 2013-2014 App Cap Loan 11- | 8.85 | 28.59 | 0.00 | 28.59 |
| Total | | 12329.00 | 0.00 | 12329.00 |

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

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---|-----------------|----------------|----------------|----------------|----------------|
| Gross Opening Loan | 12329.00 | 12329.00 | 12329.00 | 12329.00 | 12329.00 |
| Cumulative Repayments of Loans upto Previous Year | 1579.03 | 2552.05 | 3558.49 | 4577.40 | 5596.31 |
| Net Loans Opening | 10749.97 | 9776.95 | 8770.51 | 7751.60 | 6732.69 |
| Add: Draw(s) during the Year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Less: Repayments of Loan during the year | 973.02 | 1006.44 | 1018.91 | 1018.91 | 1018.91 |
| Net Closing Loan | 9776.95 | 8770.51 | 7751.60 | 6732.69 | 5713.78 |
| Average Net Loan | 10263.46 | 9273.73 | 8261.06 | 7242.15 | 6223.24 |
| Rate of Interest on Loan (%) | 9.1376% | 9.1371% | 9.1360% | 9.1346% | 9.1327% |
| Interest on Loan | 937.84 | 847.35 | 754.73 | 661.54 | 568.35 |