# CENTRAL ELECTRICITY REGULATORY COMMISSION <br> NEW DELHI 

Petition No. 185/TT/2016

## Coram:

Shri Gireesh B. Pradhan, Chairperson<br>Shri A. K. Singhal, Member<br>Shri A. S. Bakshi, Member<br>Dr. M. K. Iyer, Member

Date of Order: 06.12.2017

## In the matter of:

Truing up of transmission tariff of 2009-14 tariff period and determination of transmission tariff for 2014-19 tariff period for combined 21 nos. of assets under Common Scheme for 765 kV Pooling Station and Network for NR, Import by NR from ER and Common Scheme for network for WR and Import by WR from ER and from NER/SR/WR via ER in Eastern and Northern Region under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, Regulation 6 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

## And in the matter of:

Power Grid Corporation of India Limited, 'SAUDAMINI', Plot No-2,
Sector-29, Gurgaon-122 001 (Haryana)
Petitioner

## Vs

1. Bihar state power (holding) Company Ltd.

Vidyut Bhawan, Bailey Road
Patna-800 001
2. West Bengal State Electricity Distribution Company Limited

Bidyut Bhawan, Bidhan Nagar
Block DJ, Sector-II, Salt Lake City
Calcutta- 700091
3. Grid Corporation of Orissa Ltd.

Shahid Nagar, Bhubaneshwar- 751007

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## 4. Damodar Valley Corporation

DVC Tower, Maniktala
Civic Centre, VIP Road, Calcutta- 700054
5. Power Department

Government of Sikkim, Gangtok- 737101
6. Jharkhand Urja Vikas Nigam Ltd. (JUVNL)

HEC Building, Dhurva, Ranchi- 834002
7. Rajasthan Rajya Vidyut Prasaran Nigam Limited, Vidyut Bhawan, Vidyut Marg,
Jaipur- 302005
8. Ajmer Vidyut Vitran Nigam Limited, 400 kV GSS Building (Ground Floor), Ajmer Road, Heerapura, Jaipur
9. Jaipur Vidyut Vitran Nigam Limited, 400 kV GSS Building (Ground Floor), Ajmer Road, Heerapura, Jaipur
10. Jodhpur Vidyut Vitran Nigam Limited,

400 kV GSS Building (Ground Floor), Ajmer Road, Heerapura, Jaipur
11. Himachal Pradesh State Electricity Board, Vidyut Bhawan, Kumar House Complex Building II, Shimla-171 004
12. Punjab State Electricity Board, The Mall, Patiala-147 001
13. Haryana Power Purchase Centre, Shakti Bhawan, Sector-6,
Panchkula (Haryana)-134 109
14. Power Development Department, Govt. of Jammu and Kashmir, Mini Secretariat, Jammu
15. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board)
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226 001

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16. Delhi Transco Limited,

Shakti Sadan, Kotla Road,
New Delhi-110 002
17. BSES Yamuna Power Limited, BSES Bhawan, Nehru Place, New Delhi
18. BSES Rajdhani Power Limited, BSES Bhawan, Nehru Place, New Delhi
19. 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

## 20. Chandigarh Administration, Sector-9, Chandigarh

## 21. Uttarakhand Power Corporation Limited, Urja Bhawan, Kanwali Road, <br> Dehradun

22. North Central Railway, Allahabad
23. New Delhi Municipal Council, Palika Kendra, Sansad Marg,
New Delhi-110 002

## 24. Madhya Pradesh Power Management Company Limited, Shakti Bhawan, Rampur Jabalpur-482 008

25. Maharashtra State Electricity Distribution Company Limited,

Prakashgad,4th floor,
Andheri (East), Mumbai-400 052
26. Gujarat Urja Vikas Nigam Limited, Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara-390 007
27. Electricity Department,

Government of Goa, Vidyut Bhawan, Panaji, Near Mandvi Hotel, Goa-403 001
28. Electricity Department, Administration of Daman and Diu, Daman-396 210
29. Electricity Department, Administration of Dadra Nagar Haveli, U.T., Silvassa-396 230
30. Chhattisgarh State Electricity Board, P.O. Sunder Nagar, Dangania, Raipur Chhattisgarh-492 013
31. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Limited, 3/54, Press Complex, Agra-Mumbai Road, Indore-452 008

| For Petitioner | $:$ | Shri. Mukesh Bhakar, PGCIL <br> Shri S.K. Venkatesan, PGCIL |
| :--- | :--- | :--- |
|  | Shri Rakesh Prasad., PGCIL <br> Shri M.M. Mondal, PGCIL |  |
| For Respondents : | None |  |

## ORDER

The present petition has been filed by Power Grid Corporation of India Ltd. ("the petitioner") for truing up of capital expenditure of 2009-14 tariff period for combined 21 nos. of assets under Common Scheme for 765 kV Pooling Station (hereinafter referred to as "transmission assets") and Network for NR, Import by NR from ER and Common Scheme for network for WR and Import by WR from ER and from NER/SR/WR via ER in Eastern and Northern Region (hereinafter referred to as "transmission scheme") 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 actual capital expenditure for the period from COD to 31.3.2014 and for determination of tariff for the period from 1.4.2014 to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations").
2. The brief facts of the case are as follows:-
(a) The Investment approval for the scheme was accorded by Board of Directors of the petitioner company vide letter dated 29.8.2008 at an estimated cost of ₹707533 lakh including IDC of ₹71360 lakh (based on 1st quarter, 2008 price level).
(b) The Commission, vide order dated 3.2.2015 in Petition No.87/TT/2012 read with order dated 11.5.2015 in suo-motu review of order dated 3.2.2015 in Petition No. 87/TT/2012 and order dated 16.3.2015 in Petition No.187/TT/2011, has approved final transmission tariff for the assets covered in the instant scheme based on the following COD and capital cost of the assets:-

|  |  |  | (₹ in lakh) |  |
| :---: | :---: | :---: | :---: | :---: |
| SI. No. | Particulars | COD | Admitted <br> Capital <br> Cost up to 31.3.2014 | Reference |
| 1. | Asset A: 765/400 kV, 1500 MVA ICT-I at Gaya S/S along with associated Bays | 1.6.2012 | 10846.23 | Tariff approved |
| 2. | Asset B: 765/400 kV, 1500 MVA ICT-II at Gaya S/S along with associated Bays | 1.4.2012 | 10747.03 | vide order dated |
| 3. | Asset C : 765/400 kV, 1500 MVA ICT-III at Gaya S/S along with associated Bays | 1.4.2012 | 10745.50 | 3.2.2015 in petition no. |
| 4. | Asset D(i) 400 kV S/C Biharsharif <br> Gaya(part of Gaya Balia TL  <br> charged under     contingency arrangement) including Koderma I | 1.2.2012 | 13423.67 | 87/TT/2012 and order dated |


|  | bay at Gaya |  |  | 11.5.2015 in Suo-motu review of order dated 3.2.2015 in Petition No. 87/TT/2012 |
| :---: | :---: | :---: | :---: | :---: |
| 5. | Asset D(ii): 400 kV S/C Sasaram-Balia (part of Gaya Balia TL charged under contingency arrangement) | 1.3.2012 | 30858.78 |  |
| 6. | Asset D(iii): 01 Nos. of 765 kV Line bay for 765 kV Gaya-Balia Line along with 240 MVAR switchable line reactor (Charged as Bus reactor) at Balia Sub-station | 1.10.2012 |  |  |
| 7. | Asset E : 765 kV S/C Gaya-Sasaram TL along with associated bays at Gaya Sub-station | 1.4.2012 | 25464.84 |  |
| 8. | Asset F (i): 400 kV D/C Quad Maithon- Gaya TL and associated bays at both ends (Part Of Maithon-Koderma) | 1.2.2013 | 43286.04 |  |
| 9. | Asset-F (ii): 400 kV 2X50 MVAR Bus Reactor along with associated bays at Gaya Sub-station | 1.10.2012 | 4053.56 |  |
| 10. | Asset G : 765 kV , $3 \times 80$ MVAR Bus Reactor-I along with associated bays at Gaya Sub-station | 1.6.2012 | 4947.30 |  |
| 11. | Asset H : $765 \mathrm{kV}, 3 \times 80$ MVAR Bus Reactor-I I along with associated bays at Gaya Sub-station | 1.4.2012 | 4996.73 |  |
| 12. | Asset I: 400 kV , $1 \times 125$ MVAR Bus Reactor-I along with associated bays at Gaya Sub-station | 1.3.2012 | 1917.49 |  |
| 13. | Asset J: 400 kV , $1 \times 125$ MVAR Bus Reactor-II along with associated bays at Gaya Sub-station | 1.2.2012 | 1893.23 |  |
| 14. | Asset-K: 400 kV D/C Lucknow (New)-Lucknow (Old) line with associated bays at both ends | 1.3.2012 | 3731.36 | Tariff approved |
| 15. | Asset-L: 765 kV S/C Balia- Lucknow line along with associated bays at both ends | 1.3.2012 | 56672.99 | vide order dated |
| 16. | Asset-M: 765/400 kV 1500 MVA ICT-I at Balia Sub-station along with associated bays | 1.3.2012 | 13290.33 | 16.3.2015 in Petition |
| 17. | Asset-N: 765/400 kV 1500 MVA ICT-I at Lucknow Sub-station along with bays associated | 1.3.2012 | 13874.29 | $\begin{aligned} & \text { No.187/TT/ } \\ & 2011 \end{aligned}$ |
| 18. | Asset-O: One no. 400 kV line bay at Biharshariff Sub-station with 50 MVAR reactor and one no. 400 kV line bay at Sasaram with 400 kV Biharshariff- Sasaram Ckt-III | 1.2.2012 | 819.34 |  |
| 19. | Asset-P: One no. 400 kV line bay at Biharshariff Sub-station with 50 MVAR reactor associated with 400 kV S/C Biharshariff- Gaya transmission line | 1.2.2012 | 366.29 |  |
| 20. | Asset-Q: One no. 400 kV bay at Sasaram Substation associated with 400 kV S/C SasaramBalia transmission line | 1.3.2012 | 553.44 |  |
| 21. | Asset-R: 2x50 MVAR Bus reactor at Sasaram | 1.4.2012 | 748.45 |  |

(c) The transmission charges approved vide order dated 3.2.2015 in Petition

No.87/TT/2012 and order dated 11.5.2015 in Suo-Motu review of order dated
3.2.2015 in Petition No. 87/TT/2012, are as follows:-
(₹ in lakh)

| Particulars | Asset-A |  | Asset-B |  | Asset-C |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ <br> (pro-rata) | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Depreciation | 430.08 | 543.06 | 510.44 | 537.82 | 510.02 | 537.74 |
| Interest on Loan | 512.85 | 605.34 | 597.87 | 585.02 | 628.58 | 615.75 |
| Return on Equity | 438.48 | 554.20 | 520.54 | 549.00 | 520.13 | 548.92 |
| Interest on Working <br> Capital | 38.64 | 47.87 | 45.70 | 47.16 | 46.39 | 47.86 |
| O \& M Expenses | 123.83 | 157.10 | 148.60 | 157.10 | 148.60 | 157.10 |
| Total | $\mathbf{1 5 4 3 . 8 8}$ | $\mathbf{1 9 0 7 . 5 7}$ | $\mathbf{1 8 2 3 . 1 5}$ | $\mathbf{1 8 7 6 . 1 1}$ | $\mathbf{1 8 5 3 . 7 3}$ | $\mathbf{1 9 0 7 . 3 8}$ |

(₹ in lakh)

| Particulars | Asset-D(i) |  |  | Asset-D(ii) |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Depreciation | 99.85 | 638.87 | 683.47 | 120.58 | 1520.00 | 1606.00 |
| Interest on Loan | 117.52 | 720.23 | 714.52 | 141.43 | 1711.47 | 1674.40 |
| Return on Equity | 100.23 | 641.21 | 686.06 | 119.78 | 1510.65 | 1596.70 |
| Interest on Working <br> Capital | 7.14 | 45.03 | 47.00 | 8.47 | 105.49 | 108.80 |
| O \& M Expenses | 16.69 | 105.93 | 111.96 | 17.70 | 224.66 | 237.45 |
| Total | $\mathbf{3 4 1 . 4 3}$ | $\mathbf{2 1 5 1 . 2 8}$ | $\mathbf{2 2 4 3 . 0 1}$ | $\mathbf{4 0 7 . 9 7}$ | $\mathbf{5 0 7 2 . 2 7}$ | $\mathbf{5 2 2 3 . 3 4}$ |

(₹ in lakh)

| Particulars | Asset-E |  | Asset-F(i) |  | Asset-F(ii) |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Depreciation | 1296.12 | 1320.92 | 365.98 | 2248.60 | 77.33 | 188.08 |
| Interest on Loan | 1485.95 | 1399.07 | 430.97 | 2531.89 | 100.07 | 229.95 |
| Return on Equity | 1293.35 | 1318.68 | 363.51 | 2233.40 | 83.65 | 201.71 |
| Interest on Working <br> Capital | 108.57 | 108.57 | 28.85 | 175.00 | 2.85 | 28.73 |
| O \& M Expenses | 267.22 | 282.46 | 38.70 | 245.37 | 123.84 | 261.84 |
| Total | $\mathbf{4 4 5 1 . 2 1}$ | $\mathbf{4 4 2 9 . 6 9}$ | $\mathbf{1 2 2 8 . 0 1}$ | $\mathbf{7 4 3 4 . 2 6}$ | $\mathbf{3 9 7 . 7 4}$ | $\mathbf{9 1 0 . 3 2}$ |

(₹ in lakh)

| Particulars | Asset-G |  | Asset-H |  |
| :--- | ---: | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ <br> (pro-rata) | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Depreciation | 165.80 | 246.58 | 218.57 | 248.43 |
| Interest on Loan | 199.04 | 278.11 | 275.30 | 291.82 |
| Return on Equity | 170.60 | 252.75 | 224.94 | 255.35 |
| Interest on Working Capital | 16.31 | 22.96 | 21.33 | 23.38 |
| O \& M Expenses | 72.23 | 91.64 | 86.68 | 91.64 |
| Total | $\mathbf{6 2 3 . 9 8}$ | $\mathbf{8 9 2 . 0 4}$ | $\mathbf{8 2 6 . 8 4}$ | $\mathbf{9 1 0 . 6 1}$ |


| Particulars | Asset-I |  |  | Asset-J in lakh) |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $2011-12$ | $2012-13$ | $2013-14$ | $2011-12$ | $2012-13$ | $2013-14$ |


|  | (pro-rata) |  |  | (pro-rata) |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Depreciation | 5.06 | 74.32 | 88.97 | 9.55 | 71.71 | 86.27 |
| Interest on Loan | 6.70 | 93.74 | 104.75 | 12.73 | 90.68 | 101.83 |
| Return on Equity | 5.55 | 80.69 | 95.91 | 10.54 | 78.10 | 93.19 |
| Interest on Working <br> Capital | 0.58 | 7.94 | 8.92 | 1.12 | 7.77 | 8.76 |
| O \& M Expenses | 4.88 | 61.92 | 65.46 | 9.76 | 61.92 | 65.46 |
| Total | $\mathbf{2 2 . 7 7}$ | $\mathbf{3 1 8 . 6 1}$ | $\mathbf{3 6 4 . 0 1}$ | $\mathbf{4 3 . 7 1}$ | $\mathbf{3 1 0 . 1 8}$ | $\mathbf{3 5 5 . 5 1}$ |

(d) The transmission charges approved vide order dated 16.3.2015 in Petition

No.187/TT/2011, are as follows:-

| Particulars | Asset-K |  |  | Asset-L |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
|  | 11.81 | 164.76 | 182.21 | 228.67 | $2,854.32$ | $2,932.44$ |
| Interest on Loan | 15.91 | 211.47 | 216.84 | 281.23 | $3,367.13$ | $3,194.30$ |
| Return on Equity | 12.93 | 178.37 | 195.68 | 227.71 | $2,842.09$ | $2,919.66$ |
| Interest on Working <br> Capital | 1.76 | 23.10 | 24.59 | 16.81 | 207.37 | 208.53 |
| O \& M Expenses | 19.77 | 250.86 | 265.20 | 43.28 | 549.22 | 580.55 |
| Total | $\mathbf{6 2 . 1 8}$ | $\mathbf{8 2 8 . 5 6}$ | $\mathbf{8 8 4 . 5 3}$ | $\mathbf{7 9 7 . 6 9}$ | $\mathbf{9 8 2 0 . 1 3}$ | $\mathbf{9 8 3 5 . 4 8}$ |

(₹ in lakh)

| Particulars | Asset-M |  |  | Asset-N |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Depreciation | 54.96 | 682.26 | 699.82 | 52.53 | 676.72 | 715.99 |
| Interest on Loan | 65.26 | 777.33 | 736.30 | 63.06 | 779.50 | 763.71 |
| Return on Equity | 54.74 | 679.51 | 696.98 | 53.51 | 688.54 | 727.61 |
| Interest on Working <br> Capital | 4.06 | 49.85 | 50.14 | 3.94 | 49.96 | 51.62 |
| O \& M Expenses | 11.71 | 148.60 | 157.10 | 11.71 | 148.60 | 157.10 |
| Total | $\mathbf{1 9 0 . 7 3}$ | $\mathbf{2 3 3 7 . 5 5}$ | $\mathbf{2 3 4 0 . 3 4}$ | $\mathbf{1 8 4 . 7 5}$ | $\mathbf{2 3 4 3 . 3 2}$ | $\mathbf{2 4 1 6 . 0 3}$ |

(₹ in lakh)

| Particulars | Asset-O |  |  | Asset-P |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Depreciation | 5.06 | 34.26 | 40.73 | 2.93 | 17.59 | 18.46 |
| Interest on Loan | 5.93 | 38.68 | 43.14 | 3.43 | 19.67 | 19.11 |
| Return on Equity | 5.02 | 34.03 | 40.45 | 2.91 | 17.47 | 18.34 |
| Interest on Working <br> Capital | 1.26 | 8.07 | 8.76 | 0.65 | 4.06 | 4.25 |
| O \& M Expenses | 19.52 | 123.84 | 130.92 | 9.76 | 61.92 | 65.46 |


| Total | 36.78 | 238.89 | 264.00 | 19.68 | 120.71 | 125.63 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |


| Particulars | (₹ in lakh) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Asset-Q |  |  | Asset-R |  |
|  | $\begin{array}{r} \text { 2011-12 } \\ \text { (pro-rata) } \\ \hline \end{array}$ | 2012-13 | 2013-14 | 2012-13 | 2013-14 |
| Depreciation | 0.83 | 18.63 | 27.71 | 35.98 | 37.75 |
| Interest on Loan | 0.99 | 21.63 | 30.67 | 40.84 | 39.65 |
| Return on Equity | 0.83 | 18.50 | 27.52 | 35.74 | 37.49 |
| Interest on Working Capital | 0.29 | 4.14 | 4.85 | 9.43 | 9.88 |
| O \& M Expenses | 4.88 | 61.92 | 65.46 | 123.84 | 130.92 |
| Total | 7.82 | 124.82 | 156.20 | 245.83 | 255.69 |

(e) The Asset 'D(iii)', namely 1 No. of 765 kV Line bay for 765 kV Gaya-Balia Line along with 240 MVAR switchable line reactor (Charged as Bus reactor) at Balia Sub-station, was earlier subsumed in Asset D(ii) in Petition No. 87/TT/2012. The tariff for the same was being claimed w.e.f. 1.3.2012 even though the actual COD for Asset D(iii) was 1.10.2012. However, the discrepancy was observed as the time of issuance of order dated 9.11.2015 in Petition No. 41/TT/2013 wherein the Commission made the following observation and direction:-
"19. It is observed that in Petition No.87/TT/2012, this 765 kV line reactor at Balia has been charged at 765 kV as Bus reactor as per COD letter submitted by petitioner in Petition No.41/TT/2013. The date of COD of this reactor is 1.10 .2012 as per the COD letter. Its associated Gaya-Balia line was charged at 400 kV ( 400 kV Balia-Sasaram) which implies line was charged at 400 kV bus bar of Balia Sub- station. 765 kV line reactor was actually charged as bus reactor at 765 kV bus of Balia. The petitioner has not brought this to our notice in Petition No.87/TT/2012 and no approval was provided by the petitioner in Petition No. 87/TT/2012 for charging line reactor as bus reactor. However, the petitioner has furnished approval of CEA vide letter dated 28.9.2012 whereby CEA has recommended that 240 MVAR line reactor for Gaya-Balia 765 kV line be taken as bus reactor as it would help in reducing voltage. On perusal of Petition No. 87/TT/2012, it is found that petitioner has claimed actual COD for this asset i.e. Asset D (ii) in Petition No. 87/TT/2012, which includes 765 kV line reactor with actual COD as 1.3.2012. The COD letter dated 15.10.2012 indicates that 765 kV line reactor at Balia under bus reactor was actually charged on 1.10.2012 but the petitioner has claimed it COD in Petition No.

87/TT/2012 as 1.3.2012. Such a grave misrepresentation of facts by the petitioner is a matter of serious concern. When the COD of an asset has been declared on 1.10.2012, the petitioner cannot claim its tariff form 1.3.2012. Further, the 765 kV Gaya-Balia line was charged on 765 kV only on 8.1.2015, hence till 8.1.2015 this reactor was actually being charged under bus reactor as a temporary arrangement. Keeping in view, CEA's letter dated 28.9.2012, we allow COD of $765 \mathrm{kV}, 240$ MVAR reactor from 1.10.2012. The petitioner is directed to submit details as per modified COD of 1.10.2012 for $765 \mathrm{kV}, 240$ MVAR line reactor associated with 765 kV GayaBalia line at Balia at time of filing truing up for assets covered in Petition No. 87/TT/2012."
(f) Therefore, the tariff for Asset $D$ (iii) is being claimed w.e.f. 1.10.2012 in the instant petition. Further, the Commission in order dated 9.11.2015 in Petition No. 41/TT/2013 observed as follows:-


#### Abstract

"17. We have considered the submission of petitioner and the respondent. The petitioner has submitted that initially in the petition this reactor has been inadvertently mentioned as switchable line reactor for which one bay of 765 kV has been claimed however, it has been clarified vide affidavit dated 2.6.2015 that this reactor is a bus reactor and is not a switchable line reactor. The petitioner has submitted revised forms for bus reactor accordingly. It is observed that all along since February, 2013, the petitioner has been claiming the reactor as switchable line reactor when it was actually a bus reactor. Such errors on part of the petitioner should be avoided in future."


(g) Therefore, subject Asset D (iii) is being utilized as a bus reactor rather than a switchable reactor (as claimed in Petition No. 87/TT/2012), tariff for which is being trued-up in the instant petition. Further, the petitioner was also granted final tariff for Assets-K to $R$ vide order dated 16.3.2015 in Petition No. 187/TT/2011. As regards Asset-O and Asset-P, the Commission in the said order has made the following observations:-
"19. However, the petitioner has considered 2 line reactors at Biharshariff associated with Biharshariff-Sasaram transmission line. As the reactors at Biharshariff have not been approved by the Standing Committee, capital cost of the associated bays and reactors at Biharshariff has not been considered for the purpose of tariff."
"25. The petitioner is, however, granted liberty to approach the Commission to allow tariff for 2 reactors and associated bays at the time of truing-up after obtaining approval of the Standing Committee and RPC"
(h) Accordingly, the petitioner has submitted the Minutes of 18th SCM on Power System Planning of Eastern Region in the instant petition and has prayed for capitalization of the Bays and Reactors at Biharshariff. As per Para 2.3 and 2.4 of Minutes of 18th SCM attached, the members of the meeting have approved the installation of the 50 MVAR line reactors at Biharshariff. Further, it is observed from Para 2.3 of Minutes of 18th SCM enclosed with the petition, the petitioner informed that the $2^{\text {nd }} 50$ MVAR line reactor is a spare reactor and would be put in use in future.
3. 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, 2003 ("the Act"). The petitioner has served the petition to the respondents. Madhya Pradesh Power Management company Limited (MPPMCL) in its reply filed vide affidavit dated 4.3.2017 has submitted that the time over-run in case of asset $D$ (iii) may not be allowed and accordingly the IDC and IEDC may be disallowed. The same is considered in the relevant para of this order.
4. The hearing in the matter was held on 17.11.2016. 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 of 2009-14 period

5. The tariff of 2009-14 has been trued up as discussed below.

## Capital Cost

6. Regulation 6 of the 2009 Tariff Regulations provides as under:-

## " 6 . Truing up of Capital Expenditure and Tariff.

(1) 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.

Provided that the generating company or the transmission licensee, as the case may be, may in its discretion make an application before the Commission one more time prior to 2013-14 for revision of tariff.
(2) The generating company or the transmission licensee, as the case may be, shall make an application, as per Appendix I to these regulations, for carrying out truing up exercise in respect of the generating station a unit or block thereof or the transmission system or the transmission lines or sub-stations thereof by 31.10.2014;
(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;
(4) Where after the truing up, the tariff recovered exceeds the tariff approved by the Commission under these regulations, the generating company or the transmission licensee, as the case may be, shall refund to the beneficiaries or the transmission customers, as the case may be, the excess amount so recovered along with simple interest at the rates specified in the proviso to this regulation.
(5) Where after the truing up, the tariff recovered is less than the tariff approved by the Commission under these regulations, the generating company or the transmission licensee, as the case may be, shall recover from the beneficiaries or the transmission customers, as the case may be, the under-recovered amount along with simple interest at the rates specified in the proviso to this regulation.
(6) The amount under-recovered or over-recovered, along with simple interest at the rates specified in the proviso to this regulation, shall be recovered or refunded by the generating company or the transmission licensee, as the case may be, in six equal monthly installments starting within three months from Page 3 of 6 the date of the tariff order issued by the Commission after the truing up exercise.

Provided that the rate of interest, for clauses (4), (5) and (6) of this regulation, for calculation of simple interest shall be considered as under:
(i) SBI short-term Prime Lending Rate as on 01.04.2009 for the year 2009-10.
(ii) SBI Base Rate as on 01.07.2010 plus 350 basis points for the year 2010-11.
(iii) Monthly average SBI Base Rate from 01.07 .2010 to 31.3 .2011 plus 350 basis points for the year 2011-12.
(iv) Monthly average SBI Base Rate during previous year plus 350 basis points for the year 2012-13 \& 2013-14."
7. In the instant petition, the petitioner has submitted the actual capital expenditure incurred corresponding to the assets for the period 2009-14, vide Auditor's certificate dated 17.4.2016 for all the assets except Asset-D(iii) and Asset-K to Asset-N. The actual capital expenditure in respect of Asset-D(iii) and Assets-K to N has been submitted vide certificates dated 3.8.2016 and 20.11.2015 respectively for the purpose of truing-up. The actual capital expenditure claimed by the petitioner is mentioned below:-

|  |  |  |  |  |  | (₹ in lakh) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | Apportione d approved cost (As per RCE) | Expenditure incurred upto COD | Actual Additional Capital Expenditure |  |  | TotalCompletionCost(31.3.2014) |
|  |  |  | 2011-12 | 2012-13 | 2013-14 |  |
| Asset-A | 11254.54 | 9677.59 | 0.00 | 424.00 | 495.85 | 10597.44 |
| Asset-B | 11485.08 | 9661.76 | 0.00 | 541.14 | 608.30 | 10811.2 |
| Asset-C | 11490.87 | 9647.59 | 0.00 | 555.59 | 612.71 | 10815.89 |
| Asset-D(i) | 12122.72 | 11210.42 | 81.57 | 161.52 | 94.80 | 11548.31 |
| Asset-D(ii) | 24993.79 | 23736.16 | 187.96 | 108.42 | 63.64 | 24096.18 |
| Asset-D(iii) | 5307.92 | 4464.43 | 0.00 | 55.15 | 270.57 | 4790.15 |
| Asset-E | 27713.93 | 24498.97 | 0.00 | 1342.14 | 489.38 | 26330.49 |
| Asset-F(i) | 38179.90 | 36484.96 | 0.00 | 0.00 | 0.00 | 36484.96 |
| Asset-F(ii) | 4146.23 | 2741.55 | 0.00 | 334.00 | 471.72 | 3547.27 |
| Asset-G | 4519.80 | 3115.28 | 0.00 | 662.06 | 335.45 | 4112.79 |
| Asset-H | 5030.43 | 3837.31 | 0.00 | 561.54 | 236.14 | 4634.99 |
| Asset-I | 1903.59 | 1206.18 | 132.72 | 102.33 | 145.71 | 1586.94 |
| Asset-J | 1900.67 | 1097.38 | 222.42 | 97.22 | 150.81 | 1567.83 |
| Asset-K | 4225.02 | 2861.54 | 223.98 | 399.92 | 131.49 | 3616.93 |
| Asset-L | 57021.95 | 51492.92 | 1221.90 | 679.78 | 1100.40 | 54495.01 |
| Asset-M | 13765.84 | 12428.84 | 195.01 | 35.16 | 697.79 | 13356.80 |
| Asset-N | 16762.76 | 12106.13 | 278.00 | 430.25 | 569.03 | 13383.41 |
| Asset-O | 2477.02 | 1316.60 | 82.10 | 296.12 | 280.52 | 1975.34 |
| Asset-P | 1559.08 | 1148.20 | 41.49 | 9.75 | 220.14 | 1419.58 |
| Asset-Q | 918.59 | 169.05 | 40.61 | 286.37 | 60.38 | 556.41 |
| Asset-R | 778.16 | 681.46 | 0.00 | 0.00 | 0.00 | 681.46 |

*The capital cost has been verified from the audited accounts of the petitioner by the Auditor up to 31.3.2015 for all the assets except Asset-D(iii) and up to 31.3.2016 for Asset-D(iii).

## Time Over-run

8. As per the Investment Approval, the commissioning schedule of the project is 48 months from the date of investment approval dated 29.8.2008. Accordingly, the schedule COD of the instant assets was 1.9.2012. The details of the COD of the instant assets is given in para 2 above. There is no time over-run in case of the instant assets except Assets-D(iii), F(i) and F(ii). Accordingly, there is no need for adjustment of IDC and IEDC in case of instant assets except for Assets-D(iii), F(i) and F(ii). These details of time overrun in case of Assets- $\mathrm{D}(\mathrm{iii}), \mathrm{F}(\mathrm{i})$ and $\mathrm{F}(\mathrm{ii})$ is given in the table below:-

| Assets | Scheduled COD | COD | Time over-run (in days) |
| :---: | :---: | :---: | :---: |
| Asset-D(iii) | 1.9.2012 | 1.10.2012 | 30 |
| Asset-F(i) |  | 1.2.2013 | 154 |
| Asset-F(ii) |  | 1.10.2012 | 30 |

9. The time over-run in case of the above said assets is dealt in the subsequent paras.
10. As regards Asset D (iii), the 765 kV line bay for 765 kV Gaya-Balia Line along with 240 MVAR switchable line reactor (charged as Bus Reactor) at Balia Substation, was part of Asset D in Petition No. 87/TT/2012. The petitioner claimed tariff for the same from 1.3 .2012 even though the actual COD for Asset $D$ (iii) was 1.10.2012. This discrepancy came to the notice of the Commission during the proceedings in Petition No. 41/TT/2013. Accordingly, the Commission in order dated 9.11.2015 in Petition No. 41/TT/2013 approved the COD of Asset D(iii) as 1.10.2012.

The relevant portion of the order dated 1.10.2012 is extracted hereunder:-

> " 19 It is observed that in Petition No. $87 / \mathrm{TT} / 2012$, this 765 kV line reactor at Balia has been charged at 765 kV as Bus reactor as per COD letter submitted by petitioner in Petition No. $41 / \mathrm{TT} / 2013$. The date of COD of this reactor is 1.10 .2012 as per the COD letter. Its associated Gaya-Balia line was charged at $400 \mathrm{kV}(400 \mathrm{kV}$ Balia-Sasaram) which implies line was charged at 400 kV bus bar of Balia Sub- station. 765 kV line reactor was actually charged as bus reactor at 765 kV bus of Balia. The petitioner has not brought this to our notice in Petition No. $87 / \mathrm{TT} / 2012$ and no approval was provided by the petitioner in Petition No. $87 / T \mathrm{TT} / 2012$ for charging line reactor as bus reactor. However, the petitioner has furnished approval of CEA vide letter dated 28.9 .2012 whereby CEA has recommended that 240 MVAR line reactor for Gaya-Balia 765 kV line be taken as bus reactor as it would help in reducing voltage. On perusal of Petition No. $87 / T \mathrm{TT} / 2012$, it is found that petitioner has claimed actual COD for this asset i.e. Asset D (ii) in Petititon No. $87 / \mathrm{TT} / 2012$ which includes 765 kV line reactor with actual COD as 1.3 .2012 . The COD letter dated 15.10 .2012 indicates that 765 kV line reactor at Balia under bus reactor was actually charged on 1.10 .2012 but the petitioner has claimed it's COD in Petition No. $87 / \mathrm{TT} / 2012$ as $1.3 .2012 \ldots . .$.
......Keeping in view, CEA's letter dated 28.9.2012, we allow COD of $765 \mathrm{kV}, 240$ MVAR reactor from 1.10.2012. The petitioner is directed to submit details as per modified COD of 1.10.2012 for 765 kV , 240 MVAR line reactor associated with 765 kV Gaya-Balia line at Balia at time of filing truing up for assets covered in Petition No. 87/TT/2012"
11. The petitioner has claimed the tariff for Asset $D$ (iii) accordingly from 1.10.2012.

There is a time over-run of one month in COD of Asset D (iii). The petitioner has submitted that the time over-run of one month was due to delay in construction of 765
kV Balia Sub-station due to non-availability of leveled land which had cascading effect and led to delay in construction. The petitioner has submitted that due to heavy rains in September, 2012 the whole construction area was flooded. Flooding in site alongwith the high water table at Balia compounded the problem and hampered the progress of civil works leading to delay in completion and charging of the asset. The petitioner has further submitted that COD of $765 \mathrm{kV}, 240$ MVAR Bus Reactor under the DVC Common Scheme at the same Balia Sub-station was 1.10.2012 after a time over-run of one month for the same reasons and the Commission in order dated 9.11.2015 in Petition No. 41/TT/2013 had condoned the time over-run of one month.
12. The petitioner has claimed consolidated tariff for Assets $F$ (i) and $F$ (ii) in Petition No.87/TT/2012 and as stated above there was time over-run of 154 days and 30 days in case of Assets $F(i)$ and $F(i i)$ respectively. The said time over-run was condoned by the Commission in order dated 3.2.2015 in Petition No. 87/TT/2012. However, the petitioner was directed to submit the documents in support of the reasons for time over-run at the time of truing up. The relevant portion of the said order is extracted hereunder:-
> " 20 We therefore condone the delay of 5 months involved in the commissioning of Asset F. We also clarify that the above decision to condone 5 months delay has been taken based on information submitted through affidavit. Accordingly, we also direct the petitioner to submit the documents regarding time over-run i.e. submission of proposals for forest clearance, correspondence in the matter, proof of various Gramsabha meetings, etc. at the time of truing up petition"
13. The petitioner in the instant petition has submitted that the time over-run of 154 days in case of Asset F(i), i.e. 400 kV D/C Quad Maithon-Gaya Transmission Line and associated bays at both ends (Part as Maithon-Koderma) and 30 days in Asset F(ii): 400 kV 2X50 MVAR line reactor as Bus Reactor along with associated bays at Gaya Sub-station was due to delay in forest clearance and due to Naxalite and Maoist activities. The submissions made by the petitioner are as follows:-
a. The total forest involvement for this portion of line is to the tune of 194 ha., out of which 131 ha, involving Jharkhand and Bihar is under Multi Ckt portion and 22.7 ha in Bihar is Double Circuit portion. For this line route alignment, preliminary and detail survey was included in the scope of main transmission line contract which is pre-requisite for preparation of forest proposal. Carrying out survey in the forest areas was quite challenging due to Maoist threat
prevailing in the area. With utmost caution and care, the work of survey of line was completed. In the meantime, MoEF, New Delhi, vide order dated 3.8.2009, directed all State governments to ensure compliance of Forest Rights Act, 2006 which inter-alia required NOC and written consent from each Gram Sabha (in which at least $50 \%$ of the members were present) and certification of the same by the respective State government. IN the instant case, forest proposal involved 3 DFOs in Jharkhand and 1 DFO in Bihar. Holding Gram Sabha in each village was quite a cumbersome and time consuming exercise. Compliance of this condition which came into force only from 3.8.2009 considerably delayed the forest proposal submission. However, with extensive mobilization of manpower this exercise could be completed in May-August, 2010 and forest proposal was submitted by the petitioner to various DFOs between May to September, 2010. There was delay in obtaining forest clearance of this line and final clearance in respect of Bihar and Jharkhand was received on 16.1.2012 and 8.11.2012 respectively, i.e. 16 months after submission of proposal in Bihar and 26 months in Jharkhand. Since most of the works associated with balance portion of Koderma-Gaya line falls in the forest area, the work could be extensively taken up only after final approval of forest clearance i.e. after November, 2012 only. The details for forest clearance are given below:-

|  | Mufti Circuit Portion |  | D/C portion |
| :--- | :--- | :--- | :---: |
|  | Bihar | Jharkhand | Bihar |
| Submission of Forest proposal | September, <br> 2010 | May/September, <br> 2010 | November,2009 |
| Forwarded to MoEF | 5.4 .2011 | 1.6 .2011 |  |
| Stage I Clearance by MoEF | 30.8 .2011 | 22.3 .2012 | 30.8 .2011 |


| Stage II Clearance by MoEF | 16.1 .2012 | 8.8 .2012 | 15.12 .2012 |
| :--- | :--- | :--- | :--- |
| Final clearance issued | 16.1 .2012 | 8.11 .2012 | 27.1 .2013 |

## Delay due to Naxalite and Maoist activities

b. The Multi Ckt portion of the line passes through dense forest areas and hilly terrains of Gaya and Chatra Forest Divisions of Bihar and Jharkhand respectively. Both these forest areas are disturbed due to Naxalite activities. The foundation work in this line was started on 8.11.2011 in non-forest area in Bihar but on 10.11.2011, there was a blast near the location blowing away a nearby school. There were regular and frequent Bandh calls given by Maoist and at times Maoists had forcibly stopped the work and due to fear the labour deserted the site. There were many occasions where Maoists/Naxals assembled near the work location and disturbed the works. Excerpts of the instances of hindrances maintained at site are mentioned below:-

| SrI. No | Description |
| :--- | :--- |
| 1 | The foundation work commenced on 8.11.2011 in non forest area in Bihar <br> section. On 10.11.2011 one village school was blasted near inaugurated <br> location. Police taken away the agency excavator kept under their custody. |
| 2 | On 5.12.2011 Maoist called for Bharat bandh |
| 3 | On 17.1.2012 Maoist called for Bharat bandh one day |
| 4 | Bihar section forest approval issued on 16.1.2012. However, MCC <br> stopped all activities |
| 5 | On 28.4.2012 Maoist called for Bharat bandh for one day |
| 6 | Jharkhand section forest approval issued on 8.11.2012 |

14. MPPMCL has submitted that the delay of one month in case of Asset $D$ (iii) is due to delay in construction of 765 kV Balia Sub-station which was due to non-
availability of leveled land which had cascading effect leading to time over-run. This is due to faulty planning of management of petitioner which needs to be borne by the petitioner and should not be passed on to respondents. Further, the petitioner has submitted that due to heavy rainfall in September, 2012 the whole construction area was flooded leading to time over-run. MPPMCL has submitted that the petitioner is misrepresenting the facts because the due date of commissioning of the project was 1.10.2012 and the said rainfall was in September, 2012. The petitioner has already delayed commencement of civil works of this asset because the transmission line was supposed to be charged. The petitioner has also failed to explain that how MPPMCL is responsible for delay in commissioning of this whole transmission system. Therefore, IDC and IEDC for the period of time over-run may not be allowed.
15. We have considered the submissions of the petitioner and MPPMCL and the documents submitted by the petitioner. It is observed that rains in the month of September led to flooding of the construction site and the bay could not be charged on 1.9.2012 as scheduled and was charged on 1.10.2012 leading of time over-run of 30 days, i.e. one month in case of Asset D (iii). The Commission in a similar situation has already condoned the time over-run of 30 days in case of the other 765 kV 240 MVAR Switchable line reactor at Balia Sub-station in its order dated 9.11.2015 in Petition No. 41/TT/2013. Taking into consideration the submissions made and the documents filed by the petitioner, we are of the view that the time over-run of 30 days in Asset D (iii) is beyond the control of the petitioner and accordingly it is condoned.
16. As regards Assets $F(i)$ and $F(i i)$, there was a time over-run of 154 days in COD of Asset $F(i)$ and 30 days in Asset $F$ (ii). The petitioner was directed to submit the documents regarding time over-run i.e. submission of proposals for forest clearance, correspondence in the matter, proof of various Gram Sabha meetings, etc. at the time of truing up petition. Accordingly, the petitioner has submitted the details. It is observed that the investment approval was accorded on 29.8.2008 and the petitioner submitted the proposal for forest clearance to various DFOs during May, 2010 to September, 2010 i.e. after a gap of two years from the date of investment approval. The petitioner has submitted that the proposal for forest clearance required NOC and consent of Gram Sabha as per MOEF order dated 3.8.2009 and the same was obtained by May, 2010 to August, 2010. Thereafter, the proposal was submitted to respective DFOs from May, 2010 to September, 2010. It is observed that MOEF direction was dated 3.8.2009 and the investment approval in the instant case was on 29.8.2009. Accordingly, the petitioner was aware of the requirements of the MOEF order dated 3.8.2009 and therefore the petitioner should have taken the time required for obtaining the NOC and consent of Gram Sabhas at the time of investment approval. It appears that the petitioner has failed to take this requirement into consideration at the time of investment approval. Hence, we are not convinced with the contention of the petitioner that the delay in obtaining the consent of Gram Sabhas led to the time over-run.
17. However, it is observed that the petitioner faced Naxal and Maoist problems in Gaya and Chatra Forest Divisions of Bihar and Jharkhand. The petitioner was forced to stop the work because of frequent calls for Bandh by Maoist. The petitioner was
not able to continuously take up the work related to Assets $F$ (i) and $F$ (ii) from 10.11.2011 to 8.11.2012. We are of the view that there were hindrances in execution of the works from 10.11.2011 to 8.11.2012 and the time over-run on this account cannot be attributed to the petitioner. Accordingly, we confirm our decision in order dated 3.2.2015 in Petition No. 87/TT/2012 condoning the time over-run of 154 days in COD of asset F (i) 400 kV D/C quad Maithon-Gaya transmission line and associated bays at both ends and 30 days in case of Asset $F(i)$.

## Interest During Construction (IDC)

18. The petitioner, vide various Auditor Certificates has claimed the IDC on accrual basis. However, the petitioner has not submitted the details of IDC including IDC liability as on COD, if any. IDC, up to the allowable date, has been worked out based on the loans deployed for the assets as per Form-9C of the petition. The IDC claimed by the petitioner in case of the instant assets is slightly lower than that eligible IDC. Accordingly, IDC claimed by the petitioner is allowed. In the absence of information regarding liability of IDC as on COD and the year of discharge thereof, the entire IDC has been presumed to be discharge as on COD. Hence, the adjustment of IDC in the calculations all assets are Asset- $\mathrm{F}(\mathrm{i})$ is not required.

## Incidental Expenditure During Construction (IEDC)

19. The petitioner, vide Auditor's Certificate dated 17.4.2016, has claimed ₹ 807.23 lakh as the IEDC as on COD, which is within the percentage of Hard Cost (i.e, 5\%) as indicated in the Abstract Cost Estimate. This line of action has been approved by the Commission in order dated 7.9.2017 in Petition No. 86/TT/2017 and in other
transmission tariff petitions in the recent past. Hence, as per as allowable limit of IEDC is concerned, the adjustment of IEDC in the calculations of all the assets are not required. However, for the period of time over-run not condoned, pro-rata IEDC of ₹46.43 lakh has been worked out, which has been adjusted in the capital cost as on COD of Asset-F(i). Further, the petitioner has not submitted the discharge details of the IEDC. Hence, it has been assumed that IEDC claimed are discharged as on COD.

## Treatment of initial spares

20. Regulation 8 of the 2009 Tariff Regulations provides that initial spares shall be capitalised as a percentage of the original project cost, subject to following ceiling norms:-

$$
\begin{array}{ll}
\text { Transmission Sub-station } & 2.5 \% \\
\text { Transmission line } & 0.75 \%
\end{array}
$$

21. The petitioner has claimed the initial spares corresponding to transmission line and sub-station and has submitted the Auditor Certificates for the same. The petitioner has further submitted that since the project is complete, the initial spare may be considered for the total assets covered under the scheme as a whole. However, initial spares are allowed on the basis of the capital cost of the individual assets. Initial Spares claimed by the petitioner in respect of all the assets except Assets-D(i), D(ii), E and F(i) corresponding to transmission line and Assets-K, O, P, Q and R corresponding to sub-station are within the norms specified in the 2009 Tariff Regulations. Hence, no adjustment of initial spares is required as on COD for these assets. However, excess initial spares claimed by the petitioner in respect of Assets-D(i), D(ii), E and F(i) corresponding to transmission line and

Assets-K, O, P, Q and R corresponding to sub-station are being adjusted as on COD while determining tariff of the assets. In view of the above, detailed calculation of excess Initial spares claimed in respect of the above mentioned assets has been deducted to arrive at the capital cost considered for the purpose of tariff in the present petition, are as below:
(₹ in lakh)

| Particulars |  | Capital <br> cost <br> claimed as <br> on cut-off <br> date | lnitial spares <br> claimed <br> against <br> capital cost <br> claimed as on <br> cut-off date | Ceiling Limit <br> as per 2009 <br> Tariff <br> Regulations | lnitial <br> spares <br> works out | Excess <br> initial <br> spares <br> claimed |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- |
| Asset-D(i) | $\{\mathrm{T} / \mathrm{L}\}$ | 10633.09 | $\mathbf{8 1 . 1 2}$ | $0.75 \%$ | 79.74 | $\mathbf{1 . 3 8}$ |
| Asset-D(ii) | $\{\mathrm{T} / \mathrm{L}\}$ | 24119.84 | $\mathbf{1 8 1 . 7 5}$ | $0.75 \%$ | 180.89 | $\mathbf{0 . 8 6}$ |
| Asset-E | $\{\mathrm{T} / \mathrm{L}\}$ | 21406.87 | $\mathbf{1 6 2 . 0 0}$ | $0.75 \%$ | 160.54 | $\mathbf{1 . 4 6}$ |
| Asset-F(i) | $\{\mathrm{T} / \mathrm{L}\}$ | 36484.96 | $\mathbf{2 7 9 . 1 4}$ | $0.75 \%$ | 273.60 | $\mathbf{5 . 5 4}$ |
| Asset-K | $\{\mathrm{S} / \mathrm{S}\}$ | 2587.14 | $\mathbf{8 1 . 0 6}$ | $2.50 \%$ | 64.26 | $\mathbf{1 6 . 8 0}$ |
| Asset-O | $\{\mathrm{S} / \mathrm{S}\}$ | 2000.98 | $\mathbf{5 7 . 5 2}$ | $2.50 \%$ | 49.83 | $\mathbf{7 . 6 9}$ |
| Asset-P | $\{\mathrm{S} / \mathrm{S}\}$ | 1445.22 | $\mathbf{5 7 . 5 2}$ | $2.50 \%$ | 35.58 | $\mathbf{2 1 . 9 4}$ |
| Asset-Q | $\{\mathrm{S} / \mathrm{S}\}$ | 556.41 | $\mathbf{2 1 . 2 7}$ | $2.50 \%$ | 13.72 | $\mathbf{7 . 5 5}$ |
| Asset-R | $\{\mathrm{S} / \mathrm{S}\}$ | 681.46 | $\mathbf{1 8 . 1 4}$ | $2.50 \%$ | 17.01 | $\mathbf{1 . 1 3}$ |

22. The petitioner has not submitted the discharge details of the initial spares. Hence, it has been assumed that initial spares claimed are discharged as on COD. Accordingly, the excess initials spare claimed has been adjusted from the capital cost as on COD. Therefore, capital cost considered for the purpose of tariff in the present petition, after scrutiny of IDC on cash basis, IEDC and IDC on account of time over-run and undischarged liability and scrutiny of initial spares (excess claim and undischarged liability) are as follows:-
(₹ in lakh)

| Particulars | Capital cost as on COD <br> (a) | IDC and IEDC disallowed as on COD (b) | Initial spares disallowed as on COD <br> (c) | Capital cost as on COD considered after scrutiny of IDC and IEDC and initial spares (d=a-b-c) |
| :---: | :---: | :---: | :---: | :---: |
| Asset-A | 9677.59 | 0.00 | 0.00 | 9677.59 |
| Asset-B | 9661.76 | 0.00 | 0.00 | 9661.76 |
| Asset-C | 9647.59 | 0.00 | 0.00 | 9647.59 |
| Asset-D(i) | 11210.42 | 0.00 | 1.38 | 11209.04 |
| Asset-D(ii) | 23736.16 | 0.00 | 0.86 | 23735.30 |
| AssetD(iii) | 4464.43 | 0.00 | 0.00 | 4464.43 |
| Asset-E | 24498.97 | 0.00 | 1.46 | 24497.51 |
| Asset-F(i) | 36484.96 | 46.43 | 5.54 | 36432.99 |
| Asset-F(ii) | 2741.55 | 0.00 | 0.00 | 2741.55 |
| Asset-G | 3115.28 | 0.00 | 0.00 | 3115.28 |
| Asset-H | 3837.31 | 0.00 | 0.00 | 3837.31 |
| Asset-I | 1206.18 | 0.00 | 0.00 | 1206.18 |
| Asset-J | 1097.38 | 0.00 | 0.00 | 1097.38 |
| Asset-K | 2861.54 | 0.00 | 16.80 | 2844.74 |
| Asset-L | 51492.92 | 0.00 | 0.00 | 51492.92 |
| Asset-M | 12428.84 | 0.00 | 0.00 | 12428.84 |
| Asset-N | 12106.13 | 0.00 | 0.00 | 12106.13 |
| Asset-0 | 1316.60 | 0.00 | 7.69 | 1308.91 |
| Asset-P | 1148.20 | 0.00 | 21.94 | 1126.26 |
| Asset-Q | 169.05 | 0.00 | 7.55 | 161.50 |
| Asset-R | 681.46 | 0.00 | 1.13 | 680.33 |
| Total | 223584.32 | 46.43 | 64.35 | 223473.54 |

## Additional Capital Expenditure

23. Regulation 9 (1) of the 2009 Tariff Regulations specifies as under:-.

## "9. 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
(i) Change in law:

Provided that the details of works included in the original scope of work along with estimates of expenditure, undischarged liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff."
24. The petitioner has claimed the additional capital expenditure for the instant assets:-
( $F^{2}$ in lakh)

| Assets | Additional Capital Expenditure |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 1 - 1 2}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | Total |
|  | 0.00 | 424.00 | 495.85 | 919.85 |
| Asset-B | 0.00 | 541.14 | 608.30 | 1149.44 |
| Asset-C | 0.00 | 555.59 | 612.71 | 1168.30 |
| Asset-D(i) | 81.57 | 161.52 | 94.80 | 337.89 |
| Asset-D(ii) | 187.96 | 108.42 | 63.64 | 360.02 |
| Asset-D(iii) | 0.00 | 55.15 | 270.57 | 325.72 |
| Asset-E | 0.00 | 1342.14 | 489.38 | 1831.52 |
| Asset-F(i) | 0.00 | 0.00 | 0.00 | 0.00 |
| Asset-F(ii) | 0.00 | 334.00 | 471.72 | 805.72 |
| Asset-G | 0.00 | 662.06 | 335.45 | 997.51 |
| Asset-H | 0.00 | 561.54 | 236.14 | 797.68 |
| Asset-I | 132.72 | 102.33 | 145.71 | 380.76 |
| Asset-J | 222.42 | 97.22 | 150.81 | 470.45 |
| Asset-K | 223.98 | 399.92 | 131.49 | 755.39 |
| Asset-L | 1221.90 | 679.78 | 1100.40 | 3002.08 |
| Asset-M | 195.01 | 35.16 | 697.79 | 927.96 |
| Asset-N | 278.00 | 430.25 | 569.03 | 1277.28 |
| Asset-O | 82.10 | 296.12 | 280.52 | 658.74 |
| Asset-P | 41.49 | 9.75 | 220.14 | 271.38 |
| Asset-Q | 40.61 | 286.37 | 60.38 | 387.36 |
| Asset-R | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | $\mathbf{2 7 0 7 . 7 6}$ | $\mathbf{7 0 8 2 . 4 6}$ | $\mathbf{7 0 3 4 . 8 3}$ | $\mathbf{1 6 8 2 5 . 0 5}$ |

25. The additional capital expenditure claimed by the petitioner is within in the "cut-off date" and accordingly it is allowed under Regulation 9(1)(i) of the 2014 Tariff Regulations.

## Debt: Equity Ratio

26. Clause (1) and (2) of Regulation 12 of the 2009 Tariff Regulations provide that:-
"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 debt:equity ratio of $70: 30$, as admitted vide order dated 3.2.2015 in Petition No. 87/TT/2012 read with order dated 11.5.2015 in Suo-motu review of order dated 3.2.2015 in Petition No. 87/TT/2012 and order dated 16.3.2015 in Petition No.187/TT/2011, has been considered as on COD. The same ratio of 70:30 ratio has been considered for the additional capital expenditure. The details of debt:equity ratio as on the COD and on 31.3.2014 considered for the purpose of truing up of the approved tariff for tariff period 2009-14 is as under:-

(₹ in lakh)

| Particulars | Asset-B |  |  |  |
| :--- | :--- | ---: | ---: | ---: |
|  | As on COD |  | As on 31.3.2014 |  |
|  | Amount | $\%$ | Amount | $\%$ |
| Debt | 6763.23 | 70.00 | 7567.84 | 70.00 |
| Equity | 2898.53 | 30.00 | 3243.36 | 30.00 |
| Total | $\mathbf{9 6 6 1 . 7 6}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{1 0 8 1 1 . 2 0}$ | $\mathbf{1 0 0 . 0 0}$ |

(₹ in lakh)

| Particulars | Asset-C |  |  |  |
| :--- | :--- | :---: | :---: | :---: |
|  | As on COD |  | As on 31.3.2014 |  |
|  | Amount | \% | Amount | \% |
| Debt | 6753.31 | 70.00 | 7571.12 | 70.00 |
| Equity | 2894.28 | 30.00 | 3244.77 | 30.00 |
| Total | $\mathbf{9 6 4 7 . 5 9}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{1 0 8 1 5 . 8 9}$ | $\mathbf{1 0 0 . 0 0}$ |


|  | (₹ in lakh) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Particulars | Asset-D(i) |  |  |  |
|  | As on COD |  | As on 31.3.2014 |  |
|  | Amount | \% | Amount | \% |
| Debt | 7846.33 | 70.00 | 8082.85 | 70.00 |
| Equity | 3352.71 | 30.00 | 3464.08 | 30.00 |
| Total | 11209.46 | 100.00 | 11546.93 | 100.00 |


|  | (₹ in lakh) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Particulars | Asset-D(ii) |  |  |  |
|  | As on COD |  | As on 31.3.2014 |  |
|  | Amount | \% | Amount | \% |
| Debt | 16614.17 | 70.00 | 16866.73 | 70.00 |
| Equity | 7120.59 | 30.00 | 7228.60 | 30.00 |
| Total | 23735.30 | 100.00 | 24095.32 | 100.00 |
| (₹ in lakh) |  |  |  |  |
| Particulars | Asset-D(iii) |  |  |  |
|  | As on COD |  | As on 31.3.2014 |  |
|  | Amount | \% | Amount | \% |
| Debt | 3125.11 | 70.00 | 3353.11 | 70.00 |
| Equity | 1339.32 | 30.00 | 1437.04 | 30.00 |
| Total | 4464.43 | 100.00 | 4790.15 | 100.00 |


|  | (₹ in lakh) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Particulars | Asset-E |  |  |  |
|  | As on COD |  | As on 31.3.2014 |  |
|  | Amount | \% | Amount | \% |
| Debt | 17148.26 | 70.00 | 18430.20 | 70.00 |
| Equity | 7349.25 | 30.00 | 7898.71 | 30.00 |
| Total | 24497.51 | 100.00 | 26329.03 | 100.00 |


| (₹ in lakh) |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | :---: |
| Particulars | Asset-F(i) |  |  |  |  |
|  | As on COD |  |  | As on 31.3.2014 |  |
|  | Amount | $\%$ | Amount | $\%$ |  |
| Debt | 25503.09 | 70.00 | 25503.09 | 70.00 |  |
| Equity | 10929.90 | 30.00 | 10929.90 | 30.00 |  |
| Total |  | 36432.99 | $\mathbf{1 0 0 . 0 0}$ | 36432.99 |  |

(₹ in lakh)

| Particulars | Asset-F(ii) |  |  |  |
| :--- | ---: | ---: | ---: | :---: |
|  | As on COD |  | As on 31.3.2014 |  |
|  | Amount | $\%$ | Amount | $\%$ |
| Debt | 1919.09 | 70.00 | 2483.09 | 70.00 |
| Equity | 822.46 | 30.00 | 1064.18 | 30.00 |
| Total | $\mathbf{2 7 4 1 . 5 5}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{3 5 4 7 . 2 7}$ | $\mathbf{1 0 0 . 0 0}$ |


|  | (₹ in lakh) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Particulars | Asset-G |  |  |  |
|  | As on COD |  | As on 31.3.2014 |  |
|  | Amount | \% | Amount | \% |
| Debt | 2180.70 | 70.00 | 2878.96 | 70.00 |
| Equity | 934.58 | 30.00 | 1233.83 | 30.00 |
| Total | 3115.28 | 100.00 | 4112.79 | 100.00 |

(₹ in lakh)

| Particulars | Asset-H |  |  |  |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
|  | As on COD | As on 31.3.2014 |  |  |  |  |  |  |  |
|  | Amount | $\%$ | Amount | $\%$ |  |  |  |  |  |
| Debt | 2686.12 | 70.00 | 3244.50 | 70.00 |  |  |  |  |  |
| Equity | 1151.19 | 30.00 | 1390.49 | 30.00 |  |  |  |  |  |
| Total |  |  |  |  |  | $\mathbf{3 8 3 7 . 3 1}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{4 6 3 4 . 9 9}$ | $\mathbf{1 0 0 . 0 0}$ |

(₹ in lakh)

| Particulars | Asset-I |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | As on COD | As on 31.3.2014 |  |  |
|  | Amount | $\%$ | Amount | $\%$ |
| Debt | 844.33 | 70.00 | 1110.86 | 70.00 |
| Equity | 361.85 | 30.00 | 476.08 | 30.00 |
| Total | $\mathbf{1 2 0 6 . 1 8}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{1 5 8 6 . 9 4}$ | $\mathbf{1 0 0 . 0 0}$ |

(₹ in lakh)

| Particulars | Asset-J |  |  |  |
| :--- | ---: | ---: | ---: | :---: |
|  | As on COD | As on 31.3.2014 |  |  |
|  | Amount | $\%$ | Amount | $\%$ |
| Debt | 768.17 | 70.00 | 1097.49 | 70.00 |
| Equity | 329.21 | 30.00 | 470.35 | 30.00 |
| Total | $\mathbf{1 0 9 7 . 3 8}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{1 5 6 7 . 8 3}$ | $\mathbf{1 0 0 . 0 0}$ |

(₹ in lakh)

| Particulars | Asset-K |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | As on COD |  | As on 31.3.2014 |  |
|  | Amount | \% | Amount | \% |
| Debt | 1991.32 | 70.00 | 2520.09 | 70.00 |
| Equity | 853.42 | 30.00 | 1080.04 | 30.00 |
| Total | 2844.74 | 100.00 | 3600.13 | 100.00 |

(₹ in lakh)

| Particulars | Asset-L |  |  |  |
| :--- | :--- | ---: | ---: | ---: |
|  | As on COD |  | As on 31.3.2014 |  |
|  | Amount | \% | Amount | $\%$ |
| Debt | 36045.04 | 70.00 | 38146.50 | 70.00 |
| Equity | 15447.88 | 30.00 | 16348.50 | 30.00 |
| Total | $\mathbf{5 1 4 9 2 . 9 2}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{5 4 4 9 5 . 0 0}$ | $\mathbf{1 0 0 . 0 0}$ |

(₹ in lakh)

| Particulars | Asset-M |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | As on COD |  | As on 31.3.2014 |  |
|  | Amount | $\%$ | Amount | $\%$ |
| Debt | 8700.19 | 70.00 | 9349.76 | 70.00 |
| Equity | 3728.65 | 30.00 | 4007.04 | 30.00 |
| Total |  | $\mathbf{1 2 4 2 8 . 8 4}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{1 3 3 5 6 . 8 0}$ |
| $\mathbf{1 0 0 . 0 0}$ |  |  |  |  |

(₹ in lakh)

| Particulars | Asset-N |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | As on COD |  | As on 31.3.2014 |  |
|  | Amount | $\%$ | Amount | $\%$ |
| Debt | 8474.29 | 70.00 | 9368.39 | 70.00 |
| Equity | 3631.84 | 30.00 | 4015.02 | 30.00 |
| Total |  | $\mathbf{1 2 1 0 6 . 1 3}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{1 3 3 8 3 . 4 1}$ |

(₹ in lakh)

| Particulars | Asset-O |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | As on COD | As on 31.3.2014 |  |  |
|  | Amount | \% | Amount | \% |
| Debt | 916.24 | 70.00 | 1377.36 | 70.00 |
| Equity | 392.67 | 30.00 | 570.30 | 30.00 |
| Total | $\mathbf{1 3 0 8 . 9 1}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{1 9 6 7 . 6 5}$ | $\mathbf{1 0 0 . 0 0}$ |

(₹ in lakh)

| Particulars | Asset-P |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | As on COD |  | As on 31.3.2014 |  |
|  | Amount | \% | Amount | \% |
| Debt | 788.38 | 70.00 | 978.35 | 70.00 |
| Equity | 337.88 | 30.00 | 419.29 | 30.00 |
| Total | 1126.26 | 100.00 | 1397.64 | 100.00 |

(₹ in lakh)

| Particulars | Asset-Q |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | As on COD | As on 31.3.2014 |  |  |
|  | Amount | $\%$ | Amount | $\%$ |
| Debt | 113.06 | 70.00 | 384.21 | 70.00 |
| Equity | 48.45 | 30.00 | 164.65 | 30.00 |
| Total |  | $\mathbf{1 6 1 . 5 0}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{5 4 8 . 8 6}$ |
| $\mathbf{y}$ | $\mathbf{1 0 0 . 0 0}$ |  |  |  |

(₹ in lakh)

| Particulars | Asset-R |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | As on COD |  | As on 31.3.2014 |  |
|  | Amount | $\%$ | Amount | $\%$ |
| Debt | 476.23 | 70.00 | 476.23 | 70.00 |
| Equity | 204.10 | 30.00 | 204.10 | 30.00 |
| Total |  | $\mathbf{6 8 0 . 3 3}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{6 8 0 . 3 3}$ |
| $\mathbf{1 0 0 . 0 0}$ |  |  |  |  |

## Return on Equity (ROE)

28. Clause (3), (4) and (5) of Regulation 15(1) of the 2009 Tariff Regulations provides
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 year2008-09, 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."
29. The petitioner has submitted the MAT rate applicable during the various years.

RoE has been worked out by considering year wise MAT rate submitted by the petitioner in accordance with Regulation 15 of the 2009 Tariff Regulations. The variation in the tax rate during the 2009-14 tariff period applicable to the petitioner as
per the Finance Act, 1961 of the relevant year for the purpose of grossing up of ROE is as under:-

| Year | MAT Rate (in \%) | Grossed up ROE <br> (Base rate/(1-t) (in \%) |
| :--- | :--- | :--- |
| $2009-10$ | 16.995 | 18.674 |
| $2010-11$ | 19.931 | 19.358 |
| $2011-12$ | 20.008 | 19.377 |
| $2012-13$ | 20.008 | 19.377 |
| $2013-14$ | 20.960 | 19.610 |

30. The trued up ROE allowed for the instant transmission assets is given below:-
(₹ in lakh)

| Particulars | Asset-A |  |
| :--- | ---: | ---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ <br> (pro-rata) | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Equity | 2903.28 | 3030.48 |
| Addition due to Additional <br> Capitalization | 127.20 | 148.76 |
| Closing Equity | 3030.48 | 3179.23 |
| Average Equity | 2966.88 | 3104.85 |
| Return on Equity (Base Rate ) | $15.50 \%$ | $15.50 \%$ |
| Tax rate for the year (MAT) | $20.0080 \%$ | $20.9605 \%$ |
| Rate of Return on Equity (Pre <br> Tax ) | $19.377 \%$ | $19.610 \%$ |
| Return on Equity (Pre Tax) | 479.08 | 608.86 |

(₹ in lakh)

| Particulars | Asset-B |  |
| :--- | ---: | ---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Equity | 2898.53 | 3060.87 |
| Addition due to Additional <br> Capitalization | 162.34 | 182.49 |
| Closing Equity | 3060.87 | 3243.36 |
| Average Equity | 2979.70 | 3152.12 |
| Return on Equity (Base Rate ) | $15.50 \%$ | $15.50 \%$ |
| Tax rate for the year (MAT) | $20.0080 \%$ | $20.9605 \%$ |
| Rate of Return on Equity (Pre <br> Tax ) | $19.377 \%$ | $19.610 \%$ |
| Return on Equity (Pre Tax) | 577.38 | 618.13 |

(₹ in lakh)

| Particulars | Asset-C |  |
| :--- | :---: | :---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Equity | 2894.28 | 3060.95 |


| Addition due to Additional <br> Capitalization | 166.68 | 183.81 |
| :--- | ---: | ---: |
| Closing Equity | 3060.95 | 3244.77 |
| Average Equity | 2977.62 | 3152.86 |
| Return on Equity (Base Rate ) | $15.50 \%$ | $15.50 \%$ |
| Tax rate for the year (MAT) | $20.0080 \%$ | $20.9605 \%$ |
| Rate of Return on Equity (Pre <br> Tax ) | $19.377 \%$ | $19.610 \%$ |
| Return on Equity (Pre Tax) | 576.97 | 618.28 |


| Particulars | (₹ in lakh) |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Equity | 3362.71 | 3387.18 | 3435.64 |
| Addition due to Additional |  |  |  |
| Capitalization | 24.47 | 48.46 | 28.44 |
| Closing Equity | 3387.18 | 3435.64 | 3464.08 |
| Average Equity | 3374.95 | 3411.41 | 3449.86 |
| Return on Equity (Base Rate ) | $15.50 \%$ | $15.50 \%$ | $15.50 \%$ |
| Tax rate for the year (MAT) | $20.0080 \%$ | $20.0080 \%$ | $20.9605 \%$ |
| Rate of Return on Equity (Pre Tax ) | $19.377 \%$ | $19.377 \%$ | $19.610 \%$ |
| Return on Equity (Pre Tax) | 108.99 | 661.03 | 676.52 |
| (₹ in lakh) |  |  |  |


| Particulars | Asset-D (ii) |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Equity | 7120.59 | 7176.98 | 7209.50 |
| Adddition due to Additional <br> Capitalization | 56.39 | 32.53 | 19.09 |
| Closing Equity | 7176.98 | 7209.50 | 7228.60 |
| Average Equity | 7148.78 | 7193.24 | 7219.05 |
| Return on Equity (Base Rate ) | $15.50 \%$ | $15.50 \%$ | $15.50 \%$ |
| Tax rate for the year (MAT) | $20.0080 \%$ | $20.0080 \%$ | $20.9605 \%$ |
| Rate of Return on Equity (Pre Tax ) | $19.377 \%$ | $19.377 \%$ | $19.610 \%$ |
| Return on Equity (Pre Tax) | 115.44 | 1393.83 | 1415.66 |

(₹ in lakh)

| Particulars | Asset-D (iii) |  |
| :--- | ---: | ---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ <br> (pro-rata) | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Equity | 1339.32 | 1355.87 |
| Addition due to Additional <br> Capitalization | 16.55 | 81.17 |
| Closing Equity | 1355.87 | 1437.04 |
| Average Equity | 1347.59 | 1396.45 |
| Return on Equity (Base Rate ) | $15.50 \%$ | $15.50 \%$ |
| Tax rate for the year (MAT) | $20.0080 \%$ | $20.9605 \%$ |


| Rate of Return on Equity (Pre Tax ) | $19.377 \%$ | $19.610 \%$ |
| :--- | ---: | ---: |
| Return on Equity (Pre Tax) | 130.56 | 273.84 |


|  | (₹ in lakh) |  |
| :--- | ---: | ---: |
| Particulars | Asset-E |  |
|  | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Equity | 7349.25 | 7751.89 |
| Addition due to Additional <br> Capitalization | 402.64 | 146.81 |
| Closing Equity | 7751.89 | 7898.71 |
| Average Equity | 7550.57 | 7825.30 |
| Return on Equity (Base Rate ) | $15.50 \%$ | $15.50 \%$ |
| Tax rate for the year (MAT) | $20.0080 \%$ | $20.9605 \%$ |
| Rate of Return on Equity (Pre Tax ) | $19.377 \%$ | $19.610 \%$ |
| Return on Equity (Pre Tax) | 1463.07 | 1534.54 |

## (₹ in lakh)

| Particulars | Asset-F (i) |  |
| :--- | ---: | ---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ <br> (pro-rata) | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Equity | 10929.90 | 10929.90 |
| Addition due to Additional <br> Capitalization | 0.00 | 0.00 |
| Closing Equity | 10929.90 | 10929.90 |
| Average Equity | 10929.90 | 10929.90 |
| Return on Equity (Base Rate ) | $15.50 \%$ | $15.50 \%$ |
| Tax rate for the year (MAT) | $20.0080 \%$ | $20.9605 \%$ |
| Rate of Return on Equity (Pre Tax ) | $19.377 \%$ | $19.610 \%$ |
| Return on Equity (Pre Tax) | 352.98 | 2143.35 |

(₹ in lakh)

| Particulars | Asset-F (ii) |  |
| :--- | ---: | ---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ <br> (pro-rata) | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Equity | 822.46 | 922.66 |
| Addition due to Additional <br> Capitalization | 100.20 | 141.52 |
| Closing Equity | 922.66 | 1064.18 |
| Average Equity | 872.56 | 993.42 |
| Return on Equity (Base Rate ) | $15.50 \%$ | $15.50 \%$ |
| Tax rate for the year (MAT) | $20.0080 \%$ | $20.9605 \%$ |
| Rate of Return on Equity (Pre Tax ) | $19.377 \%$ | $19.610 \%$ |
| Return on Equity (Pre Tax) | 84.54 | 194.81 |

(₹ in lakh)

| Particulars | Asset-G |  |
| :---: | :---: | :---: |
|  | $2012-13$ | $2013-14$ |
| (pro-rata) |  |  |


| Opening Equity | 934.58 | 1133.20 |
| :--- | ---: | ---: |
| Addition due to Additional <br> Capitalization | 198.62 | 100.64 |
| Closing Equity | 1133.20 | 1233.83 |
| Average Equity | 1033.89 | 1183.52 |
| Return on Equity (Base Rate ) | $15.50 \%$ | $15.50 \%$ |
| Tax rate for the year (MAT) | $20.0080 \%$ | $20.9605 \%$ |
| Rate of Return on Equity (Pre Tax ) | $19.377 \%$ | $19.610 \%$ |
| Return on Equity (Pre Tax) | 166.95 | 232.09 |

(₹ in lakh)

| Particulars | Asset-H |  |
| :--- | ---: | ---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Equity | 1151.19 | 1319.65 |
| Addition due to Additional <br> Capitalization | 168.46 | 70.84 |
| Closing Equity | 1319.65 | 1390.49 |
| Average Equity | 1235.42 | 1355.07 |
| Return on Equity (Base Rate ) | $15.50 \%$ | $15.50 \%$ |
| Tax rate for the year (MAT) | $20.0080 \%$ | $20.9605 \%$ |
| Rate of Return on Equity (Pre Tax ) | $19.377 \%$ | $19.610 \%$ |
| Return on Equity (Pre Tax) | 239.39 | 265.73 |


| Particulars | (₹ in lakh) |  |  |
| :--- | ---: | ---: | ---: |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Equity | 361.85 | 401.67 | 432.37 |
| Addition due to Additional <br> Capitalization | 39.82 | 30.70 | 43.71 |
| Closing Equity | 401.67 | 432.37 | 476.08 |
| Average Equity | 381.76 | 417.02 | 454.22 |
| Return on Equity (Base Rate ) | $15.50 \%$ | $15.50 \%$ | $15.50 \%$ |
| Tax rate for the year (MAT) | $20.0080 \%$ | $20.0080 \%$ | $20.905 \%$ |
| Rate of Return on Equity (Pre Tax ) | $19.377 \%$ | $19.377 \%$ | $19.610 \%$ |
| Return on Equity (Pre Tax) | 6.16 | 80.81 | 89.07 |

(₹ in lakh)

| Particulars | Asset-J |  |  |
| :--- | ---: | ---: | ---: |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Equity | 329.21 | 395.94 | 425.10 |
| Addition due to Additional <br> Capitalization | 66.73 | 29.17 | 45.24 |
| Closing Equity | 395.94 | 425.10 | 470.35 |
| Average Equity | 362.57 | 410.52 | 447.72 |
| Return on Equity (Base Rate ) | $15.50 \%$ | $15.50 \%$ | $15.50 \%$ |
| Tax rate for the year (MAT) | $20.0080 \%$ | $20.0080 \%$ | $20.9605 \%$ |


| Rate of Return on Equity (Pre Tax ) | $19.377 \%$ | $19.377 \%$ | $19.610 \%$ |
| :--- | ---: | ---: | ---: |
| Return on Equity (Pre Tax) | 11.71 | 79.55 | 87.80 |

(₹ in lakh)

| Particulars | Asset-K |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 1 - 1 2}$ <br> (Pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Equity | 853.42 | 920.61 | 1040.59 |
| Addition due to Additional <br> Capitalization | 67.19 | 119.98 | 39.45 |
| Closing Equity | 920.61 | 1040.59 | 1080.04 |
| Average Equity | 887.02 | 980.60 | 1060.31 |
| Return on Equity (Base Rate ) | $15.50 \%$ | $15.50 \%$ | $15.50 \%$ |
| Tax rate for the year (MAT) | $20.0080 \%$ | $20.0080 \%$ | $20.9605 \%$ |
| Rate of Return on Equity (Pre Tax ) | $19.377 \%$ | $19.377 \%$ | $19.610 \%$ |
| Return on Equity (Pre Tax) | 14.32 | 190.01 | 207.93 |

(₹ in lakh)

| Particulars | Asset-L |  |  |
| :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline 2011-12 \\ \text { (Pro-rata) } \\ \hline \end{gathered}$ | 2012-13 | 2013-14 |
| Opening Equity | 15447.88 | 15814.45 | 16018.38 |
| Addition due to Additional Capitalization | 366.57 | 203.93 | 330.12 |
| Closing Equity | 15814.45 | 16018.38 | 16348.50 |
| Average Equity | 15631.16 | 15916.41 | 16183.44 |
| Return on Equity (Base Rate ) | 15.50\% | 15.50\% | 15.50\% |
| Tax rate for the year (MAT) | 20.0080\% | 20.0080\% | 20.9605\% |
| Rate of Return on Equity (Pre Tax) | 19.377\% | 19.377\% | 19.610\% |
| Return on Equity (Pre Tax) | 252.40 | 3084.12 | 3173.57 |

(₹ in lakh)

| Particulars | Asset-M |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 1 - 1 2}$ <br> (Pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Equity | 3728.65 | 3787.15 | 3797.70 |
| Addition due to Additional | 58.50 | 10.55 | 209.34 |
| Capitalization |  |  |  |

(₹ in lakh)

| Particulars | Asset-N |  |  |
| :---: | :---: | :---: | :---: |
|  | 2011-12 <br> (Pro-rata) | 2012-13 | 2013-14 |


| Opening Equity | 3631.84 | 3715.24 | 3844.31 |
| :--- | ---: | ---: | ---: |
| Addition due to Additional <br> Capitalization | 83.40 | 129.08 | 170.71 |
| Closing Equity | 3715.24 | 3844.31 | 4015.02 |
| Average Equity | 3673.54 | 3779.78 | 3929.67 |
| Return on Equity (Base Rate ) | $15.50 \%$ | $15.50 \%$ | $15.50 \%$ |
| Tax rate for the year (MAT) | $20.0080 \%$ | $20.0080 \%$ | $20.9605 \%$ |
| Rate of Return on Equity (Pre Tax ) | $19.377 \%$ | $19.377 \%$ | $19.610 \%$ |
| Return on Equity (Pre Tax) | 59.32 | 732.41 | 770.61 |

(₹ in lakh)

| Particulars | Asset-O |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 1 - 1 2}$ <br> (Pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Equity | 392.67 | 417.30 | 506.14 |
| Addition due to Additional <br> Capitalization | 24.63 | 88.84 | 84.16 |
| Closing Equity | 417.30 | 506.14 | 590.30 |
| Average Equity | 404.99 | 461.72 | 548.22 |
| Return on Equity (Base Rate ) | $15.50 \%$ | $15.50 \%$ | $15.50 \%$ |
| Tax rate for the year (MAT) | $20.0080 \%$ | $20.0080 \%$ | $20.9605 \%$ |
| Rate of Return on Equity (Pre Tax ) | $19.377 \%$ | $19.377 \%$ | $19.610 \%$ |
| Return on Equity (Pre Tax) | 13.08 | 89.47 | 107.51 |

(₹ in lakh)

| Particulars | Asset-P |  |  |
| :--- | ---: | ---: | ---: |
|  | 2011-12 <br> (Pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Equity | 337.88 | 350.33 | 353.25 |
| Addition due to Additional <br> Capitalization | 12.45 | 2.93 | 66.04 |
| Closing Equity | 350.33 | 353.25 | 419.29 |
| Average Equity | 344.10 | 351.79 | 386.27 |
| Return on Equity (Base Rate ) | $15.50 \%$ | $15.50 \%$ | $15.50 \%$ |
| Tax rate for the year (MAT) | $20.0080 \%$ | $20.0080 \%$ | $20.9605 \%$ |
| Rate of Return on Equity (Pre Tax ) | $19.377 \%$ | $19.377 \%$ | $19.610 \%$ |
| Return on Equity (Pre Tax) | 11.11 | 68.17 | 75.75 |

(₹ in lakh)

| Particulars | Asset-Q |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 1 - 1 2}$ <br> (Pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Equity | 48.45 | 60.63 | 146.54 |
| Addition due to Additional <br> Capitalization | 12.18 | 85.91 | 18.11 |
| Closing Equity | 60.63 | 146.54 | 164.65 |
| Average Equity | 54.54 | 103.58 | 155.60 |
| Return on Equity (Base Rate ) | $15.50 \%$ | $15.50 \%$ | $15.50 \%$ |
| Tax rate for the year (MAT) | $20.0080 \%$ | $20.0080 \%$ | $20.9605 \%$ |

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| Rate of Return on Equity (Pre Tax ) | $19.377 \%$ | $19.377 \%$ | $19.610 \%$ |
| :--- | ---: | ---: | ---: |
| Return on Equity (Pre Tax) | 0.88 | 20.07 | 30.51 |

(₹ in lakh)

| Particulars | Asset-R |  |
| :--- | ---: | ---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Equity | $\mathbf{2 0 4 . 1 0}$ | $\mathbf{2 0 4 . 1 0}$ |
| Addition due to Additional <br> Capitalization | 0.00 | 0.00 |
| Closing Equity | 204.10 | 204.10 |
| Average Equity | 204.10 | 204.10 |
| Return on Equity (Base Rate ) | $15.50 \%$ | $15.50 \%$ |
| Tax rate for the year (MAT) | $20.0080 \%$ | $20.9605 \%$ |
| Rate of Return on Equity (Pre Tax ) | $19.377 \%$ | $19.610 \%$ |
| Return on Equity (Pre Tax) | 39.55 | 40.02 |

## Interest on Loan ("IOL")

31. Regulation 16 of the 2009 Tariff regulations provides that:-
"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."
32. The petitioner has claimed the IOL based on actual interest rates for each year during the 2009-14 tariff period. We have relied on document submitted in support of interest rate and the same has been considered for tariff.
33. In the calculations, the interest on loan has been worked out as detailed below:-
(i) Gross amount of loan, repayment of instalments and rate of interest have been considered as per Form-13 given in the petition for working out the weighted average rate of interest.
(ii) The normative repayment for the tariff period 2009-14 has been considered to be equal to the depreciation allowed for that period.
(iii) Weighted average rate of interest on actual average loan worked out as per (i) above, is applied on the notional average loan during the year to arrive at the interest on loan.
34. The details of weighted average rate of interest are given in Annexure-I to Annexure-XXI. The IOL allowed under Regulation 16 of the 2009 Tariff Regulations is as follows:-
(₹ in lakh)

| Particulars | Asset-A |  |
| :--- | ---: | ---: |
|  | 2012-13 <br> (pro-rata) | 2013-14 |
| Gross Normative Loan | 6774.31 | 7071.11 |
| Cumulative Repayment upto <br> Previous Year | 0.00 | 424.39 |
| Net Loan-Opening | 6774.31 | 6646.72 |
| Addition due to Additional <br> capitalisation | 296.80 | 347.10 |
| Repayment during the year | 424.39 | 533.08 |
| Net Loan-Closing | 6646.72 | 6460.74 |
| Average Loan | 6710.52 | 6553.73 |
| Weighted Average Rate of <br> Interest on Loan | $9.0423 \%$ | $9.0791 \%$ |
| Interest |  |  |


|  |  | (₹ in lakh) |  |
| :--- | ---: | ---: | :---: |
| Particulars | Asset-B |  |  |
|  | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |  |
| Gross Normative Loan | 6763.23 | $\mathbf{7 1 4 2 . 0 3}$ |  |
| Cumulative Repayment upto <br> Previous Year | 0.00 | 511.54 |  |
| Net Loan-Opening | 6763.23 | 6630.49 |  |
| Addition due to Additional <br> capitalisation | 378.80 | 425.81 |  |
| Repayment during the year | 511.54 | 541.41 |  |
| Net Loan-Closing | 6630.49 | 6514.90 |  |
| Average Loan | 6696.86 | 6572.69 |  |
| Weighted Average Rate of <br> Interest on Loan | $9.0625 \%$ | $9.1073 \%$ |  |
| Interest |  | 606.90 |  |

(₹ in lakh)

| Particulars |  | Asset-C |  |
| :--- | ---: | ---: | :---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |  |
| Gross Normative Loan | 6753.31 | $\mathbf{7 1 4 2 . 2 3}$ |  |
| Cumulative Repayment upto <br> Previous Year | 0.00 | 511.17 |  |
| Net Loan-Opening | 6753.31 | 6631.05 |  |
| Addition due to Additional <br> capitalisation | 388.91 | 428.90 |  |


| Repayment during the year | 511.17 | 541.54 |
| :--- | ---: | ---: |
| Net Loan-Closing | 6631.05 | 6518.41 |
| Average Loan | 6692.18 | 6574.73 |
| Weighted Average Rate of <br> Interest on Loan | $9.0405 \%$ | $9.0881 \%$ |
| Interest | 605.01 | 597.52 |


| Particulars |  | (₹ in lakh) |  |  |
| :--- | ---: | ---: | ---: | :---: |
|  | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |  |
| Gross Normative Loan | 7846.33 | 7903.43 | 8016.49 |  |
| Cumulative Repayment upto Previous Year | 0.00 | 98.05 | 692.76 |  |
| Net Lan-Opening | 7846.33 | 7805.38 | 7323.73 |  |
| Addition due to Additional capitalisation | 57.10 | 113.06 | 66.36 |  |
| Repayment during the year | 98.05 | 594.71 | 601.55 |  |
| Net Loan-Closing | 7805.38 | 7323.73 | 6788.54 |  |
| Average Loan | 7825.85 | 7564.55 | 7056.14 |  |
| Weighted Average Rate of Interest on Loan | $8.8527 \%$ | $8.854 \%$ | $8.8661 \%$ |  |
| Interest | $\mathbf{1 1 5 . 4 7}$ | $\mathbf{6 7 0 . 0 2}$ | $\mathbf{6 2 5 . 6 1}$ |  |


| Particulars |  |  |  |
| :--- | ---: | ---: | ---: |
|  | (₹ in lakh) |  |  |
|  | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Gross Normative Loan | 16614.71 | 16746.28 | 16822.18 |
| Cumulative Repayment upto Previous Year | 0.00 | 104.85 | 1370.81 |
| Net Loan-Opening | 16614.71 | 16641.44 | 15451.37 |
| Addition due to Additional capitalisation | 131.57 | 75.89 | 44.55 |
| Repayment during the year | 104.85 | 1265.97 | 1270.55 |
| Net Loan-Closing | 16641.44 | 15451.37 | 14225.36 |
| Average Loan | 16628.08 | 16046.40 | 14838.36 |
| Weighted Average Rate of Interest on Loan | $8.8521 \%$ | $8.8538 \%$ | $8.8544 \%$ |
| Interest | 122.66 | 1420.71 | 1313.84 |

(₹ in lakh)

| Particulars | Asset-D (iii) |  |
| :--- | ---: | ---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ <br> (pro-rata) | $\mathbf{2 0 1 3 - 1 4}$ |
| Gross Normative Loan | 3125.11 | 3163.72 |
| Cumulative Repayment upto <br> Previous Year | 0.00 | 118.19 |
| Net Loan-Opening | 3125.11 | 3045.52 |
| Addition due to Additional <br> capitalisation | 38.61 | 189.40 |
| Repayment during the year | 118.19 | 244.93 |


| Net Loan-Closing | 3045.32 | 2989.99 |
| :--- | ---: | ---: |
| Average Loan | 3085.32 | 3017.76 |
| Weighted Average Rate of <br> Interest on Loan | $9.0898 \%$ | $9.1302 \%$ |
|  | 140.22 | 275.53 |


|  | (₹ in lakh) |  |
| :--- | ---: | ---: |
| Particulars | Asset-E |  |
|  | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Gross Normative Loan | 17148.26 | 18087.76 |
| Cumulative Repayment upto <br> Previous Year | 0.00 | 1322.98 |
| Net Loan-Opening | 17148.26 | 16764.77 |
| Addition due to Additional <br> capitalisation | 939.50 | 342.57 |
| Repayment during the year | 1322.98 | 1370.86 |
| Net Loan-Closing | 16764.77 | 15736.48 |
| Average Loan | 16956.52 | 16250.63 |
| Weighted Average Rate of <br> Interest on Loan | $8.9433 \%$ | $8.9865 \%$ |
| Interest | 1516.47 | 1460.36 |

(₹ in lakh)

| Particulars | Asset-F (i) |  |  |  |  |
| :--- | ---: | ---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ <br> (pro-rata) | $\mathbf{2 0 1 3 - 1 4}$ |  |  |  |
| Gross Normative Loan | 25503.09 | 25503.09 |  |  |  |
| Cumulative Repayment upto <br> Previous Year | 0.00 | 320.15 |  |  |  |
| Net Loan-Opening | 25503.09 | 25182.94 |  |  |  |
| Addition due to Additional <br> capitalisation | 0.00 | 0.00 |  |  |  |
| Repayment during the year | 320.15 | 1920.92 |  |  |  |
| Net Loan-Closing | 25182.94 | 23262.02 |  |  |  |
| Average Loan | 25343.02 | 24222.48 |  |  |  |
| Weighted Average Rate of <br> Interest on Loan | $8.9259 \%$ | $8.9263 \%$ |  |  |  |
| Interest |  |  |  | 377.01 | 2162.18 |

(₹ in lakh)

| Particulars | Asset-F (ii) |  |
| :--- | ---: | ---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ <br> (pro-rata) | $\mathbf{2 0 1 3 - 1 4}$ |
| Gross Normative Loan | 1919.09 | 2152.89 |
| Cumulative Repayment upto <br> Previous Year | 0.00 | 70.23 |
| Net Loan-Opening | 1919.09 | 2082.66 |
| Addition due to Additional | 233.80 | 330.20 |


| Capitalisation |  |  |
| :--- | ---: | ---: |
| Repayment during the year | 70.23 | 160.67 |
| Net Loan-Closing | 2082.66 | 2252.18 |
| Average Loan | 2000.87 | 2167.42 |
| Weighted Average Rate of <br> Interest on Loan | $9.0688 \%$ | $9.1714 \%$ |
|  | Interest | 90.73 |


| (₹ in lakh) |  |  |
| :---: | :---: | :---: |
| Particulars | Asset-G |  |
|  | $\begin{gathered} \text { 2012-13 } \\ \text { (pro-rata) } \\ \hline \end{gathered}$ | 2013-14 |
| Gross Normative Loan | 2180.70 | 2644.14 |
| Cumulative Repayment upto Previous Year | 0.00 | 146.21 |
| Net Loan-Opening | 2180.70 | 2497.93 |
| Addition due to Additional capitalisation | 463.44 | 234.82 |
| Repayment during the year | 146.21 | 201.31 |
| Net Loan-Closing | 2497.93 | 2531.44 |
| Average Loan | 2339.32 | 2514.69 |
| Weighted Average Rate of Interest on Loan | 9.0036\% | 9.0871\% |
| Interest | 175.52 | 228.51 |

(₹ in lakh)

| Particulars |  | Asset-H |  |  |  |
| :--- | ---: | ---: | :---: | :---: | :---: |
|  | 2012-13 | $\mathbf{2 0 1 3 - 1 4}$ |  |  |  |
| Gross Normative Loan | 2686.12 | 3079.20 |  |  |  |
| Cumulative Repayment upto <br> Previous Year | 0.00 | 210.19 |  |  |  |
| Net Loan-Opening | 2686.12 | 2869.01 |  |  |  |
| Addition due to Additional <br> capitalisation | 393.08 | 165.30 |  |  |  |
| Repayment during the year | 210.19 | 230.77 |  |  |  |
| Net Loan-Closing | 2869.01 | 2803.54 |  |  |  |
| Average Loan |  |  |  |  |  |
| Weighted Average Rate of <br> Interest on Loan | $8.9295 \%$ | $9.0006 \%$ |  |  |  |
| Interest |  |  |  | 248.02 | 255.28 |


| Particulars |  | (₹ in lakh) |  |  |
| :--- | ---: | ---: | ---: | :---: |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | 2013-14 |  |
| Gross Normative Loan | 844.33 | 937.23 | 1008.87 |  |
| Cumulative Repayment upto Previous <br> Year | 0.00 | 5.07 | 71.97 |  |


| Net Loan-Opening | 844.33 | 932.17 | 936.90 |
| :--- | ---: | ---: | ---: |
| Addition due to Additional capitalisation | 92.90 | 71.63 | 102.00 |
| Repayment during the year | 5.07 | 66.90 | 72.97 |
| Net Loan-Closing | 932.17 | 936.90 | 965.92 |
| Average Loan | 888.25 | 934.53 | 951.41 |
| Weighted Average Rate of Interest on <br> Loan | $9.0733 \%$ | $9.0942 \%$ | $9.1604 \%$ |
| Interest | 6.72 | 84.99 | 87.15 |


| Particulars |  |  |  |
| :--- | ---: | ---: | ---: |
|  | (₹ in lakh) |  |  |
|  | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Gross Normative Loan | 768.17 | 923.86 | 991.92 |
| Cumulative Repayment upto <br> Previous Year | 0.00 | 9.57 | 75.33 |
| Net Loan-Opening | 768.17 | 914.29 | 916.59 |
| Addition due to Additional <br> capitalisation | 155.69 | 68.05 | 105.57 |
| Repayment during the year | 9.57 | 65.76 | 71.83 |
| Net Loan-Closing | 914.29 | 916.59 | 950.32 |
| Average Loan | 841.23 | 915.44 | 933.45 |
| Weighted Average Rate of Interest <br> on Loan | $9.1284 \%$ | $9.1531 \%$ | $9.2175 \%$ |
| Interest | 12.80 | 83.79 | 86.04 |

(₹ in lakh)

| Particulars | Asset-K |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Gross Normative Loan | 1991.32 | 2148.10 | 2428.05 |
| Cumulative Repayment upto <br> Previous Year | 0.00 | 11.74 | 168.72 |
| Net Loan-Opening | 1991.32 | 2136.37 | 2259.33 |
| Addition due to Additional <br> capitalisation | 156.79 | 279.94 | 92.04 |
| Repayment during the year | 11.74 | 156.98 | 171.69 |
| Net Loan-Closing | 2136.37 | 2259.33 | 2179.69 |
| Average Loan | 2063.84 | 2197.85 | 2219.51 |
| Weighted Average Rate of Interest <br> on Loan | $9.2488 \%$ | $9.2544 \%$ | $9.2797 \%$ |
| Interest | 15.91 | 203.40 | 205.96 |

(₹ in lakh)

| Particulars | Asset-L |  |  |
| :--- | :---: | :---: | :---: |
|  | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Gross Normative Loan | 36045.04 | 36900.37 | 37376.22 |


| Cumulative Repayment upto <br> Previous Year | 0.00 | 228.67 | 3022.80 |
| :--- | ---: | ---: | ---: |
| Net Loan-Opening | 36045.04 | 36671.70 | 34353.42 |
| Addition due to Additional <br> capitalisation | 855.33 | 475.85 | 770.28 |
| Repayment during the year | 228.67 | 2794.13 | 2840.99 |
| Net Loan-Closing | 36671.70 | 34353.42 | 32282.71 |
| Average Loan | 36358.37 | 35512.56 | 33318.06 |
| Weighted Average Rate of Interest <br> on Loan | $9.2571 \%$ | $9.2561 \%$ | $9.2655 \%$ |
| Interest | 280.48 | 3287.07 | 3087.08 |

(₹ in lakh)

| Particulars | Asset-M |  |  |
| :--- | ---: | ---: | ---: |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Gross Normative Loan | 8700.19 | 8836.70 | 8861.31 |
| Cumulative Repayment upto <br> Previous Year | 0.00 | 54.96 | 720.55 |
| Net Loan-Opening | 8700.19 | 8781.73 | 8140.76 |
| Addition due to Additional <br> capitalisation | 136.51 | 24.61 | 488.45 |
| Repayment during the year | 54.96 | 665.59 | 684.79 |
| Net Loan-Closing | 8781.73 | 8140.76 | 7944.42 |
| Average Loan | 8740.96 | 8461.25 | 8042.59 |
| Weighted Average Rate of Interest <br> on Loan | $8.9587 \%$ | $8.9622 \%$ | $8.9982 \%$ |
| Interest | 65.26 | 758.31 | 723.69 |

( ${ }^{2}$ in lakh)

| Particulars | Asset-N |  |  |
| :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { 2011-12 } \\ \text { (pro-rata) } \end{gathered}$ | 2012-13 | 2013-14 |
| Gross Normative Loan | 8474.29 | 8668.89 | 8970.07 |
| Cumulative Repayment upto Previous Year | 0.00 | 52.53 | 701.29 |
| Net Loan-Opening | 8474.29 | 8616.36 | 8268.78 |
| Addition due to Additional capitalisation | 194.60 | 301.18 | 398.32 |
| Repayment during the year | 52.53 | 648.75 | 674.95 |
| Net Loan-Closing | 8616.36 | 8268.78 | 7992.15 |
| Average Loan | 8545.32 | 8442.57 | 8130.46 |
| Weighted Average Rate of Interest on Loan | 8.8655\% | 8.8772\% | 8.9138\% |
| Interest | 63.13 | 749.47 | 724.74 |

(₹ in lakh)

| Particulars | Asset-O |  |  |
| :--- | ---: | ---: | ---: |
|  | 2011-12 <br> (pro-rata) | 2012-13 | 2013-14 |
| Gross Normative Loan | 916.24 | 973.71 | 1180.99 |
| Cumulative Repayment upto <br> Previous Year | 0.00 | 11.81 | 92.67 |
| Net Loan-Opening to Additional | 916.24 | 961.90 | 1088.32 |
| Addition due <br> capitalisation | 57.47 | 207.28 | 196.36 |
| Repayment during the year | 11.81 | 80.86 | 96.49 |
| Net Loan-Closing | 961.90 | 1088.32 | 1188.20 |
| Average Loan | 939.07 | 1025.11 | 1138.26 |
| Weighted Average Rate of Interest <br> on Loan | $8.9014 \%$ | $8.9515 \%$ | $9.0835 \%$ |
| Interest | 13.93 | 91.76 | 103.39 |


| Particulars |  |  |  |  |  |
| :--- | ---: | ---: | ---: | :---: | :---: |
|  | 2011-12 <br> (pro-rata) | 2012-13 |  |  | 2013-14 |
| Gross Normative Loan | 788.38 | 817.43 | 824.25 |  |  |
| Cumulative Repayment upto Previous <br> Year | 0.00 | 9.90 | 70.68 |  |  |
| Net Loan-Opening | 788.38 | 807.52 | 753.57 |  |  |
| Addition due to Additional <br> capitalisation | 29.04 | 6.83 | 154.10 |  |  |
| Repayment during the year | 9.90 | 60.78 | 67.98 |  |  |
| Net Loan-Closing | 807.52 | 753.57 | 839.68 |  |  |
| Average Loan | 797.95 | 780.55 | 796.63 |  |  |
| Weighted Average Rate of Interest on <br> Loan | $8.8747 \%$ | $8.8847 \%$ | $9.0057 \%$ |  |  |
| Interest | 11.80 | 69.35 | 71.74 |  |  |

(₹ in lakh)

| Particulars | Asset-Q |  |  |
| :--- | ---: | ---: | ---: |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Gross Normative Loan | 113.06 | 141.48 | 341.94 |
| Cumulative Repayment upto Previous <br> Year | 0.00 | 0.77 | 18.61 |
| Net Loan-Opening | 113.06 | 140.71 | 323.33 |
| Addition due to Additional <br> capitalisation | 28.43 | 200.46 | 42.27 |
| Repayment during the year | 0.77 | 17.84 | 27.39 |
| Net Loan-Closing | 140.71 | 323.33 | 338.21 |
| Average Loan | 126.89 | 232.02 | 330.77 |
| Weighted Average Rate of Interest on <br> Loan | $8.9812 \%$ | $9.1318 \%$ | $9.2451 \%$ |


| Interest |  | 0.95 | 21.19 |
| :---: | :---: | :---: | :---: |
|  |  | (₹ in lakh) |  |
|  | Particulars | Asset-R |  |
|  |  | 2012-13 | 2013-14 |
|  | Gross Normative Loan | 476.23 | 476.23 |
|  | Cumulative Repayment upto Previous Year | 0.00 | 35.86 |
|  | Net Loan-Opening | 476.23 | 440.37 |
|  | Addition due to Additional capitalisation | 0.00 | 0.00 |
|  | Repayment during the year | 35.86 | 35.86 |
|  | Net Loan-Closing | 440.37 | 404.51 |
|  | Average Loan | 458.30 | 422.44 |
|  | Weighted Average Rate of Interest on Loan | 8.8979\% | 8.8984\% |
|  | Interest | 40.78 | 37.59 |

## Depreciation

35. Clause (42) of Regulation 3 of the 2009 Tariff Regulations defines useful life as under:-
"useful life' in relation to a unit of a generating station and transmission system from the COD shall mean the following, namely:-
(a) Coal/Lignite based thermal generating station 25 years
(b) Gas/Liquid fuel based thermal generating station

25 years
(c) AC and DC sub-station

25 years
(d) Hydro generating station

35 years
(e) Transmission line

35 years"
36. Clause (4) of Regulation 17 of the 2009 Tariff Regulations provides as under:-
"(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."
37. The instant assets have been put under commercial operation during 1.2.2013 and 1.2.2013 and they will complete 12 years of life after 31.3.2014. Accordingly,
depreciation has been calculated annually based on Straight Line Method and at rates specified in the 2009 Tariff Regulations. The depreciation for the tariff period 2009-14 has been trued up in accordance with Regulation 17 of the 2009 Tariff Regulations based on admitted capital expenditure as under:-

| Particulars |  | (₹ in lakh) |  |
| :--- | ---: | ---: | :---: |
|  | 2012-13 <br> (pro-rata) | 2013-14 |  |
| Opening Gross Block | 9677.59 | 10101.59 |  |
| Addition during 2009-14 due to <br> Projected Additional Capitalisation | 424.00 | 495.85 |  |
| Closing Gross Block | 10101.59 | 10597.44 |  |
| Average Gross Block | 9889.59 | 10349.52 |  |
| Rate of Depreciation | $5.1495 \%$ | $5.1508 \%$ |  |
| Depreciable Value | 8684.22 | 9097.91 |  |
| Remaining Depreciable Value | 8684.22 | 8673.52 |  |
| Depreciation | 424.39 | 533.08 |  |

( $₹$ in lakh)

| Particulars | Asset-B |  |
| :--- | ---: | ---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Gross Block | 9661.76 | 10202.90 |
| Addition during 2009-14 due to <br> Projected Additional Capitalisation | 541.14 | 608.30 |
| Closing Gross Block | 10202.90 | 10811.20 |
| Average Gross Block | 9932.33 | 10507.05 |
| Rate of Depreciation | $5.1502 \%$ | $5.1528 \%$ |
| Depreciable Value | 8722.68 | 9239.69 |
| Remaining Depreciable Value | 8722.68 | 8728.15 |
| Depreciation |  | 511.54 |


|  | (₹ in lakh) |  |
| :--- | ---: | ---: |
| Particulars | Asset-C |  |
|  | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Gross Block | 9647.59 | 10203.18 |
| Addition during 2009-14 due to <br> Projected Additional Capitalisation | 555.59 | 612.71 |
| Closing Gross Block | 10203.18 | 10815.89 |
| Average Gross Block | 9925.39 | 10509.54 |
| Rate of Depreciation | $5.1501 \%$ | $5.1528 \%$ |


| Depreciable Value | 8716.43 | 9241.92 |
| :--- | ---: | ---: |
| Remaining Depreciable Value | 8716.43 | 8730.75 |
| Depreciation | 511.17 | 541.54 |


| Particulars | (₹ in lakh) |  |  |
| :--- | ---: | ---: | ---: |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Gross Block | 11209.04 | 11290.61 | 11452.13 |
| Addition during 2009-14 due to <br> Projected Additional Capitalisation | 81.57 | 161.52 | 94.80 |
| Closing Gross Block | 11290.61 | 11452.13 | 11546.93 |
| Average Gross Block | 11249.82 | 11371.37 | 11499.53 |
| Rate of Depreciation | $5.2294 \%$ | $5.2299 \%$ | $5.2311 \%$ |
| Depreciable Value | 10023.41 | 10132.80 | 10249.39 |
| Remaining Depreciable Value | 10023.41 | 10034.75 | 9556.63 |
| Depreciation | 98.05 | 594.71 | 601.55 |

(₹ in lakh)

| Particulars | Asset-D (ii) |  |  |
| :--- | ---: | ---: | ---: |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ |  |
| 2013-14 |  |  |  |
| Opening Gross Block | 23735.30 | 23923.26 | 24031.68 |
| Addition during 2009-14 due to <br> Projected Additional Capitalisation | 187.96 | 108.42 | 63.64 |
| Closing Gross Block | 23923.26 | 24031.68 | 24095.32 |
| Average Gross Block | 23829.28 | 23977.47 | 24063.50 |
| Rate of Depreciation | $5.2798 \%$ | $5.2798 \%$ | $5.2800 \%$ |
| Depreciable Value | 21446.35 | 21579.73 | 21657.92 |
| Remaining Depreciable Value | 21446.35 | 21474.88 | 20287.11 |
| Depreciation | 104.85 | 1265.97 | 1270.55 |

(₹ in lakh)

| Particulars | Asset-D (iii) |  |
| :--- | ---: | ---: |
|  | 2012-13 <br> (pro-rata) | 2013-14 |
| Opening Gross Block | 4464.43 | 4519.58 |
| Addition during 2009-14 due to <br> Projected Additional Capitalisation | 55.15 | 270.57 |
| Closing Gross Block | 4519.58 | 4790.15 |
| Average Gross Block | 4492.01 | 4654.87 |
| Rate of Depreciation | $5.2623 \%$ | $5.2618 \%$ |
| Depreciable Value | 4042.80 | 4189.38 |
| Remaining Depreciable Value | 4042.80 | 4071.19 |
| Depreciation | 118.19 | 244.93 |

(₹ in lakh)

| Particulars | Asset-E |  |
| :--- | ---: | ---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Gross Block | $\mathbf{2 4 4 9 7 . 5 1}$ | 25839.65 |
| Addition during 2009-14 due to <br> Projected Additional Capitalisation | 1342.14 | 489.38 |
| Closing Gross Block | 25839.65 | 26329.03 |
| Average Gross Block | 25168.58 | 26084.34 |
| Rate of Depreciation | $5.2565 \%$ | $5.2555 \%$ |
| Depreciable Value | 22543.44 | 23367.38 |
| Remaining Depreciable Value | 22543.44 | 22044.40 |
| Depreciation |  | 1322.98 |

(₹ in lakh)

| Particulars | Asset-F (i) |  |
| :--- | ---: | ---: |
|  | (pro-rata) |  |
| $\mathbf{2 0 1 3 - 1 4}$ |  |  |
| Opening Gross Block | 36432.99 | 36432.99 |
| Addition during 2009-14 due to | 0.00 | 0.00 |
| Projected Additional Capitalisation |  |  |
| Closing Gross Block | 36432.99 | 36432.99 |
| Average Gross Block | 36432.99 | 36432.99 |
| Rate of Depreciation | $3.2725 \%$ | $5.2725 \%$ |
| Depreciable Value | 32789.69 | 32789.69 |
| Remaining Depreciable Value | 320.15 | 1920.54 |
| Depreciation | 329.92 |  |


| Particulars |  | (₹ in lakh) |  |
| :--- | ---: | ---: | :---: |
|  | 2012-13 <br> (pro-rata) |  |  |
| 2013-14 |  |  |  |
| Opening Gross Block | 2741.55 | 3075.55 |  |
| Addition during 2009-14 due to <br> Projected Additional Capitalisation | 334.00 | 471.72 |  |
| Closing Gross Block | 3075.55 | 3547.27 |  |
| Average Gross Block | 2908.55 | 3311.41 |  |
| Rate of Depreciation | $4.8295 \%$ | $4.8522 \%$ |  |
| Depreciable Value | 2400.72 | 2759.66 |  |
| Remaining Depreciable Value | 2400.72 | 2689.43 |  |
| Depreciation | 70.23 | 160.67 |  |

(₹ in lakh)

| Particulars | Asset-G |  |
| :--- | ---: | ---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ <br> (pro-rata) | 2013-14 |
| Opening Gross Block | 3115.28 | 3777.34 |
| Addition during 2009-14 due to <br> Projected Additional Capitalisation | 662.06 | 335.45 |
| Closing Gross Block | 3777.34 | 4112.79 |
| Average Gross Block | 3446.31 | 3945.07 |
| Rate of Depreciation | $5.0909 \%$ | $5.1027 \%$ |


| Depreciable Value | 2993.40 | 3442.04 |
| ---: | ---: | ---: |
| Remaining Depreciable Value | 2993.40 | 3295.83 |
| Depreciation | 146.21 | 201.31 |


|  | (₹ in lakh) |  |
| :--- | ---: | ---: |
| Particulars | Asset-H |  |
|  | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Gross Block | 3837.31 | 4398.85 |
| Addition during 2009-14 due to | 561.54 | 236.14 |
| Projected Additional Capitalisation | 4398.85 | 4634.99 |
| Closing Gross Block | 4118.08 | 4516.92 |
| Average Gross Block | $5.1040 \%$ | $5.1090 \%$ |
| Rate of Depreciation | 3584.94 | 3943.66 |
| Depreciable Value | 3584.94 | 3733.47 |
| Remaining Depreciable Value | 210.19 | 230.77 |
| Depreciation |  |  |


| Particulars |  |  |  |  | (₹ in lakh) |  |  |
| :--- | ---: | ---: | ---: | :---: | :---: | :---: | :---: |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |  |  |  |  |
| Opening Gross Block | 1206.18 | 1338.90 | 1441.23 |  |  |  |  |
| Addition during 2009-14 due to <br> Projected Additional Capitalisation | 132.72 | 102.33 | 145.71 |  |  |  |  |
| Closing Gross Block | 1338.90 | 1441.23 | 1586.94 |  |  |  |  |
| Average Gross Block | 1272.54 | 1390.07 | 1514.09 |  |  |  |  |
| Rate of Depreciation | $4.7784 \%$ | $4.8129 \%$ | $4.8197 \%$ |  |  |  |  |
| Depreciable Value | 1037.14 | 1142.78 | 1254.15 |  |  |  |  |
| Remaining Depreciable Value | 1037.14 | 1137.71 | 1182.18 |  |  |  |  |
| Depreciation | 5.07 | 66.90 | 72.97 |  |  |  |  |


| Particulars | (₹ in lakh) |  |  |
| :--- | ---: | ---: | ---: |
|  | Asset-J <br> (pro-rata) |  |  |


| (₹ in lakh) |  |  |  |
| :--- | :--- | :--- | :--- |
|  | Particulars | 2011-12 | 2012-13 |
|  | 2013-14 |  |  |


|  | (pro-rata) |  |  |
| :--- | ---: | ---: | ---: |
| Opening Gross Block | 2844.74 | 3068.72 | 3468.64 |
| Addition during 2009-14 due to <br> Projected Additional Capitalisation | 223.98 | 399.92 | 131.49 |
| Closing Gross Block | 3068.72 | 3468.64 | 3600.13 |
| Average Gross Block | 2956.73 | 3268.68 | 3534.38 |
| Rate of Depreciation | $4.7631 \%$ | $4.8026 \%$ | $4.8576 \%$ |
| Depreciable Value | 2514.78 | 2793.01 | 3047.27 |
| Remaining Depreciable Value | 2514.78 | 2781.28 | 2878.55 |
| Depreciation | 11.74 | 156.98 | 171.69 |


| Particulars | (₹ in lakh) |  |  |
| :--- | ---: | ---: | ---: |
|  | 2011-12 <br> (pro-rata) | 2012-13 | 2013-14 |
| Opening Gross Block | 51492.92 | 52714.82 | 53394.60 |
| Addition during 2009-14 due to <br> Projected Additional Capitalisation | 1221.90 | 679.78 | 1100.40 |
| Closing Gross Block | 52714.82 | 53394.60 | 54495.00 |
| Average Gross Block | 52103.87 | 53054.71 | 53944.80 |
| Rate of Depreciation | $5.2665 \%$ | $5.2665 \%$ | $5.2665 \%$ |
| Depreciable Value | 46820.35 | 47674.85 | 48475.93 |
| Remaining Depreciable Value | 46820.35 | 47446.17 | 45453.12 |
| Depreciation |  |  |  |
| 228.67 |  |  |  |


| Particulars | Asset-M |  |  |
| :--- | ---: | ---: | ---: |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Gross Block | 12428.84 | 12623.85 | 12659.01 |
| Addition during 2009-14 due to <br> Projected Additional Capitalisation | 195.01 | 35.16 | 697.79 |
| Closing Gross Block | 12623.85 | 12659.01 | 13356.80 |
| Average Gross Block | 12526.35 | 12641.43 | 13007.91 |
| Rate of Depreciation | $5.2653 \%$ | $5.2651 \%$ | $5.2644 \%$ |
| Depreciable Value | 11273.71 | 11377.29 | 11707.11 |
| Remaining Depreciable Value | 11273.71 | 11322.32 | 10986.56 |
| Depreciation | 54.96 | 665.59 | 684.79 |


| (₹ in lakh) |  |  |  |
| :--- | ---: | ---: | ---: |
|  | Asset-N |  |  |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Opening Gross Block | 12106.13 | 12384.13 | 12814.38 |
| Addition during 2009-14 due to <br> Projected Additional Capitalisation | 278.00 | 430.25 | 569.03 |
| Closing Gross Block | 12384.13 | 12814.38 | 13383.41 |
| Average Gross Block | 12245.13 | 12599.26 | 13098.90 |
| Rate of Depreciation | $5.1482 \%$ | $5.1491 \%$ | $5.1527 \%$ |

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| Depreciable Value | 10874.34 | 11190.53 | 11640.21 |
| :--- | ---: | ---: | ---: |
| Remaining Depreciable Value | 10874.34 | 11138.00 | 10938.92 |
| Depreciation | 52.53 | 648.75 | 674.95 |


|  | (₹ in lakh) |  |  |
| :---: | :---: | :---: | :---: |
| Particulars | Asset-O |  |  |
|  | 2011-12 <br> (pro-rata) | 2012-13 | 2013-14 |
| Opening Gross Block | 1308.91 | 1391.01 | 1687.13 |
| Addition during 2009-14 due to Projected Additional Capitalisation | 82.10 | 296.12 | 280.52 |
| Closing Gross Block | 1391.01 | 1687.13 | 1967.65 |
| Average Gross Block | 1349.96 | 1539.07 | 1827.39 |
| Rate of Depreciation | 5.2501\% | 5.2538\% | 5.2800\% |
| Depreciable Value | 1214.97 | 1385.17 | 1651.57 |
| Remaining Depreciable Value | 1214.97 | 1373.35 | 1558.90 |
| Depreciation | 11.81 | 80.86 | 96.49 |


| (₹ in lakh) |  |  |  |  |
| :--- | ---: | ---: | ---: | :---: |
| Particulars | Asset-P |  |  |  |
|  | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |  |
|  | 1126.26 | 1167.75 | 1177.50 |  |
| Addition during 2009-14 due to <br> Projected Additional Capitalisation | 41.49 | 9.75 | 220.14 |  |
| Closing Gross Block | 1167.75 | 1177.50 | 1397.64 |  |
| Average Gross Block | 1147.01 | 1172.63 | 1287.57 |  |
| Rate of Depreciation | $5.1809 \%$ | $5.1830 \%$ | $5.2800 \%$ |  |
| Depreciable Value | 1032.31 | 1055.36 | 1178.56 |  |
| Remaining Depreciable Value | 1032.31 | 1045.46 | 1107.88 |  |
| Depreciation | 9.90 | 60.78 | 67.98 |  |


|  |  |  | (₹ in lakh) |
| :---: | :---: | :---: | :---: |
| Particulars | Asset-Q |  |  |
|  | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| Opening Gross Block | 161.50 | 202.11 | 488.48 |
| Addition during 2009-14 due to Projected Additional Capitalisation | 40.61 | 286.37 | 60.38 |
| Closing Gross Block | 202.11 | 488.48 | 548.86 |
| Average Gross Block | 181.81 | 345.30 | 518.67 |
| Rate of Depreciation | 5.0695\% | 5.1670\% | 5.2800\% |
| Depreciable Value | 163.63 | 310.77 | 473.60 |
| Remaining Depreciable Value | 163.63 | 310.00 | 454.99 |
| Depreciation | 0.77 | 17.84 | 27.39 |
| (₹ in lakh) |  |  |  |
| Particulars |  | Asset-R |  |


|  | 2012-13 | $\mathbf{2 0 1 3 - 1 4}$ |
| :--- | ---: | ---: |
| Opening Gross Block | 680.33 | 680.33 |
| Addition during 2009-14 due to <br> Projected Additional Capitalisation | 0.00 | 0.00 |
| Closing Gross Block | 680.33 | 680.33 |
| Average Gross Block | 680.33 | 680.33 |
| Rate of Depreciation | $5.2712 \%$ | $5.2712 \%$ |
| Depreciable Value | 612.30 | 612.30 |
| Remaining Depreciable Value | 612.30 | 576.43 |
| Depreciation | 35.86 | 35.86 |

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

38. The $O$ \& $M$ Expenses allowed for the instant assets in order dated 3.2.2015 in Petition No. 87/TT/2012 read with order dated 11.5.2015 in Suo-motu review of order dated 3.2.2015 in Petition No. 87/TT/2012 and order dated 16.3.2015 in Petition No.187/TT/2011 has been considered.

## Interest on Working Capital (IWC)

39. Sub-clause (c) of clause (1) of Regulation 18 of the 2009 Tariff Regulations provides the components of the working capital for the transmission system and clause (3) of Regulation 18 of the 2009 Tariff Regulations provides for the rate of interest of working capital.

## (i) Maintenance Expenses

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

## (ii) O \& M expenses:

Regulation 18(1) (c) (iii) of the 2009 Tariff Regulations provides for operation and maintenance expenses for one month as a component of working capital. The petitioner has claimed O\&M expenses for 1 month of the respective year as claimed in the petition. This has been considered in the working capital.

## (iii) Receivables:

The receivables have been worked out on the basis of 2 months' of annual transmission charges as worked out above.

## (iv) Rate of interest on working capital:

As provided under Regulation 18(3) of the 2009 Tariff Regulations, SBI Base rate plus 350 BPS have been considered as the rate of interest on working capital.
40. The IWC trued up is as under:-

|  | (₹ in lakh) |  |
| :--- | ---: | ---: |
| Particulars | Asset-A |  |
|  | 2012-13 <br> (pro-rata) | $\mathbf{2 0 1 3 - 1 4}$ |
| Maintenance Spares | 22.29 | 23.57 |
| O \& M expenses | 12.38 | 13.09 |
| Receivables | 314.45 | 323.79 |
| Total | $\mathbf{3 4 9 . 1 2}$ | $\mathbf{3 6 0 . 4 4}$ |
| Interest | 39.28 | 48.66 |

(₹ in lakh)

| Particulars | Asset-B |  |
| :--- | ---: | ---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Maintenance Spares | 22.29 | 23.57 |
| O \& M expenses | 12.38 | 13.09 |
| Receivables | 315.28 | 327.40 |
| Total | 349.95 | 364.05 |
| Interest | $\mathbf{4 7 . 2 4}$ | $\mathbf{4 9 . 1 5}$ |

(₹ in lakh)

| Particulars | Asset-C |
| :--- | :--- |


|  | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| :--- | ---: | ---: |
| Maintenance Spares | 22.29 | 23.57 |
| O \& M expenses | 12.38 | 13.09 |
| Receivables | 314.82 | 327.26 |
| Total | 349.50 | 363.92 |
| Interest | $\mathbf{4 7 . 1 8}$ | $\mathbf{4 9 . 1 3}$ |


|  |  | (₹ in lakh) |  |  |
| :--- | ---: | ---: | ---: | :---: |
| Particulars | Asset-D (i) |  |  |  |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | 2013-14 |  |
| Maintenance Spares | 15.02 | 15.89 | 16.79 |  |
| O \& M expenses | 8.35 | 8.83 | 9.33 |  |
| Receivables | 346.44 | 345.87 | 343.17 |  |
| Total | 369.81 | 370.59 | 369.29 |  |
| Interest | 7.24 | 43.54 | 43.39 |  |

(₹ in lakh)

| Particulars | Asset-D (ii) |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Maintenance Spares | 14.29 | 15.12 | 15.98 |
| O \& M expenses | 7.94 | 8.40 | 8.88 |
| Receivables | 716.22 | 711.28 | 698.60 |
| Total | 738.46 | 734.80 | 723.46 |
| Interest | 7.23 | 86.34 | 85.01 |

(₹ in lakh)

| Particulars | Asset-D (iii) |  |
| :--- | ---: | ---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ <br> (pro-rata) | $\mathbf{2 0 1 3 - 1 4}$ |
| Maintenance Spares | 26.00 | 27.49 |
| O \& M expenses | 14.45 | 15.27 |
| Receivables | 163.13 | 167.66 |
| Total | $\mathbf{2 0 3 . 5 8}$ | $\mathbf{2 1 0 . 4 3}$ |
| Interest | 13.74 | 28.41 |

( ${ }^{2}$ in lakh)

| Particulars | Asset-E |  |
| :--- | ---: | ---: |
|  | 2012-13 | 2013-14 |
| Maintenance Spares | 40.08 | 42.37 |
| O \& M expenses | 22.27 | 23.54 |
| Receivables | 780.59 | 794.05 |
| Total | $\mathbf{8 4 2 . 9 4}$ | $\mathbf{8 5 9 . 9 6}$ |
| Interest | 113.80 | 116.09 |

( $\mathcal{F}^{\text {in lakh }}$ )

| Particulars | Asset-F (i) |  |
| :--- | ---: | ---: |
|  | 2012-13 <br> (pro-rata) | $\mathbf{2 0 1 3 - 1 4}$ |
| Maintenance Spares | 34.83 | 36.81 |
| O \& M expenses | 19.35 | 20.45 |
| Receivables | 1115.16 | 1104.78 |
| Total | 1169.34 | 1162.04 |
| Interest | $\mathbf{2 6 . 3 1}$ | $\mathbf{1 5 6 . 8 7}$ |

(₹ in lakh)

| Particulars | Asset-F (ii) |  |
| :--- | ---: | ---: |
|  | 2012-13 <br> (pro-rata) | $\mathbf{2 0 1 3 - 1 4}$ |
| Maintenance Spares | 37.15 | 39.28 |
| O \& M expenses | 20.64 | 21.82 |
| Receivables | 127.28 | 140.55 |
| Total | $\mathbf{1 8 5 . 0 7}$ | $\mathbf{2 0 1 . 6 5}$ |
| Interest | 12.49 | 27.22 |

(₹ in lakh)

| Particulars | Asset-G |  |
| :--- | ---: | ---: |
|  | 2012-13 <br> (pro-rata) | $\mathbf{2 0 1 3 - 1 4}$ |
| Maintenance Spares | 13.00 | 13.75 |
| O \& M expenses | 7.22 | 7.64 |
| Receivables | 115.23 | 128.97 |
| Total | $\mathbf{1 3 5 . 4 5}$ | $\mathbf{1 5 0 . 3 6}$ |
| Interest | 15.24 | 20.30 |

(₹ in lakh)

| Particulars | Asset-H |  |
| :--- | ---: | ---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Maintenance Spares | 13.00 | 13.75 |
| O \& M expenses | 7.22 | 7.64 |
| Receivables | 134.19 | 144.30 |
| Total | $\mathbf{1 5 4 . 4 1}$ | $\mathbf{1 6 5 . 6 8}$ |
| Interest | 20.85 | 22.37 |

(₹ in lakh)

| Particulars | Asset-I |  |  |
| :--- | ---: | ---: | ---: |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | 2013-14 |
| Maintenance Spares | 8.78 | 9.29 | 9.82 |
| O \& M expenses | 4.88 | 5.16 | 5.46 |
| Receivables | 46.84 | 50.37 | 53.80 |
| Total | $\mathbf{6 0 . 5 0}$ | $\mathbf{6 4 . 8 2}$ | $\mathbf{6 9 . 0 7}$ |
| Interest | 0.59 | 7.62 | 8.12 |


| Particulars | (₹ in lakh) |  |  |
| :--- | ---: | ---: | ---: |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Maintenance Spares | 8.78 | 9.29 | 9.82 |
| O \& M expenses | 4.88 | 5.16 | 5.46 |
| Receivables | 44.89 | 49.76 | 53.20 |
| Total | 58.65 | $\mathbf{6 4 . 2 1}$ | $\mathbf{6 8 . 4 7}$ |
| Interest | 1.15 | 7.54 | 8.05 |


| Particulars | Asset-K |  |  |
| :--- | ---: | ---: | ---: |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Maintenance Spares | 35.59 | 37.63 | 39.78 |
| O \& M expenses | 19.77 | 20.91 | 22.10 |
| Receivables | 127.04 | 137.38 | 145.86 |
| Total | $\mathbf{1 8 2 . 4 0}$ | $\mathbf{1 9 5 . 9 1}$ | $\mathbf{2 0 7 . 7 4}$ |
| Interest | 1.79 | 23.02 | 24.41 |


|  | (₹ in lakh) |  |  |
| :---: | :---: | :---: | :---: |
| Particulars | Asset-L |  |  |
|  | 2011-12 <br> (pro-rata) | 2012-13 | 2013-14 |
| Maintenance Spares | 77.90 | 82.38 | 87.08 |
| O \& M expenses | 43.28 | 45.77 | 48.38 |
| Receivables | 1644.24 | 1653.99 | 1648.64 |
| Total | 1765.42 | 1782.14 | 1784.10 |
| Interest | 17.29 | 209.40 | 209.63 |


| Particulars |  | (₹ in lakh) |  |  |
| :--- | ---: | ---: | ---: | :---: |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |  |
| Maintenance Spares | 21.08 | 22.29 | 23.57 |  |
| O \& M expenses | 11.71 | 12.38 | 13.09 |  |
| Receivables | 393.57 | 392.93 | 396.96 |  |
| Total | $\mathbf{4 2 6 . 3 6}$ | $\mathbf{4 2 7 . 6 1}$ | $\mathbf{4 3 3 . 6 2}$ |  |
| Interest | 4.17 | 50.24 | 50.95 |  |


| Particulars |  |  | (₹ in lakh) |  |  |
| :--- | ---: | ---: | ---: | :---: | :---: |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |  |  |
| Maintenance Spares | 21.08 | 22.29 | 23.57 |  |  |
| O \& M expenses | 11.71 | 12.38 | 13.09 |  |  |
| Receivables | 381.50 | 388.15 | 396.38 |  |  |
| Total | $\mathbf{4 1 4 . 2 9}$ | $\mathbf{4 2 2 . 8 2}$ | $\mathbf{4 3 3 . 0 4}$ |  |  |


| Interest | 4.06 | 49.68 | 50.88 |
| :--- | ---: | ---: | ---: |


| Particulars | Asset-O |  |  |
| :--- | ---: | ---: | ---: |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Maintenance Spares | 17.57 | 18.58 | 19.64 |
| O \& M expenses | 9.76 | 10.32 | 10.91 |
| Receivables | 60.05 | 66.18 | 75.12 |
| Total | $\mathbf{8 7 . 3 8}$ | $\mathbf{9 5 . 0 8}$ | $\mathbf{1 0 5 . 6 7}$ |
| Interest | 1.71 | 11.17 | 12.42 |


| Particulars | Asset-P |  |  |
| :--- | ---: | ---: | ---: |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Maintenance Spares | 8.78 | 9.29 | 9.82 |
| O \& M expenses | 4.88 | 5.16 | 5.46 |
| Receivables | 43.70 | 44.52 | 48.06 |
| Total | $\mathbf{5 7 . 3 7}$ | $\mathbf{5 8 . 9 7}$ | $\mathbf{6 3 . 3 4}$ |
| Interest | 1.12 | 6.93 | 7.44 |

(₹ in lakh)

| Particulars | Asset-Q |  |  |
| :--- | ---: | ---: | ---: |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | 2013-14 |
| Maintenance Spares | 8.78 | 9.29 | 9.82 |
| O \& M expenses | 4.88 | 5.16 | 5.46 |
| Receivables | 15.53 | 20.86 | 26.47 |
| Total | $\mathbf{2 9 . 1 9}$ | $\mathbf{3 5 . 3 1}$ | $\mathbf{4 1 . 7 5}$ |
| Interest | 0.29 | 4.15 | 4.91 |

(₹ in lakh)

| Particulars | Asset-R |  |
| :--- | ---: | ---: |
|  | 2012-13 | 2013-14 |
| Maintenance Spares | 18.58 | 19.64 |
| O \& M expenses | 10.32 | 10.91 |
| Receivables | 41.59 | 42.37 |
| Total | $\mathbf{7 0 . 4 9}$ | $\mathbf{7 2 . 9 2}$ |
| Interest | 9.52 | 9.84 |

## Annual Transmission charges

41. In view of above, the trued up annual transmission charges of the instant assets for the 2009-14 tariff period are as under:-

| Particulars |  |  |  | Asset-A |  | Asset-B |  | (₹ in lakh) |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ <br> (pro-rata) | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |  |  |  |
| Depreciation | 424.39 | 533.08 | 511.54 | 541.41 | 511.17 | 541.54 |  |  |  |
| Interest on Loan | 505.66 | 595.02 | 606.90 | 598.60 | 605.01 | 597.52 |  |  |  |
| Return on Equity | 479.08 | 608.86 | 577.38 | 618.13 | 576.97 | 618.28 |  |  |  |
| Interest on Working <br> Capital | 39.28 | 48.66 | 47.24 | 49.15 | 47.18 | 49.13 |  |  |  |
| O \& Expenses | 123.83 | 157.10 | 148.60 | 157.10 | 148.60 | 157.10 |  |  |  |
| Total | $\mathbf{1 5 7 2 . 2 3}$ | $\mathbf{1 9 4 2 . 7 3}$ | $\mathbf{1 8 9 1 . 6 6}$ | $\mathbf{1 9 6 4 . 3 8}$ | $\mathbf{1 8 8 8 . 9 3}$ | $\mathbf{1 9 6 3 . 5 6}$ |  |  |  |


| Particulars |  |  |  |  |  |  |  | Asset-D(i) |  |  | (₹ in lakh) |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |  |  |  |  |  |  |  |
| Depreciation | 98.05 | 594.71 | 601.55 | 104.85 | 1265.97 | 1270.55 |  |  |  |  |  |  |  |
| Interest on Loan | 115.47 | 670.02 | 625.61 | 122.66 | 1420.71 | 1313.84 |  |  |  |  |  |  |  |
| Return on Equity | 108.99 | 661.03 | 676.52 | 115.44 | 1393.83 | 1415.66 |  |  |  |  |  |  |  |
| Interest on Working <br> Capital | 7.24 | 43.54 | 43.39 | 7.23 | 86.34 | 85.01 |  |  |  |  |  |  |  |
| O \& M Expenses | 16.69 | 105.93 | 111.96 | 7.94 | 100.82 | 106.53 |  |  |  |  |  |  |  |
| Total | $\mathbf{3 4 6 . 4 4}$ | $\mathbf{2 0 7 5 . 2 4}$ | $\mathbf{2 0 5 9 . 0 2}$ | $\mathbf{3 5 8 . 1 1}$ | $\mathbf{4 2 6 7 . 6 7}$ | $\mathbf{4 1 9 1 . 5 9}$ |  |  |  |  |  |  |  |

(₹ in lakh)

| Particulars | Asset-D(iii) |  | Asset-E |  | Asset-F(i) |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 2 - 1 3}$ <br> (pro-rata) | $\mathbf{2 0 1 3 - 1 4}$ |
| Depreciation | 118.19 | 244.93 | 1322.98 | 1370.86 | 320.15 | 1920.92 |
| Interest on Loan | 140.22 | 275.53 | 1516.47 | 1460.36 | 377.01 | 2162.18 |
| Return on Equity | 130.56 | 273.84 | 1463.07 | 1534.54 | 352.98 | 2143.35 |
| Interest on Working <br> Capital | 13.74 | 28.41 | 113.80 | 116.09 | 26.31 | 156.87 |
| O \& M Expenses | 86.68 | 183.28 | 267.22 | 282.46 | 38.70 | 245.37 |
| Total | $\mathbf{4 8 9 . 4 0}$ | $\mathbf{1 0 0 5 . 9 9}$ | $\mathbf{4 6 8 3 . 5 4}$ | $\mathbf{4 7 6 4 . 3 1}$ | $\mathbf{1 1 1 5 . 1 6}$ | $\mathbf{6 6 2 8 . 7 0}$ |


| Particulars | Asset-F(ii) |  | Asset-G |  | Asset-H |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 2 - 1 3}$ <br> (pro-rata) | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 2 - 1 3}$ <br> (pro-rata) | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Depreciation | 70.23 | 160.67 | 146.21 | 201.31 | 210.19 | 230.77 |
| Interest on Loan | 90.73 | 198.78 | 175.52 | 228.51 | 248.02 | 255.28 |
| Return on Equity | 84.54 | 194.81 | 166.95 | 232.09 | 239.39 | 265.73 |
| Interest on Working <br> Capital | 12.49 | 27.22 | 15.24 | 20.30 | 20.85 | 22.37 |
| O \& M Expenses | 123.84 | 261.84 | 72.23 | 91.64 | 86.68 | 91.64 |
| Total | $\mathbf{3 8 1 . 8 3}$ | $\mathbf{8 4 3 . 3 3}$ | $\mathbf{5 7 6 . 1 4}$ | $\mathbf{7 7 3 . 8 4}$ | $\mathbf{8 0 5 . 1 2}$ | $\mathbf{8 6 5 . 7 9}$ |


| Particulars | Asset-I |  |  | Asset-J |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Depreciation | 5.07 | 66.90 | 72.97 | 9.57 | 65.76 | 71.83 |
| Interest on Loan | 6.72 | 84.99 | 87.15 | 12.80 | 83.79 | 86.04 |
| Return on Equity | 6.16 | 80.81 | 89.07 | 11.71 | 79.55 | 87.80 |
| Interest on Working <br> Capital | 0.59 | 7.62 | 8.12 | 1.15 | 7.54 | 8.05 |
| O \& M Expenses | 4.88 | 61.92 | 65.46 | 9.76 | 61.92 | 65.46 |
| Total | $\mathbf{2 3 . 4 2}$ | $\mathbf{3 0 2 . 2 3}$ | $\mathbf{3 2 2 . 7 7}$ | $\mathbf{4 4 . 9 9}$ | $\mathbf{2 9 8 . 5 6}$ | $\mathbf{3 1 9 . 1 8}$ |

(₹ in lakh)

| Particulars | Asset-K |  |  | Asset-L |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
|  | 11.74 | 156.98 | 171.69 | 228.67 | 2794.13 | 2840.99 |
| Interest on Loan | 15.91 | 203.40 | 205.96 | 280.48 | 3287.07 | 3087.08 |
| Return on Equity | 14.32 | 190.01 | 207.93 | 252.40 | 3084.12 | 3173.57 |
| Interest on Working <br> Capital | 1.79 | 23.02 | 24.41 | 17.29 | 209.40 | 209.63 |
| O \& M Expenses | 19.77 | 250.86 | 265.20 | 43.28 | 549.22 | 580.55 |
| Total | $\mathbf{6 3 . 5 2}$ | $\mathbf{8 2 4 . 2 7}$ | $\mathbf{8 7 5 . 1 9}$ | $\mathbf{8 2 2 . 1 2}$ | $\mathbf{9 9 2 3 . 9 5}$ | $\mathbf{9 8 9 1 . 8 2}$ |

(₹ in lakh)

| Particulars | Asset-M |  |  | Asset-N |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Depreciation | 54.96 | 665.59 | 684.79 | 52.53 | 648.75 | 674.95 |
| Interest on Loan | 65.26 | 758.31 | 723.69 | 63.13 | 749.47 | 724.74 |
| Return on Equity | 60.68 | 734.86 | 765.25 | 59.32 | 732.41 | 770.61 |
| Interest on Working <br> Capital | 4.17 | 50.24 | 50.95 | 4.06 | 49.68 | 50.88 |
| O \& M Expenses | 11.71 | 148.60 | 157.10 | 11.71 | 148.60 | 157.10 |
| Total | $\mathbf{1 9 6 . 7 8}$ | $\mathbf{2 3 5 7 . 6 0}$ | $\mathbf{2 3 8 1 . 7 9}$ | $\mathbf{1 9 0 . 7 5}$ | $\mathbf{2 3 2 8 . 9 1}$ | $\mathbf{2 3 7 8 . 2 8}$ |

(₹ in lakh)

| Particulars | Asset-O |  |  | Asset-P |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 1 - 1 2}$ <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Depreciation | 11.81 | 80.86 | 96.49 | 9.90 | 60.78 | 67.98 |
| Interest on Loan | 13.93 | 91.76 | 103.39 | 11.80 | 69.35 | 71.74 |
| Return on Equity | 13.08 | 89.47 | 107.51 | 11.11 | 68.17 | 75.75 |
| Interest on Working | 1.71 | 11.17 | 12.42 | 1.12 | 6.93 | 7.44 |
| Capital |  |  |  |  |  |  |
| O \& M Expenses | 19.52 | 123.84 | 130.92 | 9.76 | 61.92 | 65.46 |
| Total | $\mathbf{6 0 . 0 5}$ | $\mathbf{3 9 7 . 1 0}$ | $\mathbf{4 5 0 . 7 2}$ | $\mathbf{4 3 . 7 0}$ | $\mathbf{2 6 7 . 1 4}$ | $\mathbf{2 8 8 . 3 8}$ |

(₹ in lakh)

| Particulars | Asset-Q | Asset-R |
| :---: | :---: | :---: |
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|  | 2011-12 <br> (pro-rata) | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Depreciation | 0.77 | 17.84 | 27.39 | 35.86 | 35.86 |
| Interest on Loan | 0.95 | 21.19 | 30.58 | 40.78 | 37.59 |
| Return on Equity | 0.88 | 20.07 | 30.51 | 39.55 | 40.02 |
| Interest on Working <br> Capital | 0.29 | 4.15 | 4.91 | 9.52 | 9.84 |
| O \& M Expenses | 4.88 | 61.92 | 65.46 | 123.84 | 130.92 |
| Total | $\mathbf{7 . 7 6}$ | $\mathbf{1 2 5 . 1 7}$ | $\mathbf{1 5 8 . 8 4}$ | $\mathbf{2 4 9 . 5 4}$ | $\mathbf{2 5 4 . 2 4}$ |

## Determination of Annual Transmission Charges for 2014-19

42. The tariff for the instant assets for the 2009-14 period was earlier worked out based on the COD of individual assets irrespective of the fact whether the project as whole was completed or not. This resulted in award of multiple tariffs for the assets covered under the single project/transmission system. In this petition too, the 2009-14 period tariff has been formulated considering individual assets. Regulation 6 of the 2014 Tariff Regulations requires submitting single consolidated petition where all elements of a transmission system have been declared under commercial operation prior to 1.4.2014, so that single tariff can be granted for all the assets covered under the project. In order to determine a single transmission tariff, the concept of effective date of commercial operation and, weighted average life has been introduced under Regulation 27 of the 2014 Tariff Regulations.
43. The relevant portions of Regulation 6 and Regulation 27 of the 2014 Tariff Regulations are as follows:-

## "6. Tariff determination

(1) Tariff in respect of a generating station may be determined for the whole of the generating station or stage or generating unit or block thereof, and tariff in respect of a transmission system may be determined for the whole of the transmission system or
transmission line or sub-station or communication system forming part of transmission system:
Provided that:
(i) where all the generating units of a stage of a generating station or all elements of a transmission system have been declared under commercial operation prior to 1.4.2014, the generating company or the transmission licensee, as the case may be, shall file consolidated petition in respect of the entire generating station or transmissions system for the purpose of determination of tariff for the period 2014-15 to 2018-19:
Xxx
Xxx"

## "27. Depreciation:

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.
(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.
Xxx
Xxx"
(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.
Xxx
Xxx"
44. The instant petition pertains to the assets under Common Scheme for 765 kV Pooling Station and Network for NR, Import by NR from ER and Common Scheme for network for WR and Import by WR from ER and from NER/SR/WR via ER in Eastern and Northern Region. The tariff for the instant assets for 2009-14 period was allowed individually vide separate orders dated 3.2.2015 in Petition No. 87/TT/2012 read with order dated 11.5.2015 in Suo-motu review of order dated 3.2.2015 in Petition No. 87/TT/2012 and order dated 16.3.2015 in Petition No. 187/TT/2011. The tariff for the instant assets for period 2009-14 has been trued-up in the above paragraphs [i.e. separately for Asset-A to Asset-C, Asset-D(i) to Asset-D(iii), Asset-E, Asset-F(i), Asset-(ii) and Asset-G to Asset-R]. The petitioner has submitted that the whole project is completed. The petitioner further submitted the Tariff Forms, combining the present 21 assets into single asset. Accordingly, single tariff for the combined assets has been worked out for the tariff period 2014-19 by applying the concepts of effective date of commercial operation and weighted average life. Tariff has been approved as discussed in the following paragraphs.

## Effective Date of Commercial Operation (E-COD)

45. The Effective Date of Commercial Operation (E-COD) for the combined assets has been worked out based on the admitted capital cost of individual assets as on 31.3.2014 and the COD of individual assets. Accordingly, the E-COD for the combined assets has been worked out as 9.5.2012 as follows:-
(₹ in lakh)

| Asset No. | Actual <br> COD | Admitted <br> capital cost <br> as | Weight <br> of the <br> cost | No. of <br> days <br> from | Weighted <br> days | Effective <br> COD <br> (Latest COD - |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

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|  |  | 31.3.2014 |  | $\begin{aligned} & \text { last } \\ & \text { COD } \end{aligned}$ |  | Weighted days) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Asset-A | 1.6.2012 | 10597.44 | 4.41\% | 245 | 10.80 |  |
| Asset-B | 1.4.2012 | 10811.20 | 4.50\% | 306 | 13.77 |  |
| Asset-C | 1.4.2012 | 10815.89 | 4.50\% | 306 | 13.77 |  |
| Asset-Dii) | 1.2.2012 | 11546.93 | 4.81\% | 366 | 17.59 |  |
| Asset-D(ii) | 1.3.2012 | 24095.32 | 10.03\% | 337 | 33.79 |  |
| Asset-D(iii) | 1.10.2012 | 4790.15 | 1.99\% | 123 | 2.45 |  |
| Asset-E | 1.4.2012 | 26329.03 | 10.96\% | 306 | 33.53 |  |
| Asset-F(i) | 1.2.2013 | 36432.99 | 15.16\% | 0 | 0.00 |  |
| Asset-F(ii) | 1.10.2012 | 3547.27 | 1.48\% | 123 | 1.82 |  |
| Asset-G | 1.6.2012 | 4112.79 | 1.71\% | 245 | 4.19 |  |
| Asset-H | 1.4.2012 | 4634.99 | 1.93\% | 306 | 5.90 |  |
| Asset-I | 1.3.2012 | 1586.94 | 0.66\% | 337 | 2.23 |  |
| Asset-J | 1.2.2012 | 1567.83 | 0.65\% | 366 | 2.39 |  |
| Asset-K | 1.3.2012 | 3600.13 | 1.50\% | 337 | 5.05 |  |
| Asset-L | 1.3.2012 | 54495.00 | 22.68\% | 337 | 76.41 |  |
| Asset-M | 1.3.2012 | 13356.80 | 5.56\% | 337 | 18.73 |  |
| Asset-N | 1.3.2012 | 13383.41 | 5.57\% | 337 | 18.77 |  |
| Asset-0 | 1.2.2012 | 1967.65 | 0.82\% | 366 | 3.00 |  |
| Asset-P | 1.2.2012 | 1397.64 | 0.58\% | 366 | 2.13 |  |
| Asset-Q | 1.3.2012 | 548.86 | 0.23\% | 337 | 0.77 |  |
| Asset-R | 1.4.2012 | 680.33 | 0.28\% | 306 | 0.87 |  |
| Total |  | 240298.59 | 100.00\% |  | 267.97 | 9.5.2012 |

46. Thus, the E-COD has been used to determine the lapsed life for the combined assets as on 1.4.2014 as 1 year. (i.e. the number of completed years as on 1.4.2014 from E-COD).

## Weighted Average Life (WAL)

47. The combined assets may have multiple elements (i.e. Land, Building, Transmission line, Substation and PLCC) and each element may have different span of life. Therefore, in the 2014 Tariff Regulations the concept of WAL has been introduced which has been used as the useful life of the project as whole. The WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2014 and their respective life as stipulated in the 2014 Tariff Regulations. The
element wise life as it was defined in the 2014 Tariff Regulations prevailed at the time of COD of individual assets has been ignored for this purpose. The life as defined in the 2014 Tariff Regulations has been considered for determination of WAL. Accordingly, the WAL of the combined assets has been worked out as 31 years as under:-
(₹ in lakh)

| Determination of Weighted Average Life |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| Particulars | Admitted <br> capital cost <br> as on <br> 31.3.2014 for <br> combined <br> assets <br> (a) | Life as per the <br> 2014 Tariff <br> Regulations <br> (b) | Weight <br> (a) x (b) |  |
|  | 2115.43 |  |  |  |
| Freehold Land | 0.00 | 25 | 52885.75 |  |
| Leasehold Land | 1750.70 | 0 | 43767.62 |  |
| Building \& Other Civil Works | 141624.00 | 25 | 4956840.03 |  |
| Transmission Line | 94378.21 | 35 | 2359455.37 |  |
| Sub-Station Equipments | 430.24 | 25 | 10756.07 |  |
| PLCC | $\mathbf{2 4 0 2 9 8 . 5 9}$ |  | $\mathbf{2 5}$ |  |
| Total | 31 Years |  |  |  |
| Weighted Average life $=$ Total of <br> Weight / <br> Capital cost of project |  |  |  |  |

48. Further, it is assumed that, the WAL of the instant assets as on 1.4.2014 as determined above is applicable prospectively (i.e. for 2014-19 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. Accordingly, the WAL has been used to determine the remaining useful life as on 31.3.2014 as 30 years.
49. The petitioner has claimed the following AFC for the combined asset:-
(₹ in lakh)

| Particulars | $\mathbf{2 0 1 4 - 1 5}$ | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ | $\mathbf{2 0 1 8 - 1 9}$ |
| :---: | ---: | ---: | ---: | ---: | :---: |
| Depreciation | 12612.64 | 12734.36 | 12845.37 | 12894.88 | 12894.88 |


| Interest on Loan | 12667.71 | 11677.41 | 10659.04 | 9553.87 | 8385.19 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Return on Equity | 14213.65 | 14353.96 | 14480.69 | 14537.50 | 14537.50 |
| Interest on Working <br> Capital | 1088.00 | 1077.20 | 1065.34 | 1048.72 | 1028.35 |
| O\&M Expenses | 3238.93 | 3346.94 | 3457.50 | 3572.77 | 3691.06 |
|  | $\mathbf{4 3 8 2 0 . 9 3}$ | $\mathbf{4 3 1 8 9 . 8 7}$ | $\mathbf{4 2 5 0 7 . 9 4}$ | $\mathbf{4 1 6 0 7 . 7 4}$ | $\mathbf{4 0 5 3 6 . 9 8}$ |

50. Similarly, the petitioner has submitted details the following in support of its claim
for the combined asset:-
(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Maintenance Spares | 485.84 | 502.04 | 518.63 | 535.92 | 553.66 |
| O \& M Expenses | 269.91 | 278.91 | 288.13 | 297.73 | 307.59 |
| Receivables | 7303.49 | 7198.31 | 7084.66 | 6934.62 | 6756.16 |
| Total | 8059.24 | 7979.26 | 7891.42 | 7768.27 | 7617.41 |
| Rate of Interest | 13.50\% | 13.50\% | 13.50\% | 13.50\% | 13.50\% |
| Interest | 1088.00 | 1077.20 | 1065.34 | 1048.72 | 1028.35 |

## Capital Cost

51. Clause (1) and (3) of Regulation 9 of the 2014 Tariff Regulations provides as follows:-
"(1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects."
(2) The Capital Cost of a new project shall include the following:
(a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
(b) Interest during construction and financing charges, on the loans (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;
(c) Increase in cost in contract packages as approved by the Commission;
(d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;
(e) capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;
(f) expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;
(g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and
(h) adjustment of any revenue earned by the transmission licensee by using the assets before COD.
"(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."
52. The admitted gross capital cost and cumulative depreciation as on 31.3.2014 of individual assets are added to get the gross capital cost and cumulative depreciation as on 1.4.2014 for the combined assets. Lapsed life of the combined assets as on 1.4.2014 has been worked out on the basis of Effective COD and Weighted Average life as provided in Regulation 27 of 2014 Tariff Regulations.
53. The element wise capital cost (i.e. Land, Building, Transmission line, Substation and PLCC ) as admitted by the Commission as on 31.3.2014 for the instant assets are clubbed together and the combined capital costs has been considered as capital cost for combined assets as on 1.4.2014:-

## (₹ in lakh)

| Particulars | Combined Cost for the <br> Combined 21 Assets as on <br> 1.4.2014 |
| :--- | :--- |
| Freehold Land | 2115.43 |
| Leasehold Land | 0.00 |

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| Building \& Other Civil Works | 1750.70 |
| :--- | ---: |
| Transmission Line | 141624.00 |
| Sub-Station Equipments | 94378.21 |
| PLCC | 430.24 |
|  | Total |

54. The total element wise capital cost of the combined asset of $₹ 240298.59$ lakh has been considered as the admitted capital cost of the combined assets as on 1.4.2014. Further, vide respective assets' Auditor's Certificates the petitioner has submitted the projected additional capital expenditure during 2014-19 tariff period. The petitioner has claimed the add-cap as "balance and retention payment". The same is allowed under Regulation 14(1)(i) and 14(3)(vi) of the 2014 Tariff Regulations and considered for the purpose of tariff computation for the 2014-19 tariff period:-

|  |  |  |  | (₹ in lakh) |
| :---: | :---: | :---: | :---: | ---: |
| 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| 2392.39 | 2377.48 | 1931.12 | 0.00 | 0.00 |

## Debt: Equity Ratio

55. Clause 3 of Regulation 19 of the 2014 Tariff Regulations specifies as follows:-
"(3) In case of the generating station and the transmission 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."
56. The petitioner has considered debt:equity ratio of $70.00: 30.00$ as on 31.3 .2014 for the combined assets. The admitted debt:equity ratio of 70.00:30.00 after true-up for the tariff period ending 31.3.2014 has been considered as opening debt:equity ratio as on 1.4.2014. For additional capitalization, the petitioner has claimed normative debt:equity ratio of 70.00:30.00 and the same has been considered. The
details of the debt:equity as on 1.4.2014 considered for the purpose of determination
of tariff for the 2014-19 tariff period and as on 31.3.2019 are as follows:-
(₹ in lakh)

| Particulars | Ratio (\%) | As on 1.4.2014 | As on 31.3.2019 |
| :--- | ---: | ---: | ---: |
| Debt | 70.00 | 168209.05 | 172899.75 |
| Equity | 30.00 | 72089.54 | 74099.84 |
| Total | $\mathbf{1 0 0 . 0 0}$ | 240298.59 | 246999.58 |

## Return on Equity ("ROE")

57. Clause (1) and (2) of Regulation 24 and Clause (1) and (2) of Regulation 25 of
the 2014 Tariff Regulations specify as follows:-
" 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 and run of the river hydro generating station, and at the base rate of $16.50 \%$ for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

Provided that:
(i) in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 \% shall be allowed, if such projects are completed within the timeline specified in Appendix-I:
(ii) the additional return of $0.5 \%$ shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:
(iii) additional RoE of $0.50 \%$ may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:
(iv) the rate of return of a new project shall be reduced by $1 \%$ for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:
(v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by $1 \%$ for the period for which the deficiency continues:
(vi) additional RoE shall not be admissible for transmission line having length of less than 50 kilometers."

## "25. Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax income on other income stream (i.e., income of non generation or non transmission business, as the case may be) shall not be considered for the calculation of "effective tax rate".
"(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 $/(1-\mathrm{t})$
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 nongeneration 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."
58. The petitioner has submitted that RoE has been calculated at the rate of $19.610 \%$ after grossing up the RoE with MAT rate of $20.961 \%$ as per the above Regulations. The petitioner has further submitted that as per Regulation 25(3) of the 2014 Tariff Regulations, the grossed up RoE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial year. The petitioner has submitted that any under-recovery or over-recovery of grossed up RoE after truing up shall be recovered or refunded to the beneficiaries on year to year basis. The petitioner has further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of the tax including interest received from IT authorities

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shall be recoverable/adjustable after completion of income tax assessment of the financial year.
59. We have considered the submissions made by the petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the ROE determined is as given under:-
(₹ in lakh)

| Particulars | $\mathbf{2 0 1 4 - 1 5}$ | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ | $\mathbf{2 0 1 8 - 1 9}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Opening Equity | 72089.54 | $\mathbf{7 2 8 0 7 . 2 6}$ | $\mathbf{7 3 5 2 0 . 5 0}$ | $\mathbf{7 4 0 9 9 . 8 4}$ | $\mathbf{7 4 0 9 9 . 8 4}$ |
| Addition due to Additional <br> Capitalisation | 717.72 | 713.24 | 579.34 | 0.00 | 0.00 |
| Closing Equity | 72807.26 | 73520.50 | 74099.84 | 74099.84 | 74099.84 |
| Average Equity | 72448.40 | 73163.88 | 73810.17 | 74099.84 | 74099.84 |
| Return on Equity (Base Rate-\%) | $15.50 \%$ | $15.50 \%$ | $15.50 \%$ | $15.50 \%$ | $15.50 \%$ |
| MAT rate for the year (\%) | $20.961 \%$ | $20.961 \%$ | $20.961 \%$ | $20.961 \%$ | $20.961 \%$ |
| Rate of Return on Equity (Pre <br> Tax) (\%) | $19.610 \%$ | $19.610 \%$ | $19.610 \%$ | $19.610 \%$ | $19.610 \%$ |
| Return on Equity (Pre Tax) | $\mathbf{1 4 2 0 7 . 1 3}$ | $\mathbf{1 4 3 4 7 . 4 4}$ | $\mathbf{1 4 4 7 4 . 1 7}$ | $\mathbf{1 4 5 3 0 . 9 8}$ | $\mathbf{1 4 5 3 0 . 9 8}$ |

## Interest on Loan ("IOL")

60. Regulation 26 of the 2014 Tariff Regulations with regard to Interest on Loan specifies as under:-
"(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan.
(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3 .2014 from the gross normative loan.
(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalisation of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of decapitalisation of such asset.
(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 depreciation allowed for the year or part of the year.
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."
61. The petitioner has combined the loan portfolio as on 31.3.2014 of the instant assets and it has been considered as actual loan portfolio of combined asset as on
1.4.2014. The interest on loan has been worked out as detailed below:-
(i) Gross amount of loan, repayment of instalments and rate of interest have been considered as per Form-9C given in the petition. Accordingly, the weighted average rate of interest has been calculated on the basis of the actual loan portfolio of the combined asset.
(ii) The Normative repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that period.
(iii) Weighted average rate of interest on actual average loan worked out as per (i) above, is applied on the notional average loan during the year to arrive at the interest on loan.
62. The details of weighted average rate of interest are placed at Annexure-XXII and the IOL has been worked out as follows:-

| Particulars | $\mathbf{2 0 1 4 - 1 5}$ | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ | 2018-19 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Gross loan opening | 168209.05 | 169883.73 | 171547.96 | 172899.75 | 172899.75 |
| Cumulative Repayment <br> upto previous year | 23039.62 | 35646.45 | 48375.01 | 61214.58 | 74103.67 |
| Net Loan-Opening | 145169.43 | 134237.27 | 123172.95 | 111685.17 | 98796.08 |
| Additions during the <br> year | 1674.67 | 1664.24 | 1351.78 | 0.00 | 0.00 |
| Repayment during the <br> year | 12606.83 | 12728.55 | 12839.57 | 12889.09 | 12889.09 |
| Net Loan-Closing | 134237.27 | 123172.95 | 111685.17 | 98796.08 | 85906.99 |
| Average Loan | 139703.35 | 128705.11 | 117429.06 | 105240.62 | 92351.54 |
| Rate of Interest (\%) | $9.0638 \%$ | $9.0693 \%$ | $9.0734 \%$ | $9.0746 \%$ | $9.0762 \%$ |
| Interest | $\mathbf{1 2 6 6 2 . 4 5}$ | $\mathbf{1 1 6 7 2 . 6 0}$ | $\mathbf{1 0 6 5 4 . 8 3}$ | $\mathbf{9 5 5 0 . 2 1}$ | $\mathbf{8 3 8 2 . 0 0}$ |

63. The petitioner has prayed that it be allowed to bill and adjust impact on interest on loan due to change in interest rate on account of floating rate of interest applicable during 2014-19 period, if any, from the respondents. The interest on loans has been calculated on the basis of rate prevailing as on the date of commercial operation. Any change in rate of interest subsequent to the date of commercial operation will be considered at the time of truing-up.

## Depreciation

specifies as follows:-

## "27. Depreciation:

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.
(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.
(3) 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 station, the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the Plant:

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

Provided also that any depreciation disallowed on account of lower availability of the generating station or generating unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life and the extended life.
(4) 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.
(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."
65. We have considered the submission made by the petitioner with reference to depreciation. Depreciation is allowed as provided under Regulation 27 of the 2014 Tariff Regulations. For 2014-19 period depreciation has been worked out based on Straight Line Method as per regulation. Asset shall complete its 12 years life beyond the current tariff period. The details of the depreciation allowed are given hereunder:-

| Particulars | (₹ in lakh) |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
| $\mathbf{2 0 1 4 - 1 5}$ | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ | $\mathbf{2 0 1 8 - 1 9}$ |  |  |
| Opening Gross block | 240298.59 | 242690.98 | 245068.46 | 246999.58 | 246999.58 |  |
| Additions during the year due to <br> projected additional capitalization | 2392.39 | 2377.48 | 1931.12 | 0.00 | 0.00 |  |
| Closing Gross block | 242690.98 | 245068.46 | 246999.58 | 246999.58 | 246999.58 |  |
| Average gross block | 241494.79 | 243879.72 | 246034.02 | 246999.58 | 246999.58 |  |
| Rate of Depreciation (\%) | $5.2203 \%$ | $5.2192 \%$ | $5.2186 \%$ | $5.2183 \%$ | $5.2183 \%$ |  |
| Depreciable Value | 215441.20 | 217587.41 | 219526.28 | 220395.29 | 220395.29 |  |
| Remaining Depreciable Value | 192401.58 | 181940.96 | 171151.28 | 159180.71 | 146291.62 |  |
| Depreciation | $\mathbf{1 2 6 0 6 . 8 3}$ | $\mathbf{1 2 7 2 8 . 5 5}$ | $\mathbf{1 2 8 3 9 . 5 7}$ | $\mathbf{1 2 8 8 9 . 0 9}$ | $\mathbf{1 2 8 8 9 . 0 9}$ |  |

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

66. Regulation 29(4) of the 2014 Tariff Regulations provides for the normative O\&M Expenses for transmission system. The O\&M Expenses specified for the asset covered in the petition are as under:-

| Element | 2014-15 | 2015-16 | 2016-17 | $\mathbf{2 0 1 7 - 1 8}$ | 2018-19 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| S/C (quad) <br> T/L (₹₹ lakh/km | 0.606 | 0.627 | 0.647 | 0.669 | 0.691 |
| D/C (quad) <br> T/L (₹ lakh/km | 1.062 | 1.097 | 1.133 | 1.171 | 1.210 |
| 400 kV Bay <br> (₹ lakh/bay) | 60.30 | 62.30 | 64.37 | 66.51 | 68.71 |


| 965 kV Bay <br> (₹ lakh/bay) | 84.42 | 87.22 | 90.12 | 93.11 | 96.20 |
| :--- | ---: | ---: | ---: | ---: | ---: |

67. The O\&M Expenses allowed for the instant assets as per Regulation 29(4) of the 2014 Tariff Regulations are as under:-
(₹ in lakh)

| Element | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Asset-A Gaya substation: |  |  |  |  |  |
| 1 no 765 kV ICT-I bay | 84.42 | 87.22 | 90.12 | 93.11 | 96.20 |
| 1 no 400 kV ICT-I bay | 60.30 | 62.30 | 64.37 | 66.51 | 68.71 |
| Total O\&M (Asset-A): | 144.72 | 149.52 | 154.49 | 159.62 | 164.91 |
| Asset-B Gaya Sub-station: |  |  |  |  |  |
| 1 no. 765 kV bay for ICT-II | 84.42 | 87.22 | 90.12 | 93.11 | 96.20 |
| 1 no. 400 kV bay for ICT-II | 60.30 | 62.30 | 64.37 | 66.51 | 68.71 |
| Total O\&M (Asset-B): | 144.72 | 149.52 | 154.49 | 159.62 | 164.91 |
| Asset-C Gaya Sub-station: |  |  |  |  |  |
| $1 \mathrm{no}$.765 kV bay for ICT-II | 84.42 | 87.22 | 90.12 | 93.11 | 96.20 |
| 1 no. 400 kV bay for ICTIII | 60.30 | 62.30 | 64.37 | 66.51 | 68.71 |
| Total O\&M (Asset-C): | 144.72 | 149.52 | 154.49 | 159.62 | 164.91 |
| Asst D(i) Transmission line: |  |  |  |  |  |
| 69.3 km 400 kV S/C quad conductor, Biharshariff- Gaya T/L | 41.99 | 43.45 | 44.87 | 46.36 | 47.886 |
| Gaya sub-station: |  |  |  |  |  |
| 1 no 400 kV Balia bay | 60.30 | 62.30 | 64.37 | 66.51 | 68.71 |
| Total O\&M Asset D(i) | 102.29 | 105.75 | 109.24 | 112.87 | 116.59 |
| Asset D (ii) Transmission Line |  |  |  |  |  |
| 158.764 Km S/c quad Conductor Sasaram-Balia T/L | 96.22 | 99.54 | 102.720 | 106.21 | 109.71 |
| Total O\&M Asset D(ii) | 96.22 | 99.54 | 102.720 | 106.21 | 109.71 |
| Asset D(iii) Balia S/s |  |  |  |  |  |
| 1 no. 765 kV Gaya bay | 84.42 | 87.22 | 90.12 | 93.11 | 96.0 |
| 1 no. 765 kV bay for Switchable Line Reactor bay | 84.42 | 87.22 | 90.12 | 93.11 | 96.0 |
| Total O\&M (Asset-D (iii) | 168.84 | 174.44 | 180.24 | 186.22 | 192.40 |
| Asset-E Transmission Line: |  |  |  |  |  |
| 147.807 km, 765 kV S/c quad conductor Gaya- Sasaram (part of Gaya- Fatehpur) T/L | 89.57 | 92.67 | 95.63 | 98.88 | 102.13 |


| Gaya Sub-station: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I no. 765 kV Fatehpur bay | 84.42 | 87.22 | 90.12 | 93.11 | 96.20 |
| 1 no. 765 kV Switchable Line reactor bay | 84.42 | 87.22 | 90.12 | 93.11 | 96.20 |
| Total O\&M (Asset-E) | 258.41 | 267.11 | 275.87 | 285.10 | 294.53 |
| Asset-F(i) |  |  |  |  |  |
| Transmission line: |  |  |  |  |  |
| 209 Km D/c quad conductor 400 kV MaitonGaya T/L (Part of Maithon -Koderma T/L) | 221.96 | 229.27 | 236.79 | 244.74 | 252.890 |
| Total O\&M (Asset-F(i)): | 221.96 | 229.27 | 236.79 | 244.74 | 252.890 |
| Asset F(ii) Gaya S/s |  |  |  |  |  |
| 2 nos 400 kV line bays, at Gaya S/S. | 120.60 | 124.60 | 128.74 | 133.02 | 137.42 |
| 2 nos 400 kV bays, at Gaya S/S for 50 MVAR Bus Reactors | 120.60 | 124.60 | 128.74 | 133.02 | 137.42 |
| Total O\&M (Asset-F(ii)): | 241.20 | 249.20 | 257.48 | 266.04 | 274.84 |
| Asset-G: Gaya Sub-station: |  |  |  |  |  |
| 1 no. 765 kV bus reactor-I bay | 84.42 | 87.22 | 90.12 | 93.11 | 96.20 |
| Asset-H: Gaya Sub-station: |  |  |  |  |  |
| $\begin{aligned} & 1 \text { no. } 765 \mathrm{kV} \text { bus reactor-II } \\ & \text { bay } \end{aligned}$ | 84.42 | 87.22 | 90.12 | 93.11 | 96.20 |
| Asset-I: Gaya Sub-station: |  |  |  |  |  |
| $\begin{aligned} & 1 \text { no. } 400 \mathrm{kV} \text { bus reactor-l } \\ & \text { bay } \end{aligned}$ | 60.30 | 62.30 | 64.37 | 66.51 | 68.71 |
| Asset-J: Gaya Sub-station: |  |  |  |  |  |
| $\begin{aligned} & 1 \text { no. } 400 \mathrm{kV} \text { bus reactor-II } \\ & \text { bay } \end{aligned}$ | 60.30 | 62.30 | 64.37 | 66.51 | 68.71 |
| Asset-K |  |  |  |  |  |
| $2.862 \mathrm{~km}, 400 \mathrm{kV}$ D/C four conductor transmission line | 3.04 | 3.14 | 3.24 | 3.35 | 3.46 |
| 4 nos. 400 kV bays Lucknow | 241.20 | 249.20 | 257.48 | 266.04 | 274.84 |
| Total O\&M Asset-K | 244.24 | 252.4 | 260.72 | 269.39 | 278.30 |
| Asset-L |  |  |  |  |  |
| 318.905 km, 765 kV S/C four conductor transmission line | 193.26 | 199.95 | 206.33 | 213.35 | 220.36 |
| 4 nos. 765 kV bays (two each at Balia and Lucknow) | 337.68 | 348.88 | 360.48 | 372.44 | 384.80 |
| Total O\&M Asset L | 530.94 | 548.83 | 566.81 | 585.79 | 605.16 |
| Asset-M |  |  |  |  |  |
| 1 no. 765 kV bay at Balia S/s | 84.42 | 87.22 | 90.12 | 93.11 | 96.20 |


| 1 no. 400 kV bay at Balia S/s | 60.30 | 62.30 | 64.37 | 66.51 | 68.71 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total O\&M Asset-M | 144.72 | 149.52 | 154.49 | 159.62 | 164.91 |
| Asset-N |  |  |  |  |  |
| 1 no. 765 kV bay at Lucknow S/s | 84.42 | 87.22 | 90.12 | 93.11 | 96.20 |
| 1 no. 400 kV bay at Lucknow S/s | 60.30 | 62.30 | 64.37 | 66.51 | 68.71 |
| Total O\&M Asset-N | 144.72 | 149.52 | 154.49 | 159.62 | 164.91 |
| Asset-O |  |  |  |  |  |
| 2 nos. 400 kV bays (One each at Bihar Shariff \& Sasaram S/s) | 120.60 | 124.60 | 128.74 | 133.02 | 137.42 |
| Asset-P |  |  |  |  |  |
| 1 no. 400 kV bay at Bihar Shariff | 60.30 | 62.30 | 64.37 | 66.51 | 68.71 |
| Asset-Q |  |  |  |  |  |
| 1 no. 400 kV bay at Sasaram S/s | 60.30 | 62.30 | 64.37 | 66.51 | 68.71 |
| Asset-R |  |  |  |  |  |
| 2 nos. 400 kV bus reactor bay at Sasaram S/s | 120.60 | 124.60 | 128.74 | 133.02 | 137.42 |
| Total O\&M Expenses | 3238.93 | 3346.92 | 3457.50 | 3572.76 | 3691.05 |

68. The petitioner has submitted that O\&M Expenses for the tariff period 2014-19 had been arrived at on the basis of normalized actual O\&M Expenses during the period 2008-09 to 2012-13. The petitioner has further submitted that the wage revision of the employees is due during 2014-19 and actual impact of wage hike effective from a future date has not been factored in fixation of the normative O\&M rates specified for the tariff block 2014-19. The petitioner has submitted that it would approach the Commission for suitable revision in norms for O\&M Expenses for claiming the impact of wage hike during 2014-19, if any.
69. The O\&M Expenses have been worked out as per the norms specified in the 2014 Tariff Regulations. As regards the impact of wage revision, any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.

## Interest on Working Capital ("IWC")

70. Clause 1 (c) and 3 of Regulation 28 and Clause 5 of Regulation 3 of the 2014

Tariff Regulations specify as follows:-
"28. Interest on Working Capital: (1) The working capital shall cover:
(a)------
(c) Hydro generating station including pumped storage hydro electric generating station and transmission system including communication system:
(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"
(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later"
"(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;"
71. 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 interest on working capital as determined is as under:-

| Particulars |  |  |  | $\mathbf{2 0 1 4 - 1 5}$ | $\mathbf{2 0 1 5 - 1 6}$ |  | 2016-17 | $\mathbf{2 0 1 7 - 1 8}$ | $\mathbf{2 0 1 8 - 1 9}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: |
| Maintenance Spares | 485.84 | 502.04 | 518.63 | 535.92 | 553.66 |  |  |  |  |
| O \& M expenses | 269.91 | 278.91 | 288.13 | 297.73 | 307.59 |  |  |  |  |
| Receivables | 7300.49 | 7195.39 | 7081.84 | 6931.90 | 6753.52 |  |  |  |  |
| Total | 8056.24 | 7976.34 | 7888.59 | 7765.54 | 7614.77 |  |  |  |  |
| Interest | $\mathbf{1 0 8 7 . 5 9}$ | $\mathbf{1 0 7 6 . 8 1}$ | $\mathbf{1 0 6 4 . 9 6}$ | $\mathbf{1 0 4 8 . 3 5}$ | $\mathbf{1 0 2 7 . 9 9}$ |  |  |  |  |

## Annual Transmission Charges

72. The Annual Transmission Charges allowed for the combined transmission assets are as under:-
(₹ in lakh)

| Particulars | $\mathbf{2 0 1 4 - 1 5}$ | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ | $\mathbf{2 0 1 8 - 1 9}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Depreciation | 12606.83 | 12728.55 | 12839.57 | 12889.09 | 12889.09 |
| Interest on Loan | 12662.45 | 11672.60 | 10654.83 | 9550.21 | 8382.00 |
| Return on Equity | 14207.13 | 14347.44 | 14474.17 | 14530.98 | 14530.98 |
| Interest on Working Capital | $1,087.59$ | $1,076.81$ | 1064.96 | $1,048.35$ | 1027.99 |
| O \& M Expenses | 3238.93 | 3346.94 | 3457.50 | 3572.77 | 3691.06 |
| Total | $\mathbf{4 3 8 0 2 . 9 3}$ | $\mathbf{4 3 1 7 2 . 3 3}$ | $\mathbf{4 2 4 9 1 . 0 4}$ | $\mathbf{4 1 5 9 1 . 3 9}$ | $\mathbf{4 0 5 2 1 . 1 2}$ |

73. The petitioner has submitted that the claim for transmission charges and other charges is exclusive of incentive, late payment surcharge, FERV, any statutory taxes, levies, duties, cess filing fees, license fee RLDC fees and charges or any other kind of impositions etc. The same if imposed shall be borne and additionally paid by the respondents. We have considered the submissions of the petitioner. The petitioner is entitled for late payment surcharge and FERV as per Regulations 45 and 50 respectively of the 2014 Tariff Regulations.

## Filing Fee and Publication Expenses

74. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 52 of the 2014 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 clause (1) of Regulation 52 of the 2014 Tariff Regulations.

## Licence Fee and RLDC Fees and Charges

75. The petitioner has requested to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a), respectively, of Regulation 52 of the 2014 Tariff Regulations.

## Sharing of Transmission Charges

76. Transmission charges shall be recovered on monthly basis in accordance with Regulation 43 of Central Electricity Regulatory Commission (Terms \& Condition of Tariff) Regulations, 2014 and shall be shared by the beneficiaries and long term transmission customers in Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges \& Losses) Regulations, 2010 as amended time to time.
77. This order disposes of Petition No. 185/TT/2016.
sd/-
(Dr. M. K. Iyer) Member
sd/-
(A.S. Bakshi)

Member
sd/-
(A.K. Singhal) Member
sd/-
(Gireesh B. Pradhan)
Chairperson

Annexure-I
(₹ in lakh)
CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN (Asset-A)


|  | Net Loan-Opening | 235.00 | 235.00 |
| :---: | :---: | :---: | :---: |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 19.58 |
|  | Net Loan-Closing | 235.00 | 215.42 |
|  | Average Loan | 235.00 | 225.21 |
|  | Rate of Interest | 8.84\% | 8.84\% |
|  | Interest | 20.77 | 19.91 |
| - Rep Schedule |  | 12 Annual instalments from 27.3.2014 |  |
|  |  |  |  |
| 5 | Bond XXXV |  |  |
|  | Gross loan opening | 280.00 | 280.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 280.00 | 280.00 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 280.00 | 280.00 |
|  | Average Loan | 280.00 | 280.00 |
|  | Rate of Interest | 9.64\% | 9.64\% |
|  | Interest | 26.99 | 26.99 |
|  | Rep Schedule | 12 Annual instalments from 31.5.2015 |  |
|  |  |  |  |
| 6 | Bond XXXVII |  |  |
|  | Gross loan opening | 1351.18 | 1351.18 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 1351.18 | 1351.18 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 1351.18 | 1351.18 |
|  | Average Loan | 1351.18 | 1351.18 |
|  | Rate of Interest | 9.25\% | 9.25\% |
|  | Interest | 124.98 | 124.98 |
|  | Rep Schedule | 12 Annual instalments from 26.12.2015 |  |
|  |  |  |  |
| 7 | Bond XL (Add Cap 2012-13) |  |  |
|  | Gross loan opening | 0.00 | 296.80 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 296.80 |
|  | Additions during the year | 296.80 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 296.80 | 296.80 |
|  | Average Loan | 148.40 | 296.80 |
|  | Rate of Interest | 9.30\% | 9.30\% |
|  | Interest | 13.80 | 27.60 |
|  | Rep Schedule | 12 Annual instalments from 28.6.2016 |  |


|  |  |  |  |
| :---: | :---: | :---: | :---: |
| 8 | Bond XL |  |  |
|  | Gross loan opening | 20.63 | 20.63 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 20.63 | 20.63 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 20.63 | 20.63 |
|  | Average Loan | 20.63 | 20.63 |
|  | Rate of Interest | 9.30\% | 9.30\% |
|  | Interest | 1.92 | 1.92 |
|  | Rep Schedule | 12 Annual instalments from 28.6.2016 |  |
|  |  |  |  |
| 9 | SBI (21.03.2012) (Add Cap 2013-14) |  |  |
|  | Gross loan opening | 0.00 | 0.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 0.00 |
|  | Additions during the year | 0.00 | 347.01 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 0.00 | 347.01 |
|  | Average Loan | 0.00 | 173.51 |
|  | Rate of Interest | 10.29\% | 10.29\% |
|  | Interest | 0.00 | 17.85 |
|  | Rep Schedule | 22 annual instalments from 31.8.2016 |  |
|  |  |  |  |
| 10 | Bond XXVIII |  |  |
|  | Gross loan opening | 107.00 | 107.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 8.92 |
|  | Net Loan-Opening | 107.00 | 98.08 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 8.92 | 8.92 |
|  | Net Loan-Closing | 98.08 | 89.17 |
|  | Average Loan | 102.54 | 93.63 |
|  | Rate of Interest | 9.3300\% | 9.33\% |
|  | Interest | 9.57 | 8.74 |
|  | Rep Schedule | 12 Annual instalments from 15.12.2012 |  |
|  |  |  |  |
| 11 | BOND XXXI |  |  |
|  | Gross loan opening | 873.00 | 873.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 873.00 | 873.00 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 72.75 |
|  | Net Loan-Closing | 873.00 | 800.25 |
|  | Average Loan | 873.00 | 836.63 |


|  | Rate of Interest | 8.90\% | 8.90\% |
| :---: | :---: | :---: | :---: |
|  | Interest | 77.70 | 74.46 |
|  | Rep Schedule | 12 Annual instalments from 25.2.2014 |  |
|  | BOND XXXIV |  |  |
|  | Gross loan opening | 1136.00 | 1136.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 1136.00 | 1136.00 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 1136.00 | 1136.00 |
|  | Average Loan | 1136.00 | 1136.00 |
|  | Rate of Interest | 8.84\% | 8.84\% |
|  | Interest | 100.42 | 100.42 |
|  | Rep Schedule | 12 Annual instalments from 21.10.2014 |  |
|  |  |  |  |
|  | BOND XXXVI |  |  |
|  | Gross loan opening | 1201.50 | 1201.50 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 1201.50 | 1201.50 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 1201.50 | 1201.50 |
|  | Average Loan | 1201.50 | 1201.50 |
|  | Rate of Interest | 9.35\% | 9.35\% |
|  | Interest | 112.34 | 112.34 |
| - Rep Schedule |  | 15 Annual instalments from 29.8.2016 |  |
|  |  |  |  |
|  | Total Loan |  |  |
|  | Gross loan opening | 6774.31 | 7071.11 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 17.67 |
|  | Net Loan-Opening | 6774.31 | 7053.44 |
|  | Additions during the year | 296.80 | 347.01 |
|  | Repayment during the year | 17.67 | 154.00 |
|  | Net Loan-Closing | 7053.44 | 7246.45 |
|  | Average Loan | 6913.88 | 7149.95 |
|  | Weighted Average Rate of Interest | 9.0423\% | 9.0791\% |
|  | Interest | 625.18 | 649.15 |

## Annexure-II

(₹ in lakh)
CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN (Asset B)

|  | Details of Loan | 2012-13 | 2013-14 |
| :---: | :---: | :---: | :---: |
| 1 | Bond XXIX |  |  |
|  | Gross loan opening | 100.00 | 100.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 8.33 |
|  | Net Loan-Opening | 100.00 | 91.67 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 8.33 | 8.33 |
|  | Net Loan-Closing | 91.67 | 83.33 |
|  | Average Loan | 95.83 | 87.50 |
|  | Rate of Interest | 9.20\% | 9.20\% |
|  | Interest | 8.82 | 8.05 |
|  | Rep Schedule | $12 \text { Annual instal }$ 12.3.2013 |  |
|  |  |  |  |
| 2 | Bond XXX |  |  |
|  | Gross loan opening | 89.00 | 89.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 89.00 | 89.00 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 7.42 |
|  | Net Loan-Closing | 89.00 | 81.58 |
|  | Average Loan | 89.00 | 85.29 |
|  | Rate of Interest | 8.80\% | 8.80\% |
|  | Interest | 7.83 | 7.51 |
|  | Rep Schedule | $\begin{array}{\|l} \hline \text { 12 Annual insta } \\ \text { 29.9.2013 } \\ \hline \end{array}$ |  |
|  |  |  |  |
| 3 | Bond XXXIII |  |  |
|  | Gross loan opening | 1577.00 | 1577.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 1577.00 | 1577.00 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 1577.00 | 1577.00 |
|  | Average Loan | 1577.00 | 1577.00 |
|  | Rate of Interest | 8.64\% | 8.64\% |
|  | Interest | 136.25 | 136.25 |
|  | Rep Schedule | 12 Annual instalments from 8.7.2014 |  |
|  |  |  |  |



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|  | Repayment during the year | 13.92 | 142.75 |
| :--- | :--- | ---: | ---: |
|  | Net Loan-Closing | 7128.11 | 7411.17 |
|  | Average Loan | 6945.67 | 7269.64 |
|  | Weighted Average Rate of Interest | $9.0625 \%$ | $9.1073 \%$ |
|  | Interest | 629.45 | 662.07 |

## Annexure-III

(₹ in lakh)
CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN
(ASSET-C)


| 4 | Bond XXXII |  |  |
| :---: | :---: | :---: | :---: |
|  | Gross loan opening | 235.00 | 235.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 235.00 | 235.00 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 19.58 |
|  | Net Loan-Closing | 235.00 | 215.42 |
|  | Average Loan | 235.00 | 225.21 |
|  | Rate of Interest | 8.84\% | 8.84\% |
|  | Interest | 20.77 | 19.91 |
|  | Rep Schedule | $\begin{aligned} & 12 \text { Annual ir } \\ & 27.3 .2014 \end{aligned}$ | from |
|  |  |  |  |
| 5 | Bond XXXV |  |  |
|  | Gross loan opening | 280.00 | 280.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 280.00 | 280.00 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 280.00 | 280.00 |
|  | Average Loan | 280.00 | 280.00 |
|  | Rate of Interest | 9.64\% | 9.64\% |
|  | Interest | 26.99 | 26.99 |
|  | Rep Schedule | $\begin{aligned} & \hline 12 \text { Annual ir } \\ & 31.5 .2015 \\ & \hline \end{aligned}$ | from |
|  |  |  |  |
|  | Bond XXXVII |  |  |
|  | Gross loan opening | 149.00 | 149.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 149.00 | 149.00 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 149.00 | 149.00 |
|  | Average Loan | 149.00 | 149.00 |
|  | Rate of Interest | 9.25\% | 9.25\% |
|  | Interest | 13.78 | 13.78 |
|  | Rep Schedule | $\begin{array}{ll} \hline 12 \text { Annual ir } \\ 26.12 .2015 \\ \hline \end{array}$ |  |
|  |  |  |  |
| 7 | Bond XXXVIII |  |  |
|  | Gross loan opening | 295.00 | 295.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 295.00 | 295.00 |
|  | Additions during the year | 0.00 | 0.00 |


|  | Repayment during the year | 0.00 | 0.00 |
| :---: | :---: | :---: | :---: |
|  | Net Loan-Closing | 295.00 | 295.00 |
|  | Average Loan | 295.00 | 295.00 |
|  | Rate of Interest | 9.25\% | 9.25\% |
|  | Interest | 27.29 | 27.29 |
|  | Rep Schedule | Bullet payment 9.3.2027 |  |
| 8 | Bond XXXIX (Add Cap 2012-13) |  |  |
|  | Gross loan opening | 0.00 | 388.91 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 388.91 |
|  | Additions during the year | 388.91 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 388.91 | 388.91 |
|  | Average Loan | 194.46 | 388.91 |
|  | Rate of Interest | 9.40\% | 9.40\% |
|  | Interest | 18.28 | 36.56 |
|  | Rep Schedule | Bullet payment 29.3.2027 |  |
|  |  |  |  |
| 9 | Bond XXXIX |  |  |
|  | Gross loan opening | 100.00 | 100.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 100.00 | 100.00 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 100.00 | 100.00 |
|  | Average Loan | 100.00 | 100.00 |
|  | Rate of Interest | 9.40\% | 9.40\% |
|  | Interest | 9.40 | 9.40 |
|  | Rep Schedule | Bullet payment 29.3.2027 |  |
|  |  |  |  |
| 10 | SBI (21.03.2012) (Add Cap 2013-14) |  |  |
|  | Gross loan opening | 0.00 | 0.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 0.00 |
|  | Additions during the year | 0.00 | 428.90 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 0.00 | 428.90 |
|  | Average Loan | 0.00 | 214.45 |
|  | Rate of Interest | 10.29\% | 10.29\% |
|  | Interest | 0.00 | 22.07 |
|  | Rep Schedule | 22 annual instalments <br> 31.8 .2016   |  |
|  |  |  |  |
| 11 | Bond XXVIII |  |  |



|  | Net Loan-Closing | 1833.31 |  |
| :--- | :--- | ---: | ---: |
|  | Average Loan | 1833.31 | 1833.31 |
|  | Rate of Interest | $9.35 \%$ |  |

Annexure-IV
( $₹$ in lakh)


|  | Net Loan-Opening | 1600.00 | 1600.00 | 1600.00 |
| :---: | :---: | :---: | :---: | :---: |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 1600.00 | 1600.00 | 1600.00 |
|  | Average Loan | 1600.00 | 1600.00 | 1600.00 |
|  | Rate of Interest | 8.64\% | 8.64\% | 8.64\% |
|  | Interest | 138.24 | 138.24 | 138.24 |
|  | Rep Schedule |  |  |  |
|  |  | 12 Annual instalments from 8.7.2014 |  |  |
| 5 | Bond XXXII |  |  |  |
|  | Gross loan opening | 250.00 | 250.00 | 250.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 250.00 | 250.00 | 250.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 20.83 |
|  | Net Loan-Closing | 250.00 | 250.00 | 229.17 |
|  | Average Loan | 250.00 | 250.00 | 239.58 |
|  | Rate of Interest | 8.84\% | 8.84\% | 8.84\% |
|  | Interest | 22.10 | 22.10 | 21.18 |
|  | Rep Schedule | 12 Annual instalments from 27.3.2014 |  |  |
|  |  |  |  |  |
| 6 | Bond XXXIV |  |  |  |
|  | Gross loan opening | 991.77 | 991.77 | 991.77 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 991.77 | 991.77 | 991.77 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 991.77 | 991.77 | 991.77 |
|  | Average Loan | 991.77 | 991.77 | 991.77 |
|  | Rate of Interest | 8.84\% | 8.84\% | 8.84\% |
|  | Interest | 87.67 | 87.67 | 87.67 |
|  | Rep Schedule | 12 Annual instalments from 21.10.2014 |  |  |
|  |  |  |  |  |
| 7 | Bond XXXV |  |  |  |
|  | Gross loan opening | 301.94 | 301.94 | 301.94 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 301.94 | 301.94 | 301.94 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 301.94 | 301.94 | 301.94 |
|  | Average Loan | 301.94 | 301.94 | 301.94 |
|  | Rate of Interest | 9.64\% | 9.64\% | 9.64\% |
|  | Interest | 29.11 | 29.11 | 29.11 |
|  | Rep Schedule | 12 Annual instalments from 31.5.2015 |  |  |
|  |  |  |  |  |



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## Annexure-V

(₹ in lakh)

| CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN [ASSET-D(ii)] |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Details of Loan | 2011-12 | 2012-13 | 2013-14 |
| 1 Bond XXVIII |  |  |  |  |
|  | Gross loan opening | 1229.00 | 1229.00 | 1229.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 102.42 |
|  | Net Loan-Opening | 1229.00 | 1229.00 | 1126.58 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 102.42 | 102.42 |
|  | Net Loan-Closing | 1229.00 | 1126.58 | 1024.17 |
|  | Average Loan | 1229.00 | 1177.79 | 1075.38 |
|  | Rate of Interest | 9.33\% | 9.33\% | 9.33\% |
|  | Interest | 114.67 | 109.89 | 100.33 |
|  | Rep Schedule | 12 Annual instalments from 15.12.2012 |  |  |
|  |  |  |  |  |
| 2 | BOND XXX |  |  |  |
|  | Gross loan opening | 6300.00 | 6300.00 | 6300.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 6300.00 | 6300.00 | 6300.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 525.00 |
|  | Net Loan-Closing | 6300.00 | 6300.00 | 5775.00 |
|  | Average Loan | 6300.00 | 6300.00 | 6037.50 |
|  | Rate of Interest | 8.80\% | 8.80\% | 8.80\% |
|  | Interest | 554.40 | 554.40 | 531.30 |
|  | Rep Schedule | 12 Annual instalments from 29.9.2013 |  |  |
|  |  |  |  |  |
| 3 | Bond XXXI |  |  |  |
|  | Gross loan opening | 3300.00 | 3300.00 | 3300.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 3300.00 | 3300.00 | 3300.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 275.00 |
|  | Net Loan-Closing | 3300.00 | 3300.00 | 3025.00 |
|  | Average Loan | 3300.00 | 3300.00 | 3162.50 |
|  | Rate of Interest | 8.90\% | 8.90\% | 8.90\% |
|  | Interest | 293.70 | 293.70 | 281.46 |
|  | Rep Schedule | 12 Annual instalments from 25.2.2014 |  |  |
|  |  |  |  |  |
| 4 Bond XXXIII |  |  |  |  |
|  | Gross loan opening | 2500.00 | 2500.00 | 2500.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |




|  | Average Loan | 16681.10 | 16733.62 | 16268.50 |
| :--- | :--- | ---: | ---: | ---: |
|  | Weighted Average Rate of Interest | $\mathbf{8 . 8 5 2 1 \%}$ | $8.8538 \%$ | $8.8544 \%$ |
|  | Interest | 1476.63 | 1481.55 | 1440.47 |

Order in Petition No. 185/TT/2016

## Annexure-VI



| 4 | Bond XXXIX (Add Cap 2012-13) |  |  |
| :---: | :---: | :---: | :---: |
|  | Gross loan opening | 0.00 | 38.61 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 38.61 |
|  | Additions during the year | 38.61 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 38.61 | 38.61 |
|  | Average Loan | 19.31 | 38.61 |
|  | Rate of Interest | 9.40\% | 9.40\% |
|  | Interest | 1.81 | 3.63 |
|  | Rep Schedule | Bullet payment 29.3.2027 |  |
|  |  |  |  |
| 5 | SBI (21.03.2012) (Add Cap 2013-14) |  |  |
|  | Gross loan opening | 0.00 | 0.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 0.00 |
|  | Additions during the year | 0.00 | 189.40 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 0.00 | 189.40 |
|  | Average Loan | 0.00 | 94.70 |
|  | Rate of Interest | 10.29\% | 10.29\% |
|  | Interest | 0.00 | 9.74 |
|  | Rep Schedule | $\begin{gathered} 22 \text { annual instalments from } \\ 31.8 .2016 \\ \hline \end{gathered}$ |  |
|  |  |  |  |
| 6 | BOND XXXIV |  |  |
|  | Gross loan opening | 468.00 | 468.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 468.00 | 468.00 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 468.00 | 468.00 |
|  | Average Loan | 468.00 | 468.00 |
|  | Rate of Interest | 8.84\% | 8.84\% |
|  | Interest | 41.37 | 41.37 |
|  | Rep Schedule | 12 Annual instalments from |  |
|  |  |  |  |
| 7 | BOND XXXVI |  |  |
|  | Gross loan opening | 176.11 | 176.11 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 176.11 | 176.11 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |


|  | Net Loan-Closing | 176.11 | 176.11 |
| :--- | :--- | ---: | ---: |
|  | Average Loan | 176.11 | 176.11 |
|  | Rate of Interest | $9.35 \%$ | $9.35 \%$ |
|  | Interest | 16.47 | 16.47 |
|  | Rep Schedule | 15 Annual instalments from |  |
|  |  | 29.8 .2016 |  |
|  |  |  |  |
|  | Total Loan | 3125.11 | 3163.72 |
|  | Gross loan opening | 0.00 | 0.00 |
|  | Cumulative Repayment upto | 3125.11 | 3163.72 |
| COD/previous year | 38.61 | 189.40 |  |
|  | Net Loan-Opening | 0.00 | 83.33 |
|  | Additions during the year | 3163.72 | 3269.79 |
|  | Repayment during the year | 3144.42 | 3216.75 |
|  | Net Loan-Closing | $\mathbf{9 . 0 8 9 8 \%}$ | $\mathbf{9 . 1 3 0 2 \%}$ |
|  | Average Loan | 285.82 | 293.70 |
|  | Weighted Average Rate of Interest |  |  |
|  | Interest |  |  |

Annexure-VII
(₹ in lakh)
CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN (ASSET-E)

|  | Details of Loan | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| :--- | :--- | ---: | ---: |
| $\mathbf{1}$ | Bond XXX |  |  |
|  | Gross loan opening | 3100.00 | 3100.00 |
|  | Cumulative Repayment upto | 0.00 | 0.00 |
|  | COD/previous year | 3100.00 | 3100.00 |
|  | Net Loan-Opening | 0.00 | 0.00 |
|  | Additions during the year | 0.00 | 258.33 |
|  | Repayment during the year | 3100.00 | 2841.67 |
|  | Net Loan-Closing | 3100.00 | 2970.83 |
|  | Average Loan | $8.80 \%$ | $8.80 \%$ |
|  | Rate of Interest | 272.80 | 261.43 |
|  | Interest | 12 Annual instalments from |  |
|  | Rep Schedule | 29.9 .2013 |  |
|  |  |  |  |
| $\mathbf{2}$ | Bond XXXIII | 5760.00 | 5760.00 |
|  | Gross loan opening | 0.00 | 0.00 |
|  | Cumulative Repayment upto | 5760.00 | 5760.00 |
|  | COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 0.00 |
|  | Additions during the year | 5760.00 | 5760.00 |
|  | Repayment during the year | 5760.00 | 5760.00 |
|  | Net Loan-Closing | $8.64 \%$ | $8.64 \%$ |
|  | Average Loan | 497.66 | 497.66 |
|  | Rate of Interest | 12 Annual instalments from |  |
|  | Interest | 8.7 .2014 |  |
|  | Rep Schedule |  |  |
|  |  |  |  |
| $\mathbf{3}$ | Bond XXXII | 320.00 | $\mathbf{3 2 0 . 0 0}$ |
|  | Gross loan opening | 0.00 | $\mathbf{0 . 0 0}$ |
|  | Cumulative Repayment upto |  |  |
|  | COD/previous year | 320.00 | 320.00 |
|  | Net Loan-Opening | 0.00 | 0.00 |
|  | Additions during the year | 0.00 | 26.67 |
|  | Repayment during the year | 320.00 | 293.33 |
|  | Net Loan-Closing | $8.84 \%$ | 306.67 |
|  | Average Loan | 28.29 | $8.84 \%$ |
|  | Rate of Interest | 27.11 |  |
|  | Interest | 27.3 .2014 |  |
|  | Rep Schedule |  |  |
|  |  |  |  |
|  |  |  |  |


| 4 | Bond XXXV |  |  |
| :---: | :---: | :---: | :---: |
|  | Gross loan opening | 1100.00 | 1100.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 1100.00 | 1100.00 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 1100.00 | 1100.00 |
|  | Average Loan | 1100.00 | 1100.00 |
|  | Rate of Interest | 9.64\% | 9.64\% |
|  | Interest | 106.04 | 106.04 |
|  | Rep Schedule | 12 Annual in 31.5 | from |
|  |  |  |  |
| 5 | Bond XXXVII |  |  |
|  | Gross loan opening | 1000.00 | 1000.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 1000.00 | 1000.00 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 1000.00 | 1000.00 |
|  | Average Loan | 1000.00 | 1000.00 |
|  | Rate of Interest | 9.25\% | 9.25\% |
|  | Interest | 92.50 | 92.50 |
|  | Rep Schedule | 12 Annual in 26.12 | from |
|  |  |  |  |
| 6 | Bond XXXVIII |  |  |
|  | Gross loan opening | 126.85 | 126.85 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 126.85 | 126.85 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 126.85 | 126.85 |
|  | Average Loan | 126.85 | 126.85 |
|  | Rate of Interest | 9.25\% | 9.25\% |
|  | Interest | 11.73 | 11.73 |
|  | Rep Schedule | Bullet payment 9.3.2027 |  |
|  |  |  |  |
|  | Bond XXXIX (Add Cap 2012-13) |  |  |
|  | Gross loan opening | 0.00 | 230.22 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 230.22 |
|  | Additions during the year | 230.22 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |




|  | Additions during the year | 939.50 | 342.57 |
| :--- | :--- | ---: | ---: |
|  | Repayment during the year | 10.00 | 419.17 |
|  | Net Loan-Closing | 18078.78 | 18002.18 |
|  | Average Loan | 17614.03 | 18040.48 |
|  | Weighted Average Rate of Interest | $\mathbf{8 . 9 4 3 3 \%}$ | $\mathbf{8 . 9 8 6 5 \%}$ |
|  | Interest | 1575.27 | 1621.20 |




|  | Repayment during the year | 0.00 | 0.00 |
| :--- | :--- | ---: | ---: |
|  | Net Loan-Closing | 4112.07 | 4112.07 |
|  | Average Loan | 4112.07 | 4112.07 |
|  | Rate of Interest | $8.84 \%$ | $8.84 \%$ |
|  | Interest | 363.51 | 363.51 |
|  | Rep Schedule | 12 Annual instalments from |  |
|  |  | 21.10 .2014 |  |
|  |  |  |  |
|  | Total Loan |  |  |
|  | Gross loan opening | 25539.47 | 25539.47 |
|  | Cumulative Repayment upto | 0.00 | 91.67 |
|  | COD/previous year | 25539.47 | 25447.80 |
|  | Net Loan-Opening | 0.00 | 0.00 |
|  | Additions during the year | 91.67 | 1266.67 |
|  | Repayment during the year | 25447.80 | 24181.14 |
|  | Net Loan-Closing | 25493.64 | 24814.47 |
|  | Average Loan | $8.9259 \%$ | $\mathbf{8 . 9 2 6 3 \%}$ |
|  | Weighted Average Rate of Interest | 2275.53 | 2215.02 |
|  | Interest |  |  |

## Annexure-IX

| CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN <br> ASSET F(ii) |  |  |  |
| :--- | :--- | ---: | ---: |
|  | Details of Loan | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| $\mathbf{1}$ | Bond XXIX |  |  |
|  | Gross loan opening | 10.00 | 10.00 |
|  | Cumulative Repayment upto | 0.00 | 0.83 |
|  | COD/previous year |  |  |
|  | Net Loan-Opening | 10.00 | 9.17 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.83 | 0.83 |
|  | Net Loan-Closing | 9.17 | 8.33 |
|  | Average Loan | 9.58 | 8.75 |
|  | Rate of Interest | $9.20 \%$ | $9.20 \%$ |
|  | Interest | 0.88 | 0.81 |
|  | Rep Schedule | 12 Annual instalments from |  |
|  |  | 12.3 .2013 |  |
|  |  |  |  |
| $\mathbf{2}$ | Bond XXX |  |  |
|  | Gross loan opening | 65.00 | 65.00 |
|  | Cumulative Repayment upto | 0.00 | 0.00 |
|  | COD/previous year |  |  |
|  | Net Loan-Opening | 65.00 | 65.00 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 5.42 |
|  | Net Loan-Closing | 65.00 | 59.58 |
|  | Average Loan | 65.00 | 62.29 |
|  | Rate of Interest | $8.80 \%$ | $8.80 \%$ |
|  | Interest | 5.72 | 5.48 |
|  | Rep Schedule | 12 |  |
|  |  | 29.9 .2013 |  |




|  |  | 29.8 .2016 |  |
| :--- | :--- | ---: | ---: |
|  |  |  |  |
| $\mathbf{1 1}$ | BOND XXXVI (Add Cap 2012-13) |  |  |
|  | Gross loan opening | 0.00 | $\mathbf{2 3 3 . 8 0}$ |
|  | Cumulative Repayment upto | 0.00 | $\mathbf{0 . 0 0}$ |
|  | COD/previous year |  | 233.80 |
|  | Net Loan-Opening | 0.00 | 0.00 |
|  | Additions during the year | 233.80 | 0.00 |
|  | Repayment during the year | 0.00 | 233.80 |
|  | Net Loan-Closing | 116.80 | 233.80 |
|  | Average Loan | $9.35 \%$ | $9.35 \%$ |
|  | Rate of Interest | 10.93 | 21.86 |
|  | Interest | 15 Annual instalments from |  |
|  | Rep Schedule | 29.8 .2016 |  |
|  |  |  |  |
|  | Total Loan | 1919.09 | 2152.89 |
|  | Gross loan opening | 0.00 | 0.83 |
|  | Cumulative Repayment upto | 1919.09 | 2152.06 |
|  | COD/previous year | 233.80 | 330.20 |
|  | Net Loan-Opening | 0.83 | 22.50 |
|  | Additions during the year | 2152.06 | 2459.76 |
|  | Repayment during the year | 2035.57 | 2305.91 |
|  | Net Loan-Closing | $\mathbf{9 . 0 6 8 8} \%$ | $\mathbf{9 . 1 7 1 4 \%}$ |
|  | Average Loan | 184.60 | 211.48 |
|  | Weighted Average Rate of Interest |  |  |
|  | Interest |  |  |

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN (ASSET-G)

| (ASSET-G) |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Details of Loan | 2012-13 | 2013-14 |
| 1 | Bond XXIX |  |  |
|  | Gross loan opening | 60.00 | 60.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 5.00 |
|  | Net Loan-Opening | 60.00 | 55.00 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 5.00 | 5.00 |
|  | Net Loan-Closing | 55.00 | 50.00 |
|  | Average Loan | 57.50 | 52.50 |
|  | Rate of Interest | 9.20\% | 9.20\% |
|  | Interest | 5.29 | 4.83 |
|  | Rep Schedule | 12 Annual instalments from 12.3.2013 |  |
|  |  |  |  |
| 2 | Bond XXX |  |  |
|  | Gross loan opening | 80.00 | 80.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 80.00 | 80.00 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 6.67 |
|  | Net Loan-Closing | 80.00 | 73.33 |
|  | Average Loan | 80.00 | 76.67 |
|  | Rate of Interest | 8.80\% | 8.80\% |
|  | Interest | 7.04 | 6.75 |
|  | Rep Schedule | 12 Annual instalments from 29.9.2013 |  |
|  |  |  |  |
| 3 | Bond XXXIII |  |  |
|  | Gross loan opening | 500.00 | 500.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 500.00 | 500.00 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 500.00 | 500.00 |
|  | Average Loan | 500.00 | 500.00 |
|  | Rate of Interest | 8.64\% | 8.64\% |
|  | Interest | 43.20 | 43.20 |
|  | Rep Schedule | 12 Annual instalments from 8.7.2014 |  |
|  |  |  |  |


| $\mathbf{4}$ | Bond XXXII |  |  |
| :--- | :--- | ---: | ---: |
|  | Gross loan opening | 40.00 | $\mathbf{4 0 . 0 0}$ |
|  | Cumulative Repayment upto | 0.00 | $\mathbf{0 . 0 0}$ |
|  | COD/previous year |  | 40.00 |
|  | Net Loan-Opening | 40.00 | 0.00 |
|  | Additions during the year | 0.00 | 3.33 |
|  | Repayment during the year | 40.00 | 36.67 |
|  | Net Loan-Closing | 40.00 | 38.33 |
|  | Average Loan | $8.84 \%$ | $8.84 \%$ |
|  | Rate of Interest | 3.54 | 3.39 |
|  | Interest | 12 Annual instalments from |  |
|  | Rep Schedule | 27.3 .2014 |  |
|  |  |  |  |
| $\mathbf{5}$ | Bond XXXV |  |  |
|  | Gross loan opening | 434.55 | $\mathbf{4 3 4 . 5 5}$ |
|  | Cumulative Repayment upto | 0.00 | $\mathbf{0 . 0 0}$ |
|  | COD/previous year | 434.55 | 434.55 |
|  | Net Loan-Opening | 0.00 | 0.00 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 434.55 | 434.55 |
|  | Net Loan-Closing | 434.55 | 434.55 |
|  | Average Loan | $9.64 \%$ | $9.64 \%$ |
|  | Rate of Interest | 41.89 | 41.89 |
|  | Interest | 12 | Annual instalments from |
|  | Rep Schedule | 31.5 .2015 |  |


|  | Repayment during the year | 0.00 | 0.00 |
| :---: | :---: | :---: | :---: |
|  | Net Loan-Closing | 20.00 | 20.00 |
|  | Average Loan | 20.00 | 20.00 |
|  | Rate of Interest | 9.25\% | 9.25\% |
|  | Interest | 1.85 | 1.85 |
|  | Rep Schedule | Bullet payment 9.3.2027 |  |
|  |  |  |  |
|  | Bond XL (Add Cap 2012-13) |  |  |
|  | Gross loan opening | 0.00 | 5.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 5.00 |
|  | Additions during the year | 5.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 5.00 | 5.00 |
|  | Average Loan | 2.50 | 5.00 |
|  | Rate of Interest | 9.30\% | 9.30\% |
|  | Interest | 0.23 | 0.47 |
|  | Rep Schedule | 12 Annual instalments from 28.6.2016 |  |
|  |  |  |  |
| 9 | SBI (21.03.2012) (Add Cap 2013-14) |  |  |
|  | Gross loan opening | 0.00 | 0.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 0.00 |
|  | Additions during the year | 0.00 | 234.82 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 0.00 | 234.82 |
|  | Average Loan | 0.00 | 117.41 |
|  | Rate of Interest | 10.29\% | 10.29\% |
|  | Interest | 0.00 | 12.08 |
|  | Rep Schedule | $\begin{gathered} 22 \text { annual instalments from } \\ 31.8 .2016 \\ \hline \end{gathered}$ |  |
|  |  |  |  |
| 10 | BOND XXXI |  |  |
|  | Gross loan opening | 90.00 | 90.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 90.00 | 90.00 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 7.50 |
|  | Net Loan-Closing | 90.00 | 82.50 |
|  | Average Loan | 90.00 | 86.25 |
|  | Rate of Interest | 8.90\% | 8.90\% |
|  | Interest | 8.01 | 7.68 |
|  | Rep Schedule | 12 Annual instalments from 25.2.2014 |  |


| 11 | BOND XXXIV |  |  |
| :---: | :---: | :---: | :---: |
|  | Gross loan opening | 956.15 | 956.15 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 956.15 | 956.15 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 956.15 | 956.15 |
|  | Average Loan | 956.15 | 956.15 |
|  | Rate of Interest | 8.84\% | 8.84\% |
|  | Interest | 84.52 | 84.52 |
|  | Rep Schedule | 12 Annual instalments from 21.10.2014 |  |
| 12 | BOND XXXVI (Add Cap 2012-13) |  |  |
| 12 | Gross loan opening | 0.00 | 409.44 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 409.44 |
|  | Additions during the year | 409.44 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 409.44 | 409.44 |
|  | Average Loan | 204.72 | 409.44 |
|  | Rate of Interest | 9.35\% | 9.35\% |
|  | Interest | 19.14 | 38.28 |
|  | Rep Schedule | 15 Annual instalments from 29.8.2016 |  |
|  |  |  |  |
|  | Total Loan |  |  |
|  | Gross loan opening | 2180.70 | 2644.14 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 5.00 |
|  | Net Loan-Opening | 2180.70 | 2639.14 |
|  | Additions during the year | 463.44 | 234.82 |
|  | Repayment during the year | 5.00 | 22.50 |
|  | Net Loan-Closing | 2639.14 | 2851.46 |
|  | Average Loan | 2409.92 | 2745.30 |
|  | Weighted Average Rate of Interest | 9.0036\% | 9.0871\% |
|  | Interest | 216.98 | 249.47 |

## Annexure-XI

(₹ in lakh)
CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN (ASSET-H)


| 4 | Bond XXXII |  |  |
| :---: | :---: | :---: | :---: |
|  | Gross loan opening | 20.00 | 20.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 20.00 | 20.00 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 1.67 |
|  | Net Loan-Closing | 20.00 | 18.33 |
|  | Average Loan | 20.00 | 19.17 |
|  | Rate of Interest | 8.84\% | 8.84\% |
|  | Interest | 1.77 | 1.69 |
|  | Rep Schedule | 12 Annual instalments from 27.3.2014 |  |
|  |  |  |  |
| 5 | Bond XXXV (Add Cap 2012-13) |  |  |
|  | Gross loan opening | 0.00 | 310.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 310.00 |
|  | Additions during the year | 310.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 310.00 | 310.00 |
|  | Average Loan | 155.00 | 310.00 |
|  | Rate of Interest | 9.64\% | 9.64\% |
|  | Interest | 14.94 | 29.88 |
|  | Rep Schedule | 12 Annual instalments from 31.5.2015 |  |
|  |  |  |  |
| 6 | SBI (21.03.2012) (Add Cap 2013-14) |  |  |
|  | Gross loan opening | 0.00 | 0.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 0.00 |
|  | Additions during the year | 0.00 | 165.30 |
|  | Repayment during the year | 0.00 | 0.00 |
|  | Net Loan-Closing | 0.00 | 165.30 |
|  | Average Loan | 0.00 | 82.65 |
|  | Rate of Interest | 10.29\% | 10.29\% |
|  | Interest | 0.00 | 8.50 |
|  | Rep Schedule | 22 annual instalments from31.8 .2016 |  |
|  |  |  |  |
| 7 | Bond XXVIII |  |  |
|  | Gross loan opening | 340.00 | 340.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 28.33 |
|  | Net Loan-Opening | 340.00 | 311.67 |
|  | Additions during the year | 0.00 | 0.00 |



|  |  | 21.10 .2014 |  |
| :--- | :--- | ---: | ---: |
|  |  |  |  |
| $\mathbf{1 1}$ | BOND XXXVI (Add Cap 2012-13) |  |  |
|  | Gross loan opening | 0.00 | $\mathbf{5 0 . 0 0}$ |
|  | Cumulative Repayment upto | 0.00 | $\mathbf{0 . 0 0}$ |
|  | COD/previous year |  | 50.00 |
|  | Net Loan-Opening | 0.00 | 0.00 |
|  | Additions during the year | 50.00 | 0.00 |
|  | Repayment during the year | 50.00 | 50.00 |
|  | Net Loan-Closing | 25.00 | 50.00 |
|  | Average Loan | $9.35 \%$ | $9.35 \%$ |
|  | Rate of Interest | 2.34 | 4.68 |
|  | Interest | 15 Annual instalments from |  |
|  | Rep Schedule | 29.8 .2016 |  |
|  |  |  |  |
|  | Total Loan | 2686.12 | 3079.20 |
|  | Gross loan opening | 0.00 | 32.50 |
|  | Cumulative Repayment upto | 2686.12 | 3046.70 |
|  | COD/previous year | 393.08 | 165.30 |
|  | Net Loan-Opening | 32.50 | 59.17 |
|  | Additions during the year | 3046.70 | 3152.83 |
|  | Repayment during the year | 2866.41 | 3099.77 |
|  | Net Loan-Closing | $\mathbf{8 . 9 2 9 5 \%}$ | $\mathbf{9 . 0 0 0 6 \%}$ |
|  | Average Loan | 255.96 | 279.00 |
|  | Weighted Average Rate of Interest |  |  |

## Annexure-XII

( $₹$ in lakh)

| CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN (ASSET-I) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Details of Loan | 2011-12 | 2012-13 | 2013-14 |
| 1 | Bond XXVIII |  |  |  |
|  | Gross loan opening | 8.00 | 8.00 | 8.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.67 |
|  | Net Loan-Opening | 8.00 | 8.00 | 7.33 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.67 | 0.67 |
|  | Net Loan-Closing | 8.00 | 7.33 | 6.67 |
|  | Average Loan | 8.00 | 7.67 | 7.00 |
|  | Rate of Interest | 9.33\% | 9.33\% | 9.33\% |
|  | Interest | 0.75 | 0.72 | 0.65 |
|  | Rep Schedule | 12 Annual | alments from | 2012 |
|  |  |  |  |  |
| 2 | BOND XXIX |  |  |  |
|  | Gross loan opening | 19.00 | 19.00 | 19.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 1.58 |
|  | Net Loan-Opening | 19.00 | 19.00 | 17.42 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 1.58 | 1.58 |
|  | Net Loan-Closing | 19.00 | 17.42 | 15.83 |
|  | Average Loan | 19.00 | 18.21 | 16.63 |
|  | Rate of Interest | 9.20\% | 9.20\% | 9.20\% |
|  | Interest | 1.75 | 1.68 | 1.53 |
|  | Rep Schedule | 12 Annua | alments from | 013 |
|  |  |  |  |  |
| 3 | BOND XXX |  |  |  |
|  | Gross loan opening | 105.00 | 105.00 | 105.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 105.00 | 105.00 | 105.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 8.75 |
|  | Net Loan-Closing | 105.00 | 105.00 | 96.25 |
|  | Average Loan | 105.00 | 105.00 | 100.63 |
|  | Rate of Interest | 8.80\% | 8.80\% | 8.80\% |
|  | Interest | 9.24 | 9.24 | 8.86 |
|  | Rep Schedule | 12 Annua | talments from | 013 |
|  |  |  |  |  |
| 4 | Bond XXXI |  |  |  |
|  | Gross loan opening | 58.00 | 58.00 | 58.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |


|  | Net Loan-Opening | 58.00 | 58.00 | 58.00 |
| :---: | :---: | :---: | :---: | :---: |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 4.83 |
|  | Net Loan-Closing | 58.00 | 58.00 | 53.17 |
|  | Average Loan | 58.00 | 58.00 | 55.58 |
|  | Rate of Interest | 8.90\% | 8.90\% | 8.90\% |
|  | Interest | 5.16 | 5.16 | 4.95 |
|  | Rep Schedule | 12 Annual instalments from 25.2.2014 |  |  |
| 5 |  |  |  |  |
|  | Bond XXXIII |  |  |  |
|  | Gross loan opening | 117.00 | 117.00 | 117.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 117.00 | 117.00 | 117.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 117.00 | 117.00 | 117.00 |
|  | Average Loan | 117.00 | 117.00 | 117.00 |
|  | Rate of Interest | 8.64\% | 8.64\% | 8.64\% |
|  | Interest | 10.11 | 10.11 | 10.11 |
|  | Rep Schedule | 12 Annual instalments from 8.7.2014 |  |  |
|  |  |  |  |  |
| 6 | Bond XXXII |  |  |  |
|  | Gross loan opening | 7.00 | 7.00 | 7.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 7.00 | 7.00 | 7.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.58 |
|  | Net Loan-Closing | 7.00 | 7.00 | 6.42 |
|  | Average Loan | 7.00 | 7.00 | 6.71 |
|  | Rate of Interest | 8.84\% | 8.84\% | 8.84\% |
|  | Interest | 0.62 | 0.62 | 0.59 |
|  | Rep Schedule | 12 Annual instalments from 27.3.2014 |  |  |
|  |  |  |  |  |
| 7 | Bond XXXIV |  |  |  |
|  | Gross loan opening | 200.00 | 200.00 | 200.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 200.00 | 200.00 | 200.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 200.00 | 200.00 | 200.00 |
|  | Average Loan | 200.00 | 200.00 | 200.00 |
|  | Rate of Interest | 8.84\% | 8.84\% | 8.84\% |
|  | Interest | 17.68 | 17.68 | 17.68 |
|  | Rep Schedule | 12 Annual instalments from 21.10.2014 |  |  |
|  |  |  |  |  |



|  | Rate of Interest | 9.35\% | 9.35\% | 9.35\% |
| :---: | :---: | :---: | :---: | :---: |
|  | Interest | 21.54 | 21.54 | 21.54 |
|  | Rep Schedule | 15 Annual instalments from 29.8.2016 |  |  |
| 12 | SBI (21.03.2012) (Add Cap 2013-14) |  |  |  |
|  | Gross loan opening | 0.00 | 0.00 | 0.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 0.00 | 0.00 |
|  | Additions during the year | 0.00 | 0.00 | 102.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 0.00 | 0.00 | 102.00 |
|  | Average Loan | 0.00 | 0.00 | 51.00 |
|  | Rate of Interest | 10.29\% | 10.29\% | 10.29\% |
|  | Interest | 0.00 | 0.00 | 5.25 |
|  | Rep Schedule | 22 annual instalments from 31.8.2016 |  |  |
|  |  |  |  |  |
| 13 | Bond XXXVIII (Add Cap 2012-13) |  |  |  |
|  | Gross loan opening | 0.00 | 0.00 | 44.64 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 0.00 | 44.64 |
|  | Additions during the year | 0.00 | 44.64 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 0.00 | 44.64 | 44.64 |
|  | Average Loan | 0.00 | 22.32 | 44.64 |
|  | Rate of Interest | 9.25\% | 9.25\% | 9.25\% |
|  | Interest | 0.00 | 2.06 | 4.13 |
|  | Rep Schedule | Bullet payment on 9.3.2027 |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | Total Loan |  |  |  |
|  | Gross loan opening | 844.33 | 937.23 | 1008.86 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 2.25 |
|  | Net Loan-Opening | 844.33 | 937.23 | 1006.61 |
|  | Additions during the year | 92.90 | 71.63 | 102.00 |
|  | Repayment during the year | 0.00 | 2.25 | 16.42 |
|  | Net Loan-Closing | 937.23 | 1006.61 | 1092.19 |
|  | Average Loan | 890.78 | 971.92 | 1049.40 |
|  | Weighted Average Rate of Interest | 9.0733\% | 9.0942\% | 9.1604\% |
|  | Interest | 80.82 | 88.39 | 96.13 |


| CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN (ASSET J) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Details of Loan | 2011-12 | 2012-13 | 2013-14 |
| 1 Bond XXVIII |  |  |  |  |
|  | Gross loan opening | 8.00 | 8.00 | 8.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.67 |
|  | Net Loan-Opening | 8.00 | 8.00 | 7.33 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.67 | 0.67 |
|  | Net Loan-Closing | 8.00 | 7.33 | 6.67 |
|  | Average Loan | 8.00 | 7.67 | 7.00 |
|  | Rate of Interest | 9.33\% | 9.33\% | 9.33\% |
|  | Interest | 0.75 | 0.72 | 0.65 |
|  | Rep Schedule | 12 Annual instalments from 15.12.2012 |  |  |
|  |  |  |  |  |
| 2 BOND XXIX |  |  |  |  |
|  | Gross loan opening | 19.00 | 19.00 | 19.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 1.58 |
|  | Net Loan-Opening | 19.00 | 19.00 | 17.42 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 1.58 | 1.58 |
|  | Net Loan-Closing | 19.00 | 17.42 | 15.83 |
|  | Average Loan | 19.00 | 18.21 | 16.63 |
|  | Rate of Interest | 9.20\% | 9.20\% | 9.20\% |
|  | Interest | 1.75 | 1.68 | 1.53 |
|  | Rep Schedule | 12 Annual instalments from 12.3.2013 |  |  |
|  |  |  |  |  |
| 3 BOND XXX |  |  |  |  |
|  | Gross loan opening | 55.00 | 55.00 | 55.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 55.00 | 55.00 | 55.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 4.58 |
|  | Net Loan-Closing | 55.00 | 55.00 | 50.42 |
|  | Average Loan | 55.00 | 55.00 | 52.71 |
|  | Rate of Interest | 8.80\% | 8.80\% | 8.80\% |
|  | Interest | 4.84 | 4.84 | 4.64 |
|  | Rep Schedule | 12 Annual instalments from 29.9.2013 |  |  |
|  |  |  |  |  |
| 4 | Bond XXXI |  |  |  |
|  | Gross loan opening | 40.00 | 40.00 | 40.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 40.00 | 40.00 | 40.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 3.33 |
|  | Net Loan-Closing | 40.00 | 40.00 | 36.67 |


|  | Average Loan | 40.00 | 40.00 | 38.33 |
| :---: | :---: | :---: | :---: | :---: |
|  | Rate of Interest | 8.90\% | 8.90\% | 8.90\% |
|  | Interest | 3.56 | 3.56 | 3.41 |
|  | Rep Schedule | 12 Annual instalments from 25.2.2014 |  |  |
| 5 | Bond XXXIII |  |  |  |
|  | Gross loan opening | 117.00 | 117.00 | 117.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 117.00 | 117.00 | 117.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 117.00 | 117.00 | 117.00 |
|  | Average Loan | 117.00 | 117.00 | 117.00 |
|  | Rate of Interest | 8.64\% | 8.64\% | 8.64\% |
|  | Interest | 10.11 | 10.11 | 10.11 |
|  | Rep Schedule | 12 Annual instalments from 8.7.2014 |  |  |
|  |  |  |  |  |
| 6 | Bond XXXII |  |  |  |
|  | Gross loan opening | 7.00 | 7.00 | 7.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 7.00 | 7.00 | 7.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.58 |
|  | Net Loan-Closing | 7.00 | 7.00 | 6.42 |
|  | Average Loan | 7.00 | 7.00 | 6.71 |
|  | Rate of Interest | 8.84\% | 8.84\% | 8.84\% |
|  | Interest | 0.62 | 0.62 | 0.59 |
|  | Rep Schedule | 12 Annual instalments from 27.3.2014 |  |  |
|  |  |  |  |  |
| 7 | Bond XXXIV |  |  |  |
|  | Gross loan opening | 200.00 | 200.00 | 200.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 200.00 | 200.00 | 200.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 200.00 | 200.00 | 200.00 |
|  | Average Loan | 200.00 | 200.00 | 200.00 |
|  | Rate of Interest | 8.84\% | 8.84\% | 8.84\% |
|  | Interest | 17.68 | 17.68 | 17.68 |
|  | Rep Schedule | 12 Annual instalments from 21.10.2014 |  |  |
|  |  |  |  |  |
| 8 | Bond XXXV |  |  |  |
|  | Gross loan opening | 180.89 | 180.89 | 180.89 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 180.89 | 180.89 | 180.89 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 180.89 | 180.89 | 180.89 |


|  | Average Loan | 180.89 | 180.89 | 180.89 |
| :---: | :---: | :---: | :---: | :---: |
|  | Rate of Interest | 9.64\% | 9.64\% | 9.64\% |
|  | Interest | 17.44 | 17.44 | 17.44 |
|  | Rep Schedule | 12 Annual instalments from 31.5.2015 |  |  |
| $9$ |  |  |  |  |
|  | Bond XXXVI (Add Cap 2011-12) |  |  |  |
|  | Gross loan opening | 0.00 | 155.69 | 155.69 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 155.69 | 155.69 |
|  | Additions during the year | 155.69 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 155.69 | 155.69 | 155.69 |
|  | Average Loan | 77.85 | 155.69 | 155.69 |
|  | Rate of Interest | 9.35\% | 9.35\% | 9.35\% |
|  | Interest | 7.28 | 14.56 | 14.56 |
|  | Rep Schedule | 15 Annual instalments from 29.8.2016 |  |  |
|  |  |  |  |  |
| 10 | Bond XXXVI (Add Cap 2012-13) |  |  |  |
|  | Gross loan opening | 0.00 | 0.00 | 46.88 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 0.00 | 46.88 |
|  | Additions during the year | 0.00 | 46.88 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 0.00 | 46.88 | 46.88 |
|  | Average Loan | 0.00 | 23.44 | 46.88 |
|  | Rate of Interest | 9.35\% | 9.35\% | 9.35\% |
|  | Interest | 0.00 | 2.19 | 4.38 |
|  | Rep Schedule | 15 Annual instalments from 29.8.2016 |  |  |
|  |  |  |  |  |
| 11 | Bond XXXVI |  |  |  |
|  | Gross loan opening | 141.28 | 141.28 | 141.28 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 141.28 | 141.28 | 141.28 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 141.28 | 141.28 | 141.28 |
|  | Average Loan | 141.28 | 141.28 | 141.28 |
|  | Rate of Interest | 9.35\% | 9.35\% | 9.35\% |
|  | Interest | 13.21 | 13.21 | 13.21 |
|  | Rep Schedule | 15 Annual instalments from 29.8.2016 |  |  |
|  |  |  |  |  |
| 12 | SBI (21.03.2012) (Add Cap 2013-14) |  |  |  |
|  | Gross loan opening | 0.00 | 0.00 | 0.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 0.00 | 0.00 |
|  | Additions during the year | 0.00 | 0.00 | 105.57 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 0.00 | 0.00 | 105.57 |


|  | Average Loan | 0.00 | 0.00 | 52.79 |
| :--- | :--- | ---: | ---: | ---: |
|  | Rate of Interest | $10.29 \%$ | $10.29 \%$ | $10.29 \%$ |
|  | Interest | 0.00 | 0.00 | 5.43 |
|  | Rep Schedule | 22 annual instalments from | 31.8 .2016 |  |
|  |  |  |  |  |
| $\mathbf{1 3}$ | Bond XXXVII (Add Cap 2012-13) |  |  |  |
|  | Gross loan opening | 0.00 | $\mathbf{0 . 0 0}$ | $\mathbf{2 1 . 1 7}$ |
|  | Cumulative Repayment upto COD/previous year | 0.00 | $\mathbf{0 . 0 0}$ | $\mathbf{0 . 0 0}$ |
|  | Net Loan-Opening | 0.00 | 0.00 | 21.17 |
|  | Additions during the year | 0.00 | 21.17 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 0.00 | 21.17 | 21.17 |
|  | Average Loan | 0.00 | 10.59 | 21.17 |
|  | Rate of Interest | $9.25 \%$ | $9.25 \%$ | $9.25 \%$ |
|  | Interest | 0.00 | 0.98 | 1.96 |
|  | Rep Schedule | 12 Annual instalments from | 26.12 .2015 |  |
|  |  |  |  |  |
|  | Total Loan | 768.17 | 923.86 | 991.91 |
|  | Gross loan opening | 0.00 | 0.00 | 2.25 |
|  | Cumulative Repayment upto COD/previous year | 768.17 | 923.86 | 989.66 |
|  | Net Loan-Opening | 155.69 | 68.05 | 105.57 |
|  | Additions during the year | 0.00 | 2.25 | 10.75 |
|  | Repayment during the year | 923.86 | 989.66 | 1084.48 |
|  | Net Loan-Closing | 846.02 | 956.76 | 1037.07 |
|  | Average Loan | $\mathbf{9 . 1 2 8 4 \%}$ | $\mathbf{9 . 1 5 3 1 \%}$ | $\mathbf{9 . 2 1 7 5 \%}$ |
|  | Weighted Average Rate of Interest | 77.23 | 87.57 | 95.59 |
|  | Interest |  |  |  |


| CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN (ASSET-K) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Details of Loan | 2011-12 | 2012-13 | 2013-14 |
| 1 Bond XXVIII |  |  |  |  |
|  | Gross loan opening | 700.00 | 700.00 | 700.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 58.33 |
|  | Net Loan-Opening | 700.00 | 700.00 | 641.67 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 58.33 | 58.33 |
|  | Net Loan-Closing | 700.00 | 641.67 | 583.33 |
|  | Average Loan | 700.00 | 670.83 | 612.50 |
|  | Rate of Interest | 9.33\% | 9.33\% | 9.33\% |
|  | Interest | 65.31 | 62.59 | 57.15 |
|  | Rep Schedule | 12 Annual instalments from 15.12.2012 |  |  |
|  |  |  |  |  |
| 2 | BOND XXX |  |  |  |
|  | Gross loan opening | 300.00 | 300.00 | 300.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 300.00 | 300.00 | 300.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 25.00 |
|  | Net Loan-Closing | 300.00 | 300.00 | 275.00 |
|  | Average Loan | 300.00 | 300.00 | 287.50 |
|  | Rate of Interest | 8.80\% | 8.80\% | 8.80\% |
|  | Interest | 26.40 | 26.40 | 25.30 |
|  | Rep Schedule | 12 Annual instalments from 29.9.2013 |  |  |
|  |  |  |  |  |
| 3 | Bond XXXI |  |  |  |
|  | Gross loan opening | 300.00 | 300.00 | 300.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 300.00 | 300.00 | 300.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 25.00 |
|  | Net Loan-Closing | 300.00 | 300.00 | 275.00 |
|  | Average Loan | 300.00 | 300.00 | 287.50 |
|  | Rate of Interest | 8.90\% | 8.90\% | 8.90\% |
|  | Interest | 26.70 | 26.70 | 25.59 |
|  | Rep Schedule | 12 Annual instalments from 25.2.2014 |  |  |
|  |  |  |  |  |
| 4 | Bond XXXII |  |  |  |
|  | Gross loan opening | 17.00 | 17.00 | 17.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 17.00 | 17.00 | 17.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 1.42 |
|  | Net Loan-Closing | 17.00 | 17.00 | 15.58 |



|  | Average Loan | 0.00 | 0.00 | 46.02 |
| :--- | :--- | ---: | ---: | ---: |
|  | Rate of Interest | $10.29 \%$ | $10.29 \%$ | $10.29 \%$ |
|  | Interest | 0.00 | 0.00 | 4.74 |
|  | Rep Schedule |  |  |  |
|  |  |  |  |  |
| $\mathbf{9}$ | Bond XL (AddCap for 2012-13) |  |  |  |
|  | Gross loan opening | 0.00 | $\mathbf{0 . 0 0}$ | $\mathbf{2 7 9 . 9 4}$ |
|  | Cumulative Repayment upto COD/previous year | 0.00 | $\mathbf{0 . 0 0}$ | $\mathbf{0 . 0 0}$ |
|  | Net Loan-Opening | 0.00 | 0.00 | 279.94 |
|  | Additions during the year | 0.00 | 279.94 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 0.00 | 279.94 | 279.94 |
|  | Average Loan | 0.00 | 139.97 | 279.94 |
|  | Rate of Interest | $9.3000 \%$ | $9.30 \%$ | $9.30 \%$ |
|  | Interest | 0.00 | 13.02 | 26.03 |
|  | Rep Schedule | 12 Annual instalments from | 28.6 .2016 |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | Total Loan |  |  |  |
|  | Gross loan opening | 2003.07 | 2159.86 | 2439.80 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 58.33 |
|  | Net Loan-Opening | 2003.07 | 2159.86 | 2381.47 |
|  | Additions during the year | 156.79 | 279.94 | 92.04 |
|  | Repayment during the year | 0.00 | 58.33 | 109.75 |
|  | Net Loan-Closing | 2159.86 | 2381.47 | 2363.76 |
|  | Average Loan | 2081.47 | 2270.66 | 2372.61 |
|  | Weighted Average Rate of Interest | $\mathbf{9 . 2 4 8 8 \%}$ | $\mathbf{9 . 2 5 4 4 \%}$ | $\mathbf{9 . 2 7 9 7 \%}$ |
|  | Interest | 192.51 | 210.14 | 220.17 |

( $₹$ in lakh)



|  | Average Loan | 400.00 | 400.00 | 400.00 |
| :---: | :---: | :---: | :---: | :---: |
|  | Rate of Interest | 9.35\% | 9.35\% | 9.35\% |
|  | Interest | 37.40 | 37.40 | 37.40 |
|  | Rep Schedule | 15 Annual instalments from 29.8.2016 |  |  |
| $9$ |  |  |  |  |
|  | SBI (21.03.2012) (Add Cap 2013-14) |  |  |  |
|  | Gross loan opening | 0.00 | 0.00 | 0.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 0.00 | 0.00 |
|  | Additions during the year | 0.00 | 0.00 | 770.28 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 0.00 | 0.00 | 770.28 |
|  | Average Loan | 0.00 | 0.00 | 385.14 |
|  | Rate of Interest | 10.29\% | 10.29\% | 10.29\% |
|  | Interest | 0.00 | 0.00 | 39.63 |
|  | Rep Schedule | 22 annual instalments from 31.8.2016 |  |  |
|  |  |  |  |  |
| 10 | Bond XL (AddCap for 2012-13) |  |  |  |
|  | Gross loan opening | 0.00 | 0.00 | 475.85 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 0.00 | 475.85 |
|  | Additions during the year | 0.00 | 475.85 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 0.00 | 475.85 | 475.85 |
|  | Average Loan | 0.00 | 237.93 | 475.85 |
|  | Rate of Interest | 9.3000\% | 9.30\% | 9.30\% |
|  | Interest | 0.00 | 22.13 | 44.25 |
|  | Rep Schedule | 12 Annual instalments from 28.6.2016 |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | Total Loan |  |  |  |
|  | Gross loan opening | 36045.04 | 36900.38 | 37376.23 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 2333.33 |
|  | Net Loan-Opening | 36045.04 | 36900.38 | 35042.90 |
|  | Additions during the year | 855.34 | 475.85 | 770.28 |
|  | Repayment during the year | 0.00 | 2333.33 | 2714.75 |
|  | Net Loan-Closing | 36900.38 | 35042.90 | 33098.43 |
|  | Average Loan | 36472.71 | 35971.64 | 34070.66 |
|  | Weighted Average Rate of Interest | 9.2571\% | 9.2561\% | 9.2655\% |
|  | Interest | 3376.30 | 3329.56 | 3156.81 |

(₹ in lakh)
CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN (ASSET-M)

|  | Details of Loan | $\mathbf{2 0 1 1 - 1 2}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| :--- | :--- | ---: | ---: | ---: |
|  |  |  |  |  |
| $\mathbf{1}$ | Bond XXXIII |  |  |  |
|  | Gross loan opening | 1000.00 | $\mathbf{1 0 0 0 . 0 0}$ | $\mathbf{1 0 0 0 . 0 0}$ |
|  | Cumulative Repayment upto COD/previous year | 0.00 | $\mathbf{0 . 0 0}$ | $\mathbf{0 . 0 0}$ |
|  | Net Loan-Opening | 1000.00 | 1000.00 | 1000.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 1000.00 | 1000.00 | 1000.00 |
|  | Average Loan | 1000.00 | 1000.00 | 1000.00 |
|  | Rate of Interest | $8.64 \%$ | $8.64 \%$ | $8.64 \%$ |
|  | Interest | 86.40 | 86.40 | 86.40 |
|  | Rep Schedule | 12 Annual instalments from | 8.7 .2014 |  |
|  |  |  |  |  |
| $\mathbf{2}$ | Bond XXXIV |  |  |  |
|  | Gross loan opening | 6193.00 | $\mathbf{6 1 9 3 . 0 0}$ | $\mathbf{6 1 9 3 . 0 0}$ |
|  | Cumulative Repayment upto COD/previous year | 0.00 | $\mathbf{0 . 0 0}$ | $\mathbf{0 . 0 0}$ |
|  | Net Loan-Opening | 6193.00 | 6193.00 | 6193.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 6193.00 | 6193.00 | 6193.00 |
|  | Average Loan | 6193.00 | 6193.00 | 6193.00 |
|  | Rate of Interest | $8.84 \%$ | $8.84 \%$ | $8.84 \%$ |
|  | Interest | 547.46 | 547.46 | 547.46 |
|  | Rep Schedule | 12 Annual instalments from | 21.10 .2014 |  |
|  |  |  |  |  |
| $\mathbf{3}$ | Bond XXXV |  |  |  |
|  | Gross loan opening | 1507.18 | $\mathbf{1 5 0 7 . 1 8}$ | $\mathbf{1 5 0 7 . 1 8}$ |
|  | Cumulative Repayment upto COD/previous year | 0.00 | $\mathbf{0 . 0 0}$ | $\mathbf{0 . 0 0}$ |
|  | Net Loan-Opening | 1507.18 | 1507.18 | 1507.18 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 1507.18 | 1507.18 | 1507.18 |
|  | Average Loan | 1507.18 | 1507.18 | 1507.18 |
|  | Rate of Interest | $9.64 \%$ | $9.64 \%$ | $9.64 \%$ |
|  | Interest | 145.29 | 145.29 | 145.29 |
|  | Rep Schedule | $\mathbf{1 2}$ | Annual instalments from | 31.5 .2015 |
|  |  |  |  |  |
| $\mathbf{4}$ | Bond XXXVI (Add Cap 2011-12) | 0.00 | $\mathbf{1 3 6 . 5 1}$ | $\mathbf{1 3 6 . 5 1}$ |
|  | Gross loan opening | 0.00 | $\mathbf{0 . 0 0}$ | $\mathbf{0 . 0 0}$ |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 136.51 | 136.51 |
|  | Net Loan-Opening | 0.00 | 0.00 | 0.00 |
|  | Additions during the year | 0.00 | 0.00 |  |
|  | Repayment during the year |  |  |  |
|  |  |  |  |  |


(₹ in lakh)


|  | Average Loan | 2000.00 | 2000.00 | 2000.00 |
| :---: | :---: | :---: | :---: | :---: |
|  | Rate of Interest | 8.64\% | 8.64\% | 8.64\% |
|  | Interest | 172.80 | 172.80 | 172.80 |
|  | Rep Schedule | 12 Annual instalments from |  | 8.7.2014 |
| 5 | Bond XXXII |  |  |  |
|  | Gross loan opening | 600.00 | 600.00 | 600.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 600.00 | 600.00 | 600.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 50.00 |
|  | Net Loan-Closing | 600.00 | 600.00 | 550.00 |
|  | Average Loan | 600.00 | 600.00 | 575.00 |
|  | Rate of Interest | 8.84\% | 8.84\% | 8.84\% |
|  | Interest | 53.04 | 53.04 | 50.83 |
|  | Rep Schedule | 12 Annual instalments from 27.3.2014 |  |  |
|  |  |  |  |  |
| 6 | Bond XXXIV |  |  |  |
|  | Gross loan opening | 2994.00 | 2994.00 | 2994.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 2994.00 | 2994.00 | 2994.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 2994.00 | 2994.00 | 2994.00 |
|  | Average Loan | 2994.00 | 2994.00 | 2994.00 |
|  | Rate of Interest | 8.84\% | 8.84\% | 8.84\% |
|  | Interest | 264.67 | 264.67 | 264.67 |
|  | Rep Schedule | 12 Annual instalments from 21.10.2014 |  |  |
|  |  |  |  |  |
| 7 | Bond XXXV |  |  |  |
|  | Gross loan opening | 380.29 | 380.29 | 380.29 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 380.29 | 380.29 | 380.29 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 380.29 | 380.29 | 380.29 |
|  | Average Loan | 380.29 | 380.29 | 380.29 |
|  | Rate of Interest | 9.64\% | 9.64\% | 9.64\% |
|  | Interest | 36.66 | 36.66 | 36.66 |
|  | Rep Schedule | 12 Annual instalments from 31.5.2015 |  |  |
|  |  |  |  |  |
| 8 | Bond XXXVI (Add Cap 2011-12) |  |  |  |
|  | Gross loan opening | 0.00 | 194.60 | 194.60 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 194.60 | 194.60 |
|  | Additions during the year | 194.60 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 194.60 | 194.60 | 194.60 |


|  | Average Loan | 97.30 | 194.60 | 194.60 |
| :---: | :---: | :---: | :---: | :---: |
|  | Rate of Interest | 9.35\% | 9.35\% | 9.35\% |
|  | Interest | 9.10 | 18.20 | 18.20 |
|  | Rep Schedule | 15 Annual instalments from 29.8.2016 |  |  |
| 9 |  |  |  |  |
|  | SBI (21.03.2012) (Add Cap 2013-14) |  |  |  |
|  | Gross loan opening | 0.00 | 0.00 | 0.00 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 0.00 | 0.00 |
|  | Additions during the year | 0.00 | 0.00 | 398.32 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 0.00 | 0.00 | 398.32 |
|  | Average Loan | 0.00 | 0.00 | 199.16 |
|  | Rate of Interest | 10.29\% | 10.29\% | 10.29\% |
|  | Interest | 0.00 | 0.00 | 20.49 |
|  | Rep Schedule | 22 annual instalments from 31.8.2016 |  |  |
|  |  |  |  |  |
| 10 | Bond XL (AddCap for 2012-13) |  |  |  |
|  | Gross loan opening | 0.00 | 0.00 | 301.18 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 0.00 | 301.18 |
|  | Additions during the year | 0.00 | 301.18 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 0.00 | 301.18 | 301.18 |
|  | Average Loan | 0.00 | 150.59 | 301.18 |
|  | Rate of Interest | 9.3000\% | 9.30\% | 9.30\% |
|  | Interest | 0.00 | 14.00 | 28.01 |
|  | Rep Schedule | 12 Annual instalments from 28.6.2016 |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | Total Loan |  |  |  |
|  | Gross loan opening | 8474.29 | 8668.89 | 8970.07 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 41.67 |
|  | Net Loan-Opening | 8474.29 | 8668.89 | 8928.40 |
|  | Additions during the year | 194.60 | 301.18 | 398.32 |
|  | Repayment during the year | 0.00 | 41.67 | 258.33 |
|  | Net Loan-Closing | 8668.89 | 8928.40 | 9068.39 |
|  | Average Loan | 8571.59 | 8798.65 | 8998.40 |
|  | Weighted Average Rate of Interest | 8.8655\% | 8.8772\% | 8.9138\% |
|  | Interest | 759.92 | 781.08 | 802.10 |

(₹ in lakh)



|  | Net Loan-Closing | 979.09 | 1186.37 | 1366.06 |
| :--- | :--- | ---: | ---: | ---: |
|  | Average Loan | 950.36 | 1082.73 | 1276.22 |
|  | Weighted Average Rate of Interest | $\mathbf{8 . 9 0 1 4 \%}$ | $\mathbf{8 . 9 5 1 5 \%}$ | $\mathbf{9 . 0 8 3 5 \%}$ |
|  | Interest | 84.59 | 96.92 | 115.92 |

Order in Petition No. 185/TT/2016
(₹ in lakh)
CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN (ASSET-P)

|  | Details of Loan | $\mathbf{2 0 1 1 - 1 2}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1}$ | Bond XXXIII |  |  |  |
|  | Gross loan opening | 450.00 | $\mathbf{4 5 0 . 0 0}$ | $\mathbf{4 5 0 . 0 0}$ |
|  | Cumulative Repayment upto COD/previous year | 0.00 | $\mathbf{0 . 0 0}$ | $\mathbf{0 . 0 0}$ |
|  | Net Loan-Opening | 450.00 | 450.00 | 450.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 450.00 | 450.00 | 450.00 |
|  | Average Loan | 450.00 | 450.00 | 450.00 |
|  | Rate of Interest | $8.64 \%$ | $8.64 \%$ | $8.64 \%$ |
|  | Interest | 38.88 | 38.88 | 38.88 |
|  | Rep Schedule | 12 Annual instalments from | 8.7 .2014 |  |
|  |  |  |  |  |
| $\mathbf{2}$ | Bond XXXII |  |  |  |
|  | Gross loan opening | 180.00 | $\mathbf{1 8 0 . 0 0}$ | $\mathbf{1 8 0 . 0 0}$ |
|  | Cumulative Repayment upto COD/previous year | 0.00 | $\mathbf{0 . 0 0}$ | $\mathbf{0 . 0 0}$ |
|  | Net Loan-Opening | 180.00 | 180.00 | 180.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 15.00 |
|  | Net Loan-Closing | 180.00 | 180.00 | 165.00 |
|  | Average Loan | 180.00 | 180.00 | 172.50 |
|  | Rate of Interest | $8.84 \%$ | $8.84 \%$ | $8.84 \%$ |
|  | Interest | 15.91 | 15.91 | 15.25 |
|  | Rep Schedule | 12 Annual instalments from | 27.3 .2014 |  |
|  |  |  |  |  |
| $\mathbf{3}$ | Bond XXXIV |  |  |  |
|  | Gross loan opening | 35.00 | $\mathbf{3 5 . 0 0}$ | $\mathbf{3 5 . 0 0}$ |
|  | Cumulative Repayment upto COD/previous year | 0.00 | $\mathbf{0 . 0 0}$ | $\mathbf{0 . 0 0}$ |
|  | Net Loan-Opening | 35.00 | 35.00 | 35.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 35.00 | 35.00 | 35.00 |
|  | Average Loan | 35.00 | 35.00 | 35.00 |
|  | Rate of Interest | $8.84 \%$ | $8.84 \%$ | $8.84 \%$ |
|  | Interest | 3.09 | 3.09 | 3.09 |
|  | Rep Schedule | 12 |  |  |
|  |  | 138.74 | $\mathbf{1 3 8 . 7 4}$ | $\mathbf{1 3 8 . 7 4}$ |
| $\mathbf{4}$ | Bond XXXV | 0.00 | $\mathbf{0 . 0 0}$ | $\mathbf{0 . 0 0}$ |
|  | Gross loan opening | 138.74 | 138.74 | 138.74 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 0.00 | 0.00 |
|  | Additions during the year | 138.74 | 138.74 | 138.74 |
|  | Repayment during the year |  |  |  |
|  | Net Loan-Closing |  |  |  |
|  |  |  |  |  |



|  | Net Loan-Closing | 832.78 | 839.61 | 978.71 |
| :--- | :--- | ---: | ---: | ---: |
|  | Average Loan | 818.26 | 836.20 | 909.16 |
|  | Weighted Average Rate of Interest | $\mathbf{8 . 8 7 4 7 \%}$ | $\mathbf{8 . 8 8 4 7 \%}$ | $\mathbf{9 . 0 0 5 7 \%}$ |
|  | Interest | 72.62 | 74.29 | 81.88 |

(₹ in lakh)



|  | Net Loan-Closing | 146.76 | 347.22 | 387.49 |
| :--- | :--- | ---: | ---: | ---: |
|  | Average Loan | 132.55 | 246.99 | 367.36 |
|  | Weighted Average Rate of Interest | $\mathbf{8 . 9 8 1 2 \%}$ | $\mathbf{9 . 1 3 1 8 \%}$ | $\mathbf{9 . 2 4 5 1 \%}$ |
|  | Interest | 11.90 | 22.55 | 33.96 |

(₹ in lakh)


| $\mathbf{4}$ | BOND XXXIV |  |  |
| :--- | :--- | ---: | ---: |
|  | Gross loan opening | 30.00 | $\mathbf{3 0 . 0 0}$ |
|  | Cumulative Repayment upto | 0.00 | $\mathbf{0 . 0 0}$ |
|  | COD/previous year |  | 30.00 |
|  | Net Loan-Opening | 0.00 | 30.00 |
|  | Additions during the year | 0.00 | 0.00 |
|  | Repayment during the year | 30.00 | 30.00 |
|  | Net Loan-Closing | 30.00 | 30.00 |
|  | Average Loan | $8.84 \%$ | $8.84 \%$ |
|  | Rate of Interest | 2.65 | 2.65 |
|  | Interest | 12 Annual instalments from |  |
|  | Rep Schedule | 21.10 .2014 |  |
|  |  |  |  |
|  | Total Loan | 477.02 |  |
|  | Gross loan opening | 0.00 | 477.02 |
|  | Cumulative Repayment upto | 477.02 | 0.00 |
|  | COD/previous year | 0.00 | 477.02 |
|  | Net Loan-Opening | 0.00 | 0.00 |
|  | Additions during the year | 477.02 | 4.33 |
|  | Repayment during the year | 477.02 | 472.69 |
|  | Net Loan-Closing | $\mathbf{8 . 8 9 7 9 \%}$ | $\mathbf{8 . 8 9 8 4 \%}$ |
|  | Average Loan | 42.44 | 42.08 |
|  | Weighted Average Rate of Interest |  |  |
|  | Interest |  |  |

## (₹ in lakh)



|  | the year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Net Loan-Closing | 20500.00 | 18450.00 | 16400.00 | 14350.00 | 12300.00 |
|  | Average Loan | 21525.00 | 19475.00 | 17425.00 | 15375.00 | 13325.00 |
|  | Rate of Interest | 8.80\% | 8.80\% | 8.80\% | 8.80\% | 8.80\% |
|  | Interest | 1894.20 | 1713.80 | 1533.40 | 1353.00 | 1172.60 |
|  | Rep Schedule | 12 annual installments from 29.9.2013 |  |  |  |  |
|  |  |  |  |  |  |  |
| 4 | Bond-XXXI |  |  |  |  |  |
|  | Gross loan opening | 17471.00 | 17471.00 | 17471.00 | 17471.00 | 17471.00 |
|  | Cumulative <br> Repayment upto COD/previous year | 1455.92 | 2911.84 | 4367.75 | 5823.67 | 7279.59 |
|  | Net Loan-Opening | 16015.08 | 14559.16 | 13103.25 | 11647.33 | 10191.41 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 1455.92 | 1455.92 | 1455.92 | 1455.92 | 1455.92 |
|  | Net Loan-Closing | 14559.16 | 13103.25 | 11647.33 | 10191.41 | 8735.50 |
|  | Average Loan | 15287.12 | 13831.21 | 12375.29 | 10919.37 | 9463.46 |
|  | Rate of Interest | 8.90\% | 8.90\% | 8.90\% | 8.90\% | 8.90\% |
|  | Interest | 1360.55 | 1230.98 | 1101.40 | 971.82 | 842.25 |
|  | Rep Schedule | 12 annual installments from 25.2.2014 |  |  |  |  |
|  |  |  |  |  |  |  |
| 5 | Bond-XXXII |  |  |  |  |  |
|  | Gross loan opening | 7017.00 | 7017.00 | 7017.00 | 7017.00 | 7017.00 |
|  | Cumulative <br> Repayment upto COD/previous year | 584.75 | 1169.50 | 1754.25 | 2339.00 | 2923.75 |
|  | Net Loan-Opening | 6432.25 | 5847.50 | 5262.75 | 4678.00 | 4093.25 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 584.75 | 584.75 | 584.75 | 584.75 | 584.75 |
|  | Net Loan-Closing | 5847.50 | 5262.75 | 4678.00 | 4093.25 | 3508.50 |
|  | Average Loan | 6139.88 | 5555.13 | 4970.38 | 4385.63 | 3800.88 |
|  | Rate of Interest | 8.84\% | 8.84\% | 8.84\% | 8.84\% | 8.84\% |
|  | Interest | 542.76 | 491.07 | 439.38 | 387.69 | 336.00 |
|  | Rep Schedule | 12 annual installments from 29.3.2014 |  |  |  |  |
|  |  |  |  |  |  |  |
| 6 | Bond-XXXIII |  |  |  |  |  |
|  | Gross loan opening | 23785.00 | 23785.00 | 23785.00 | 23785.00 | 23785.00 |
|  | Cumulative <br> Repayment upto COD/previous year | 0.00 | 1982.08 | 3964.17 | 5946.25 | 7928.33 |
|  | Net Loan-Opening | 23785.00 | 21802.92 | 19820.83 | 17838.75 | 15856.67 |


|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Repayment during the year | 1982.08 | 1982.08 | 1982.08 | 1982.08 | 1982.08 |
|  | Net Loan-Closing | 21802.92 | 19820.83 | 17838.75 | 15856.67 | 13874.58 |
|  | Average Loan | 22793.96 | 20811.88 | 18829.79 | 16847.71 | 14865.63 |
|  | Rate of Interest | 8.64\% | 8.64\% | 8.64\% | 8.64\% | 8.64\% |
|  | Interest | 1969.40 | 1798.15 | 1626.89 | 1455.64 | 1284.39 |
|  | Rep Schedule | 12 annual installments from 8.7.2014 |  |  |  |  |
|  |  |  |  |  |  |  |
| 7 | Bond-XXXIV |  |  |  |  |  |
|  | Gross loan opening | 28169.47 | 28169.47 | 28169.47 | 28169.47 | 28169.47 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 2347.46 | 4694.91 | 7042.37 | 9389.82 |
|  | Net Loan-Opening | 28169.47 | 25822.01 | 23474.56 | 21127.10 | 18779.65 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 2347.46 | 2347.46 | 2347.46 | 2347.46 | 2347.46 |
|  | Net Loan-Closing | 25822.01 | 23474.56 | 21127.10 | 18779.65 | 16432.19 |
|  | Average Loan | 26995.74 | 24648.29 | 22300.83 | 19953.37 | 17605.92 |
|  | Rate of Interest | 8.84\% | 8.84\% | 8.84\% | 8.84\% | 8.84\% |
|  | Interest | 2386.42 | 2178.91 | 1971.39 | 1763.88 | 1556.36 |
|  | Rep Schedule | 12 annual installments from 21.10.2014 |  |  |  |  |
|  |  |  |  |  |  |  |
| 8 | Bond-XXXV |  |  |  |  |  |
|  | Gross loan opening | 12791.07 | 12791.07 | 12791.07 | 12791.07 | 12791.07 |
|  | Cumulative <br> Repayment upto COD/previous year | 0.00 | 0.00 | 1065.92 | 2131.85 | 3197.77 |
|  | Net Loan-Opening | 12791.07 | 12791.07 | 11725.15 | 10659.23 | 9593.30 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 1065.92 | 1065.92 | 1065.92 | 1065.92 |
|  | Net Loan-Closing | 12791.07 | 11725.15 | 10659.23 | 9593.30 | 8527.38 |
|  | Average Loan | 12791.07 | 12258.11 | 11192.19 | 10126.26 | 9060.34 |
|  | Rate of Interest | 9.64\% | 9.64\% | 9.64\% | 9.64\% | 9.64\% |
|  | Interest | 1233.06 | 1181.68 | 1078.93 | 976.17 | 873.42 |
|  | Rep Schedule | 12 annual installments from 31.5.2015 |  |  |  |  |
|  |  |  |  |  |  |  |
| 9 | Bond-XXXVI |  |  |  |  |  |
|  | Gross loan opening | 8314.88 | 8314.88 | 8314.88 | 8314.88 | 8314.88 |
|  | Cumulative Repayment upto | 0.00 | 0.00 | 0.00 | 554.33 | 1108.65 |


|  | COD/previous year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Net Loan-Opening | 8314.88 | 8314.88 | 8314.88 | 7760.55 | 7206.23 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 554.33 | 554.33 | 554.33 |
|  | Net Loan-Closing | 8314.88 | 8314.88 | 7760.55 | 7206.23 | 6651.90 |
|  | Average Loan | 8314.88 | 8314.88 | 8037.72 | 7483.39 | 6929.07 |
|  | Rate of Interest | 9.35\% | 9.35\% | 9.35\% | 9.35\% | 9.35\% |
|  | Interest | 777.44 | 777.44 | 751.53 | 699.70 | 647.87 |
|  | Rep Schedule | 15 annual installments from 29.8.2016 |  |  |  |  |
|  | Bond-XXXVII |  |  |  |  |  |
|  | Gross loan opening | 2570.35 | 2570.35 | 2570.35 | 2570.35 | 2570.35 |
|  | Cumulative <br> Repayment upto COD/previous year | 0.00 | 0.00 | 214.20 | 428.39 | 642.59 |
|  | Net Loan-Opening | 2570.35 | 2570.35 | 2356.15 | 2141.96 | 1927.76 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 214.20 | 214.20 | 214.20 | 214.20 |
|  | Net Loan-Closing | 2570.35 | 2356.15 | 2141.96 | 1927.76 | 1713.57 |
|  | Average Loan | 2570.35 | 2463.25 | 2249.06 | 2034.86 | 1820.66 |
|  | Rate of Interest | 9.25\% | 9.25\% | 9.25\% | 9.25\% | 9.25\% |
|  | Interest | 237.76 | 227.85 | 208.04 | 188.22 | 168.41 |
|  | Rep Schedule | 12 annual installments from 26.12.2015. |  |  |  |  |
| 11 |  |  |  |  |  |  |
|  | Bond-XXXVIII |  |  |  |  |  |
|  | Gross loan opening | 1217.72 | 1217.72 | 1217.72 | 1217.72 | 1217.72 |
|  | Cumulative <br> Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 1217.72 | 1217.72 | 1217.72 | 1217.72 | 1217.72 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 1217.72 | 1217.72 | 1217.72 | 1217.72 | 1217.72 |
|  | Average Loan | 1217.72 | 1217.72 | 1217.72 | 1217.72 | 1217.72 |
|  | Rate of Interest | 9.25\% | 9.25\% | 9.25\% | 9.25\% | 9.25\% |
|  | Interest | 112.64 | 112.64 | 112.64 | 112.64 | 112.64 |
|  | Rep Schedule | Bullet Payment as on 9.3.2027 |  |  |  |  |
|  |  |  |  |  |  |  |
| 12 | Bond-XXXIX |  |  |  |  |  |


|  | Gross loan opening | 978.26 | 978.26 | 978.26 | 978.26 | 978.26 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 978.26 | 978.26 | 978.26 | 978.26 | 978.26 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 978.26 | 978.26 | 978.26 | 978.26 | 978.26 |
|  | Average Loan | 978.26 | 978.26 | 978.26 | 978.26 | 978.26 |
|  | Rate of Interest | 9.40\% | 9.40\% | 9.40\% | 9.40\% | 9.40\% |
|  | Interest | 91.96 | 91.96 | 91.96 | 91.96 | 91.96 |
|  | Rep Schedule | Bullet Payment as on 29.3.2027 |  |  |  |  |
|  |  |  |  |  |  |  |
| 13 | Bond-XL |  |  |  |  |  |
|  | Gross loan opening | 1976.86 | 1976.86 | 1976.86 | 1976.86 | 1976.86 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 | 164.74 | 329.48 |
|  | Net Loan-Opening | 1976.86 | 1976.86 | 1976.86 | 1812.12 | 1647.38 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 164.74 | 164.74 | 164.74 |
|  | Net Loan-Closing | 1976.86 | 1976.86 | 1812.12 | 1647.38 | 1482.65 |
|  | Average Loan | 1976.86 | 1976.86 | 1894.49 | 1729.75 | 1565.01 |
|  | Rate of Interest | 9.30\% | 9.30\% | 9.30\% | 9.30\% | 9.30\% |
|  | Interest | 183.85 | 183.85 | 176.19 | 160.87 | 145.55 |
|  | Rep Schedule | 12 annual installments from 28.6.2016 |  |  |  |  |
|  |  |  |  |  |  |  |
| 14 | Bond-XLVI (Add Cap for 2014-15) |  |  |  |  |  |
|  | Gross loan opening | 0.00 | 470.72 | 470.72 | 470.72 | 470.72 |
|  | Cumulative Repayment upto COD/previous year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 470.72 | 470.72 | 470.72 | 470.72 |
|  | Additions during the year | 470.72 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 470.72 | 470.72 | 470.72 | 470.72 | 470.72 |
|  | Average Loan | 235.36 | 470.72 | 470.72 | 470.72 | 470.72 |
|  | Rate of Interest | 9.30\% | 9.30\% | 9.30\% | 9.30\% | 9.30\% |
|  | Interest | 21.89 | 43.78 | 43.78 | 43.78 | 43.78 |
|  | Rep Schedule | Matured on 4.9.2019, 4.9.2024 and 4.9.2029 equally |  |  |  |  |




