

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO. 551/TT/2014

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

Date of Hearing : 27.01.2016
Date of Order : 07.03.2016

In the Matter of:

Truing up of transmission tariff for 2009-14 tariff block under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 and determination of transmission tariff for 2014-19 tariff block under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2014 for Transmission Assets under "System Strengthening – XI in Southern Regional Grid in Southern Region and Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999

And in the Matter of:

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

.....Petitioner

Versus

1. Karnataka Power Transmission Corporation Limited,
(KPTCL), Kaveri Bhawan, Bangalore – 560009
2. Transmission Corporation of Andhra Pradesh Limited,
(APTRANSCO), Vidyut Soudha,
Hyderabad- 500082
3. Kerala State Electricity Board (KSEB),
Vaidyuthi Bhavanam,
Pattom, Thiruvananthapuram - 695 004
4. Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO),



(Formerly Tamil Nadu Electricity Board - TNEB),
NPKRR Maaligai, 800, Anna Salai,
Chennai - 600 002

5. Electricity Department, Government of Goa,
Vidyuti Bhawan, Panaji, Goa - 403001
6. Electricity Department, Govt. of Pondicherry,
Pondicherry - 605001
7. Eastern Power Distribution Company of Andhra Pradesh Limited,
(APEPDCL) P&T Colony, Seethmmadhara,
Vishakhapatnam, Andhra Pradesh
8. Southern Power Distribution Company of Andhra Pradesh Limited,
(APSPDCL), Srinivasasa Kalyana Mandapam Backside,
Tiruchanoor Road, Kesavayana Gunta,
Tirupati-517 501, Chittoor District, Andhra Pradesh
9. Central Power Distribution Company of Andhra Pradesh Limited,
(APCPDCL), Corporate Office, Mint Compound,
Hyderabad - 500 063, Andhra Pradesh
10. Northern Power Distribution Company of Andhra Pradesh Limited,
(APNPDCL), Opp. NIT Petrol Pump,
Chaitanyapuri, Kazipet, Warangal - 506 004, Andhra Pradesh
11. Bangalore Electricity Supply Company Ltd. (BESCOM),
Corporate Office, KR.Circle
Bangalore - 560001, Karnataka
12. Gulbarga Electricity Supply Company Ltd (GESCOM)
Station Main Road, Gulbarga, Karnataka
13. Hubli Electricity Supply Company Ltd, (HESCOM)
Navanagar, PB Road, Hubli, Karnataka
14. MESCOM Corporate Office,
Paradigm Plaza, AB Shetty Circle,
Mangalore – 575001, Karnataka
15. Chamundeswari Electricity Supply Corporation Ltd.,



(CESC), # 927, L J Avenue, Ground Floor,
New Kantharaj Urs Road, Saraswatipuram,
MYSORE - 570 009, Karnataka

....Respondent(s)

The following were present:

For Petitioner: Shri S.S. Raju, PGCIL
Smt. Sangeeta Edwards, PGCIL
Shri M. M. Mondal, PGCIL
Shri S. C. Taneja, PGCIL
Shri S. K. Venkatesan, PGCIL
Shri Jasbir Singh, PGCIL
Shri Anshul Garg, PGCIL

For Respondents: Shri S. Vallinayagam, Advocate, TANGEDCO
Shri R. Kamrajan, TANGEDCO

ORDER

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

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



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

| Assets | Description | COD |
|---------------|--|------------|
| Asset 1 | LILO of Circuit-II of Udumalpet- Madakathara (North Trichur) 400 kV D/C Line at Chulliar / Palakkad S/S (hereinafter referred to as Asset 1) | 1.3.2012 |
| Asset 2 | LILO of Circuit-I of Udumalpet- Madakathara (North Trichur) 400 kV D/C Line at Chulliar (Palakkad) (hereinafter referred to as Asset 2) | 1.9.2012 |
| Asset 3 | 63 MVAR Bus Reactors at Palakkad (Chulliar) (hereinafter referred to as Asset 3) | 1.6.2012 |
| Asset 4 | 1X315 MVA 400/220 kV ICTs with associated bays and 220 kV Downstream System at Palakkad (Chulliar) (hereinafter referred to as Asset 4) | 1.3.2012 |
| Asset 5 | 1X315 MVA 400/220 kV ICTs with associated bays and equipment at Chulliar (Palakkad) (hereinafter referred to as Asset 5) | 1.4.2012 |

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

a) Investment approval for the project was accorded by Board of Director of POWERGRID vide letter dated 16.3.2009 at an estimated cost of ₹19610 lakh including IDC of ₹1233 lakh.

b) The Commission vide its order dated 31.1.2014 in Petition No. 110/TT/2012 had admitted the following capital cost as on COD:-

| Capital cost admitted as on COD | Amount (₹ in lakh) | Percentage (%) |
|--|---------------------------|-----------------------|
| Asset 1 | | |
| Debt | 3976.01 | 70.00 |
| Equity | 1704.01 | 30.00 |
| Total | 5680.02 | 100.00 |
| Asset 2 | | |
| Debt | 2599.81 | 70.00 |
| Equity | 1114.21 | 30.00 |
| Total | 3714.02 | 100.00 |
| Asset 3 | | |
| Debt | 511.79 | 70.00 |

| Capital cost admitted as on COD | Amount (₹ in lakh) | Percentage (%) |
|---------------------------------|--------------------|----------------|
| Equity | 219.34 | 30.00 |
| Total | 731.12 | 100.00 |
| Asset 4 | | |
| Debt | 1404.28 | 70.00 |
| Equity | 601.83 | 30.00 |
| Total | 2006.11 | 100.00 |
| Asset 5 | | |
| Debt | 1311.74 | 70.00 |
| Equity | 562.18 | 30.00 |
| Total | 1873.92 | 100.00 |

c) The time over-run in case of Assets 1, 2, 4 & 5 was condoned in order dated 31.1.2014 in Petition No. 110/TT/2012. However, in case of Asset 3, out of the total time over-run of 10 months, time over-run of 3 months was not condoned and accordingly IEDC and IDC of ₹61.66 lakh was disallowed.

d) Excess initial spares of ₹34.81 lakh, ₹33.88 lakh, ₹0.33 lakh and ₹14.90 lakh in case of Asset 1, 2, 3 and 4 respectively was disallowed.

e) The following amount of additional capital expenditure was allowed in order dated 31.1.2014 in Petition No. 110/TT/2012 for the 2009-14 tariff period:-

| Assets | Approved add. cap. during 2009-14 (₹ in lakh) | | |
|--------------|---|----------------|----------------|
| | 2011-12 | 2012-13 | 2013-14 |
| Asset 1 | 175.16 | 827.51 | 386.59 |
| Asset2 | - | 815.10 | 284.00 |
| Asset 3 | - | 139.59 | 269.85 |
| Asset 4 | 8.19 | 281.96 | 75.84 |
| Asset 5 | - | 97.44 | 194.91 |
| Total | 183.35 | 2161.60 | 1211.19 |

f) The transmission tariff allowed for the instant assets in order dated 31.1.2014 in Petition No. 110/TT/2012 is depicted below:-

(₹ in lakh)

| Particulars | Asset 1 | | | Asset 2 | |
|-----------------------------|-----------------------|----------------|----------------|-----------------------|---------------|
| | 2011-12 (pro-rata) | 2012-13 | 2013-14 | 2012-13 (pro-rata) | 2013-14 |
| Depreciation | 23.23 | 299.96 | 325.02 | 127.18 | 246.88 |
| Interest on Loan | 30.42 | 384.67 | 395.43 | 148.85 | 270.27 |
| Return on Equity | 25.21 | 328.76 | 360.6 | 126.09 | 244.97 |
| Interest on Working Capital | 2.11 | 27.05 | 28.79 | 13.83 | 25.84 |
| O & M Expenses | 11.2 | 142.02 | 150.13 | 82.84 | 150.13 |
| Total | 92.16 | 1182.47 | 1259.97 | 498.79 | 938.08 |

(₹ in lakh)

| Particulars | Asset 3 | | Asset 4 | | |
|-----------------------------|-----------------------|---------------|-----------------------|---------------|---------------|
| | 2012-13 (pro-rata) | 2013-14 | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| Depreciation | 34.21 | 51.39 | 8.84 | 113.63 | 122.76 |
| Interest on Loan | 41.39 | 58.98 | 10.43 | 129.67 | 130.59 |
| Return on Equity | 35.00 | 52.74 | 8.79 | 113.03 | 122.41 |
| Interest on Working Capital | 5.40 | 7.37 | 1.29 | 16.32 | 17.23 |
| O & M Expenses | 51.60 | 65.46 | 15.13 | 191.94 | 202.92 |
| Total | 167.60 | 235.93 | 44.48 | 564.59 | 595.91 |

(₹ in lakh)

| Asset 5 | | |
|-----------------------------|---------------|---------------|
| Particulars | 2012-13 | 2013-14 |
| Depreciation | 101.52 | 109.23 |
| Interest on Loan | 116.58 | 116.6 |
| Return on Equity | 100.83 | 108.49 |
| Interest on Working Capital | 17.94 | 18.91 |
| O & M Expenses | 191.94 | 202.92 |
| Total | 528.81 | 556.16 |

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



6. In this context, the petitioner has filed the instant petition on 9.12.2014, for revision of tariff for the tariff period 2009-14 in accordance with Regulation 6 of the 2009 Tariff Regulations.

7. The petitioner has served the petition to the respondents and notice of this application has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003 (Act). No comments/objections have been received from the public in response to the notice in newspaper. Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO), Respondent No. 4 i.e. has submitted its reply vide affidavit dated 21.1.2016. The petitioner has submitted its rejoinder to the reply filed by TANGEDCO vide affidavit dated 12.2.2016. The hearing in this matter was held on 27.1.2016.

8. The petitioner was directed, vide letter dated 22.1.2016, to submit reconciliation of capital cost as on COD in petition, Auditor`s Certificate and Tariff Forms for Asset 5, reconciliation of actual additional capital expenditure during 2009-14 tariff period in petition, Auditor`s Certificate and tariff forms for Asset 3, details of the balance/retention payments claimed during 2009-14 tariff period, undertaking providing IDC, IEDC and initial spares discharged on cash basis as on COD and during the tariff period and un-discharged liabilities, if any, and an undertaking/certificate depicting the actual equity infused during the 2009-14 and 2014-19 tariff period. In response, the petitioner filed the information vide affidavit dated 11.2.2016.

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



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

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

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

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

Capital Cost

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

(₹ in lakh)

| Assets | Capital cost |
|---------------|---------------------|
| Asset 1 | 5677.81 |
| Asset 2 | 3711.87 |
| Asset 3 | 731.08 |
| Asset 4 | 2005.56 |
| Asset 5 | 1873.92 |

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

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

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

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

(c) additional capital expenditure determined under regulation 9:

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

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

IDC and IEDC

15. As stated in para 4 above, in order dated 31.1.2014 in Petition No. 110/TT/2012 had condoned the time-over-run in case of Assets 1, 2, 4 & 5. Time over-run of three months in case of Asset 3 was not condoned and accordingly disallowed an IDC and IEDC of ₹21.06 lakh and ₹40.60 lakh respectively.

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

(₹ in lakh)

| Assets | Capital cost claimed | IDC | IEDC | Capital cost after disallowing IDC/IEDC |
|--------------------------------|-----------------------------|--------------|--------------|--|
| Asset 1 | 5714.83 | - | - | 5714.83 |
| Asset 2 | 3747.90 | - | - | 3747.90 |
| Asset 3 | 793.11 | 21.06 | 40.60 | 731.45 |
| Asset 4 | 2021.01 | - | - | 2021.01 |
| Asset 5 | 1873.92 | - | - | 1873.92 |
| Total (Combined Assets) | 14150.77 | 21.06 | 40.60 | 14089.11 |

Treatment of Initial Spares

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

| Assets | Amount (₹ in lakh) |
|---------|-----------------------|
| Asset 1 | 138.90 |
| Asset 2 | 135.17 |
| Asset 3 | 1.38 |
| Asset 4 | 59.46 |
| Asset 5 | - |

18. We have considered the claim of the petitioner for initial spares for the transmission assets. The petitioner has not claimed any initial spares for Asset 5. In case of Asset 3, the initial spares is allowed taking into consideration the IEDC/IDC disallowed for three months. The initial spares worked out for the remaining assets covered in the instant assets are as follows:-

| Asset 1 | | | |
|--|----------------------------|-----------------------|-------------------|
| Particulars | Formula | Amount in (₹ in lakh) | |
| | | Sub Station | Transmission Line |
| Capital cost as on cut off date | (a) | 3409.88 | - |
| Capital Cost after deducting excess IDC | (b) | 3409.88 | - |
| Initial Spares claimed | (c) | 138.90 | - |
| Proportionate Initial Spares claimed after deducting IDC | $(d) = (c)/(a) * (b)$ | 138.90 | - |
| Ceiling limit as per Regulation 8 of 2009 regulations | (e) | 2.50% | - |
| Initial spares worked out | $(f) = ((b-d)*e)/(100%-e)$ | 83.87 | - |
| Excess initial spares claimed | $(g) = (d) - (f)$ | 55.03 | - |

| Asset 2 | | | |
|--|----------------------------|------------------------------|--------------------------|
| Particulars | Formula | Amount in (₹ in lakh) | |
| | | Sub Station | Transmission Line |
| Capital cost as on cut off date | (a) | 912.16 | - |
| Capital Cost after deducting excess IDC | (b) | 912.16 | - |
| Initial Spares claimed | (c) | 135.17 | - |
| Proportionate Initial Spares claimed after deducting IDC | $(d) = (c)/(a) * (b)$ | 135.17 | - |
| Ceiling limit as per Regulation 8 of 2009 regulations | (e) | 2.50% | - |
| Initial spares worked out | $(f) = ((b-d)*e)/(100%-e)$ | 19.92 | - |
| Excess initial spares claimed | $(g)=(d)-(f)$ | 115.25 | - |

| Asset 3 | | | |
|--|----------------------------|------------------------------|--------------------------|
| Particulars | Formula | Amount in (₹ in lakh) | |
| | | Sub Station | Transmission Line |
| Capital cost as on cut off date | (a) | 1101.29 | - |
| Capital Cost after deducting excess IDC | (b) | 1039.63 | - |
| Initial Spares claimed | (c) | 1.31 | - |
| Proportionate Initial Spares claimed after deducting IDC | $(d) = (c)/(a) * (b)$ | 1.24 | - |
| Ceiling limit as per Regulation 8 of 2009 regulations | (e) | 2.50% | - |
| Initial spares worked out | $(f) = ((b-d)*e)/(100%-e)$ | 26.63 | - |
| Excess initial spares claimed | $(g)=(d)-(f)$ | -25.39 | - |

| Asset 4 | | | |
|--|----------------|------------------------------|--------------------------|
| Particulars | Formula | Amount in (₹ in lakh) | |
| | | Sub Station | Transmission Line |
| Capital cost as on cut off date or upto 31.3.2014 whichever is earlier | (a) | 2387.00 | - |

| Asset 4 | | | |
|--|----------------------------|-----------------------|-------------------|
| Particulars | Formula | Amount in (₹ in lakh) | |
| | | Sub Station | Transmission Line |
| Capital Cost after deducting excess IDC | (b) | 2387.00 | - |
| Initial Spares claimed | (c) | 59.46 | - |
| Proportionate Initial Spares claimed after deducting IDC | $(d) = (c)/(a) * (b)$ | 59.46 | - |
| Ceiling limit as per Regulation 8 of 2009 regulations | (e) | 2.50% | - |
| Initial spares worked out | $(f) = ((b-d)*e)/(100%-e)$ | 59.68 | - |
| Excess initial spares claimed | $(g)=(d)-(f)$ | -0.22 | - |

19. The capital cost allowed as on COD for the transmission assets after disallowing the excess initial spares are as follows:-

| (₹ in lakh) | | | |
|-------------|---|----------------------------------|--------------------------------|
| Assets | Capital cost after disallowing IEDC/IDC | Excess initial spares disallowed | Capital cost allowed as on COD |
| Asset 1 | 5714.83 | 55.03 | 5659.80 |
| Asset 2 | 3747.90 | 115.25 | 3632.65 |
| Asset 3 | 731.45 | - | 731.45 |
| Asset 4 | 2021.01 | - | 2021.01 |
| Asset 5 | 1873.92 | - | 1873.92 |

Additional Capital Expenditure

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

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

21. The details of the additional capital expenditure claimed by the petitioner and approved in order dated 31.1.2014 in Petition No. 110/TT/2012 are give in the table below:-

(₹ in lakh)

| Assets | Approved / Claimed | Capital cost as on COD | Additional capital expenditure | | | | Capital cost as on 31.3.2014 |
|---------|--|------------------------|--------------------------------|---------|---------|---------|------------------------------|
| | | | 2011-12 | 2012-13 | 2013-14 | Total | |
| Asset 1 | As approved vide Order dated 31.1.2014 | 5680.02 | 175.16 | 827.51 | 386.59 | 1389.26 | 7069.28 |
| | Claimed by the petitioner | 5677.81 | 175.16 | 827.51 | 327.45 | 1330.12 | 7007.93 |
| Asset 2 | As approved vide Order dated 31.1.2014 | 3714.02 | - | 815.10 | 284.00 | 1099.10 | 4813.12 |
| | Claimed by the petitioner | 3711.87 | - | 620.87 | 48.64 | 669.51 | 4381.38 |
| Asset 3 | As approved vide Order dated 31.1.2014 | 731.45 | - | 139.59 | 269.85 | 409.44 | 1140.89 |
| | Claimed by the petitioner | 731.08 | - | 139.59 | 143.59 | 283.18 | 1014.26 |
| Asset 4 | As approved vide Order dated 31.1.2014 | 2006.11 | 8.19 | 281.96 | 75.84 | 365.99 | 2372.10 |
| | Claimed by the petitioner | 2005.56 | 8.19 | 281.96 | 75.84 | 365.99 | 2371.55 |
| Asset 5 | As approved vide Order dated 31.1.2014 | 1873.92 | - | 97.44 | 194.91 | 292.35 | 2166.27 |
| | Claimed by the petitioner | 1873.92 | - | 97.44 | 194.91 | 292.35 | 2166.27 |

22. The petitioner has submitted the Auditor's Certificates dated 25.7.2014, 21.11.2014 and 28.7.2014 certifying the actual capital cost incurred towards additional capitalization. The petitioner has submitted the additional capital expenditure during 2009-14 tariff period is on account of balance and retention payments towards buildings, civil works, sub-station, transmission line and PLCC works. The petitioner has

claimed the actual additional capital expenditure during 2009-14 period under the provision of Regulation 9 (1) and 9(2) of the 2009 Tariff Regulations.

23. We have considered the submissions of the petitioner with regard to the actual capital expenditure during 2009-14 tariff period. The capital addition claimed by the petitioner is based on actual capital expenditure incurred as per the Auditor Certificates dated 25.7.2014, 21.11.2014 and 28.7.2014 and is within the original scope of work and also within the approved cost of the transmission assets. The additional capital expenditure claimed by the petitioner is towards balance and retention payments and is within the cut-off date hence the same is allowed for truing up under Regulation 9 (2 (viii)) of 2009 Tariff Regulations.

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

(₹ in lakh)

| Assets | Capital cost admitted as on COD | Additional capital expenditure | | | | Capital cost as on 31.3.2014 |
|---------|---------------------------------|--------------------------------|---------|---------|---------|------------------------------|
| | | 2011-12 | 2012-13 | 2013-14 | Total | |
| Asset 1 | 5659.80 | 175.16 | 827.51 | 327.45 | 1330.12 | 6989.92 |
| Asset 2 | 3632.65 | - | 620.87 | 48.64 | 669.51 | 4302.16 |
| Asset 3 | 731.45 | - | 139.59 | 143.59 | 283.18 | 1014.63 |
| Asset 4 | 2021.01 | 8.19 | 281.96 | 75.84 | 365.99 | 2387.00 |
| Asset 5 | 1873.92 | - | 97.44 | 194.91 | 292.35 | 2166.27 |

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

Debt: Equity

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

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

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

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

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

27. The admitted debt: equity ratio of 70:30 as on COD was considered in order dated 31.1.2014 in Petition No. 110/TT/2012 in line with the Regulation 12 of the 2009 Tariff Regulations. In respect of the additional capitalization, as stated above in para 25 above, debt: equity ratio of 70:30 has been considered in line with the 2009 Tariff Regulations.

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

(₹ in lakh)

| Funding | Capital cost as on COD | (%) | Additional capital expenditure during 2009-14 | (%) | Total Cost as on 31.3.2014 | (%) |
|----------------|------------------------|---------------|---|---------------|----------------------------|---------------|
| Asset 1 | | | | | | |
| Debt | 3961.86 | 70.00 | 931.08 | 70.00 | 4892.94 | 70.00 |
| Equity | 1697.94 | 30.00 | 399.04 | 30.00 | 2096.98 | 30.00 |
| Total | 5659.80 | 100.00 | 1330.12 | 100.00 | 6989.92 | 100.00 |
| Asset 2 | | | | | | |
| Debt | 2543.58 | 70.02 | 468.66 | 70.00 | 3012.24 | 70.02 |
| Equity | 1089.07 | 29.98 | 200.85 | 30.00 | 1289.92 | 29.98 |

| Funding | Capital cost as on COD | (%) | Additional capital expenditure during 2009-14 | (%) | Total Cost as on 31.3.2014 | (%) |
|----------------|------------------------|---------------|---|---------------|----------------------------|---------------|
| Total | 3632.65 | 100.00 | 669.51 | 100.00 | 4302.16 | 100.00 |
| Asset 3 | | | | | | |
| Debt | 512.02 | 70.00 | 198.23 | 70.00 | 710.24 | 70.00 |
| Equity | 219.44 | 30.00 | 84.95 | 30.00 | 304.39 | 30.00 |
| Total | 731.45 | 100.00 | 283.18 | 100.00 | 1014.63 | 100.00 |
| Asset 4 | | | | | | |
| Debt | 1414.91 | 70.01 | 256.19 | 70.00 | 1671.10 | 70.01 |
| Equity | 606.10 | 29.99 | 109.80 | 30.00 | 715.90 | 29.99 |
| Total | 2021.01 | 100.00 | 365.99 | 100.00 | 2387.00 | 100.00 |
| Asset 5 | | | | | | |
| Debt | 1311.74 | 70.00 | 204.65 | 70.00 | 1516.39 | 70.00 |
| Equity | 562.18 | 30.00 | 87.71 | 30.00 | 649.88 | 30.00 |
| Total | 1873.92 | 100.00 | 292.35 | 100.00 | 2166.27 | 100.00 |

Return on Equity ("ROE")

29. Clause (3), (4) and (5) of the Regulation 15 of the 2009 Tariff Regulations provides as follows:-

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

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

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

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

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

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

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

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

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

(₹ in lakh)

| Asset 1 | | | |
|--|--------------------|---------|---------|
| Return on Equity | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| As approved vide Order dated 31.1.2014 | 25.21 | 328.76 | 360.60 |
| Claimed by the petitioner | 27.93 | 364.29 | 402.64 |
| Allowed after true up in this order | 27.84 | 363.24 | 401.59 |

(₹ in lakh)

| Asset 2 | | |
|--|--------------------|---------|
| Return on Equity | 2012-13 (pro-rata) | 2013-14 |
| As approved vide Order dated 31.1.2014 | 126.09 | 244.97 |
| Claimed by the petitioner | 136.40 | 256.33 |
| Allowed after true up in this order | 133.63 | 251.53 |

(₹ in lakh)

| Asset 3 | | |
|--|--------------------|---------|
| Return on Equity | 2012-13 (pro-rata) | 2013-14 |
| As approved vide Order dated 31.1.2014 | 35.00 | 52.74 |
| Claimed by the petitioner | 38.79 | 55.44 |
| Allowed after true up in this order | 38.81 | 55.47 |

(₹ in lakh)

| Asset 4 | | | |
|--|-------------------------------|----------------|----------------|
| Return on Equity | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| As approved vide Order dated 31.1.2014 | 8.79 | 113.03 | 122.41 |
| Claimed by the petitioner | 9.73 | 125.24 | 137.27 |
| Allowed after true up in this order | 9.81 | 126.12 | 138.16 |

(₹ in lakh)

| Asset 5 | | |
|--|----------------|----------------|
| Return on Equity | 2012-13 | 2013-14 |
| As approved vide Order dated 31.1.2014 | 100.83 | 108.49 |
| Claimed by the petitioner | 111.77 | 121.70 |
| Allowed after true up in this order | 111.76 | 121.71 |

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

Interest on Loan (“IoL”)

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

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

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

(₹ in lakh)

| Asset 1 | | | |
|--|-------------------------------|----------------|----------------|
| Interest on Loan | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| As approved vide Order dated 31.1.2014 | 30.42 | 384.67 | 395.43 |
| Claimed by the petitioner | 30.55 | 384.14 | 393.89 |
| Allowed after true up in this order | 30.46 | 383.03 | 392.87 |

(₹ in lakh)

| Asset 2 | | |
|--|-------------------------------|----------------|
| Interest on Loan | 2012-13 (pro-rata) | 2013-14 |
| As approved vide Order dated 31.1.2014 | 148.85 | 270.27 |
| Claimed by the petitioner | 145.46 | 254.84 |
| Allowed after true up in this order | 142.64 | 250.29 |

(₹ in lakh)

| Asset 3 | | |
|--|-------------------------------|----------------|
| Interest on Loan | 2012-13 (pro-rata) | 2013-14 |
| As approved vide Order dated 31.1.2014 | 41.39 | 58.98 |
| Claimed by the petitioner | 41.37 | 54.47 |
| Allowed after true up in this order | 41.38 | 54.48 |

(₹ in lakh)

| Asset 4 | | | |
|--|-------------------------------|----------------|----------------|
| Interest on Loan | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| As approved vide Order dated 31.1.2014 | 10.43 | 129.67 | 130.59 |
| Claimed by the petitioner | 10.47 | 130.15 | 131.33 |
| Allowed after true up in this order | 10.55 | 131.12 | 132.23 |

(₹ in lakh)

| Asset 5 | | |
|--|----------------|----------------|
| Interest on Loan | 2012-13 | 2013-14 |
| As approved vide Order dated 31.1.2014 | 116.58 | 116.60 |
| Claimed by the petitioner | 116.78 | 116.95 |
| Allowed after true up in this order | 116.78 | 116.95 |

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

Depreciation

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

(₹ in lakh)

| Asset 1 | | | |
|--|-------------------------------|----------------|----------------|
| Depreciation | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| As approved vide Order dated 31.1.2014 | 23.23 | 299.96 | 325.02 |
| Claimed by the petitioner | 23.22 | 299.86 | 323.92 |
| Allowed after true up in this order | 23.14 | 298.90 | 322.97 |

(₹ in lakh)

| Asset 2 | | |
|--|-------------------------------|----------------|
| Depreciation | 2012-13 (pro-rata) | 2013-14 |
| As approved vide Order dated 31.1.2014 | 127.18 | 246.88 |
| Claimed by the petitioner | 124.24 | 230.48 |
| Allowed after true up in this order | 121.79 | 226.30 |

(₹ in lakh)

| Asset 3 | | |
|--|-------------------------------|----------------|
| Depreciation | 2012-13 (pro-rata) | 2013-14 |
| As approved vide Order dated 31.1.2014 | 34.21 | 51.39 |
| Claimed by the petitioner | 34.15 | 48.07 |
| Allowed after true up in this order | 34.22 | 48.16 |

(₹ in lakh)

| Asset 4 | | | |
|--|-------------------------------|----------------|----------------|
| Depreciation | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| As approved vide Order dated 31.1.2014 | 8.84 | 113.63 | 122.76 |
| Claimed by the petitioner | 8.84 | 113.58 | 122.70 |
| Allowed after true up in this order | 8.91 | 114.41 | 123.54 |

(₹ in lakh)

| Asset 5 | | |
|--|----------------|----------------|
| Depreciation | 2012-13 | 2013-14 |
| As approved vide Order dated 31.1.2014 | 101.52 | 109.23 |
| Claimed by the petitioner | 101.52 | 109.23 |
| Allowed after true up in this order | 101.52 | 109.23 |

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

Operation & Maintenance Expenses (O&M Expenses)

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

(₹ in lakh)

| Asset 1 | | | |
|--|-------------------------------|----------------|----------------|
| O&M Expenses | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| As approved vide Order dated 31.1.2014 | 11.20 | 142.02 | 150.13 |
| Claimed by the petitioner | 11.19 | 142.02 | 150.13 |
| Allowed after true up in this order | 11.19 | 142.02 | 150.13 |

(₹ in lakh)

| Asset 2 | | |
|--|-------------------------------|----------------|
| O&M Expenses | 2012-13 (pro-rata) | 2013-14 |
| As approved vide Order dated 31.1.2014 | 82.84 | 150.13 |
| Claimed by the petitioner | 84.35 | 152.85 |
| Allowed after true up in this order | 82.84 | 150.13 |

(₹ in lakh)

| Asset 3 | | |
|--|-------------------------------|----------------|
| O&M Expenses | 2012-13 (pro-rata) | 2013-14 |
| As approved vide Order dated 31.1.2014 | 51.60 | 65.46 |
| Claimed by the petitioner | 51.60 | 65.46 |
| Allowed after true up in this order | 51.60 | 65.46 |

(₹ in lakh)

| Asset 4 | | | |
|--|-------------------------------|----------------|----------------|
| O&M Expenses | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| As approved vide Order dated 31.1.2014 | 15.13 | 191.94 | 202.92 |
| Claimed by the petitioner | 15.13 | 191.94 | 202.92 |
| Allowed after true up in this order | 15.13 | 191.94 | 202.92 |

(₹ in lakh)

| Asset 5 | | |
|--|----------------|----------------|
| O&M Expenses | 2012-13 | 2013-14 |
| As approved vide Order dated 31.1.2014 | 191.94 | 202.92 |
| Claimed by the petitioner | 191.94 | 202.92 |
| Allowed after true up in this order | 191.94 | 202.92 |

Interest on Working Capital (IWC)

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

(₹ in lakh)

| Asset 1 | | | |
|--|-------------------------------|----------------|----------------|
| Interest on Working Capital | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| As approved vide Order dated 31.1.2014 | 2.11 | 27.05 | 28.79 |
| Claimed by the petitioner | 2.17 | 27.75 | 29.58 |
| Allowed after true up in this order | 2.16 | 27.68 | 29.52 |

(₹ in lakh)

| Asset 2 | | |
|--|-------------------------------|----------------|
| Interest on Working Capital | 2012-13 (pro-rata) | 2013-14 |
| As approved vide Order dated 31.1.2014 | 13.83 | 25.84 |
| Claimed by the petitioner | 14.01 | 25.52 |
| Allowed after true up in this order | 11.92 | 21.74 |

(₹ in lakh)

| Asset 3 | | |
|--|-------------------------------|----------------|
| Interest on Working Capital | 2012-13 (pro-rata) | 2013-14 |
| As approved vide Order dated 31.1.2014 | 5.40 | 7.37 |
| Claimed by the petitioner | 5.48 | 7.25 |
| Allowed after true up in this order | 5.48 | 7.26 |

(₹ in lakh)

| Asset 4 | | | |
|--|-------------------------------|----------------|----------------|
| Interest on Working Capital | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| As approved vide Order dated 31.1.2014 | 1.29 | 16.32 | 17.23 |
| Claimed by the petitioner | 1.31 | 16.57 | 17.54 |
| Allowed after true up in this order | 1.31 | 16.62 | 17.60 |



(₹ in lakh)

| Asset 5 | | |
|--|----------------|----------------|
| Interest on Working Capital | 2012-13 | 2013-14 |
| As approved vide Order dated 31.1.2014 | 17.94 | 18.91 |
| Claimed by the petitioner | 18.20 | 19.22 |
| Allowed after true up in this order | 18.20 | 19.22 |

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

APPROVED ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

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

(₹ in lakh)

| Asset 1 | | | |
|--|-------------------------------|----------------|----------------|
| Particulars | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| Depreciation | | | |
| Opening Gross Block | 5659.80 | 5834.96 | 6662.47 |
| Additional Capitalisation | 175.16 | 827.51 | 327.45 |
| Closing Gross Block | 5834.96 | 6662.47 | 6989.92 |
| Average Gross Block | 5747.38 | 6248.72 | 6826.20 |
| Rate of Depreciation (%) | 4.83 | 4.78 | 4.73 |
| Depreciable Value | 4830.72 | 5360.74 | 6174.03 |
| Balance useful life of the asset | 31.00 | 30.00 | 29.00 |
| Elapsed life | 0.00 | 1.00 | 2.00 |
| Remaining Depreciable Value | 4830.72 | 5258.78 | 5479.61 |
| Depreciation during the year | 23.14 | 298.90 | 322.97 |
| Cumulative depreciation (incl. of AAD) | 23.14 | 322.03 | 645.00 |
| Interest on Loan | | | |
| Gross Normative Loan | 3961.86 | 4084.47 | 4663.73 |
| Cumulative Repayments upto Previous Year | 0.00 | 23.14 | 322.03 |
| Net Loan-Opening | 3961.86 | 4061.33 | 4341.70 |
| Additions | 122.61 | 579.26 | 229.22 |
| Repayment during the year | 23.14 | 298.90 | 322.97 |



| Asset 1 | | | |
|---|-------------------------------|----------------|----------------|
| Particulars | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| Net Loan-Closing | 4061.33 | 4341.70 | 4247.94 |
| Average Loan | 4011.60 | 4201.52 | 4294.82 |
| Weighted Average Rate of Interest on Loan (%) | 9.1111 | 9.1166 | 9.1476 |
| Interest on Loan | 30.46 | 383.03 | 392.87 |
| Return on Equity | | | |
| Opening Equity | 1697.94 | 1750.49 | 1998.74 |
| Additions | 52.55 | 248.25 | 98.24 |
| Closing Equity | 1750.49 | 1998.74 | 2096.98 |
| Average Equity | 1724.21 | 1874.61 | 2047.86 |
| Return on Equity (Base Rate) (%) | 15.500 | 15.500 | 15.500 |
| MAT Rate for respective year (%) | 20.008 | 20.008 | 20.961 |
| Rate of Return on Equity (%) | 19.377 | 19.377 | 19.610 |
| Return on Equity | 27.84 | 363.24 | 401.59 |
| Interest on Working Capital | | | |
| O & M Expenses | 11.19 | 11.83 | 12.51 |
| Maintenance Spares | 20.15 | 21.30 | 22.52 |
| Receivables | 189.59 | 202.48 | 216.18 |
| Total Working Capital | 220.94 | 235.62 | 251.21 |
| Rate of Interest (%) | 11.75 | 11.75 | 11.75 |
| Interest of working capital | 25.96 | 27.68 | 29.52 |
| Annual Transmission Charges | | | |
| Depreciation | 23.14 | 298.90 | 322.97 |
| Interest on Loan | 30.46 | 383.03 | 392.87 |
| Return on Equity | 27.84 | 363.24 | 401.59 |
| Interest on Working Capital | 2.16 | 27.68 | 29.52 |
| O & M Expenses | 11.19 | 142.02 | 150.13 |
| Total | 94.80 | 1214.87 | 1297.08 |

(₹ in lakh)

| Asset 2 | | |
|----------------------------------|-------------------------------|----------------|
| Particulars | 2012-13 (pro-rata) | 2013-14 |
| Depreciation | | |
| Opening Gross Block | 3632.65 | 4253.52 |
| Additional Capitalisation | 620.87 | 48.64 |
| Closing Gross Block | 4253.52 | 4302.16 |
| Average Gross Block | 3943.09 | 4277.84 |
| Rate of Depreciation (%) | 5.30 | 5.29 |
| Depreciable Value | 3548.78 | 4129.45 |
| Balance useful life of the asset | 33.00 | 32.00 |



| Asset 2 | | |
|---|-------------------------------|----------------|
| Particulars | 2012-13 (pro-rata) | 2013-14 |
| Elapsed life | 1.00 | 2.00 |
| Remaining Depreciable Value | 3548.78 | 3728.26 |
| Depreciation during the year | 121.79 | 226.30 |
| Cumulative depreciation (incl. of AAD) | 121.79 | 348.10 |
| Interest on Loan | | |
| Gross Normative Loan | 2543.58 | 2978.19 |
| Cumulative Repayments upto Previous Year | 0.00 | 121.79 |
| Net Loan-Opening | 2543.58 | 2856.40 |
| Additions | 434.61 | 34.05 |
| Repayment during the year | 121.79 | 226.30 |
| Net Loan-Closing | 2856.40 | 2664.14 |
| Average Loan | 2699.99 | 2760.27 |
| Weighted Average Rate of Interest on Loan (%) | 9.0562 | 9.0676 |
| Interest on Loan | 142.64 | 250.29 |
| Return on Equity | | |
| Opening Equity | 1089.07 | 1275.33 |
| Additions | 186.26 | 14.59 |
| Closing Equity | 1275.33 | 1289.92 |
| Average Equity | 1182.20 | 1282.63 |
| Return on Equity (Base Rate) (%) | 15.500 | 15.500 |
| MAT Rate for respective year (%) | 20.008 | 20.961 |
| Rate of Return on Equity (%) | 19.377 | 19.610 |
| Return on Equity | 133.63 | 251.53 |
| Interest on Working Capital | | |
| O & M Expenses | 11.83 | 12.51 |
| Maintenance Spares | 21.30 | 22.52 |
| Receivables | 140.81 | 150.00 |
| Total Working Capital | 173.94 | 185.02 |
| Rate of Interest (%) | 11.75 | 11.75 |
| Interest of working capital | 20.44 | 21.74 |
| Annual Transmission Charges | | |
| Depreciation | 121.79 | 226.30 |
| Interest on Loan | 142.64 | 250.29 |
| Return on Equity | 133.63 | 251.53 |
| Interest on Working Capital | 11.92 | 21.74 |
| O & M Expenses | 82.84 | 150.13 |
| Total | 492.82 | 899.99 |

(₹ in lakh)

| Asset 3 | | |
|---|-------------------------------|----------------|
| Particulars | 2012-13 (pro-rata) | 2013-14 |
| Depreciation | | |
| Opening Gross Block | 731.45 | 871.04 |
| Additional Capitalisation | 139.59 | 143.59 |
| Closing Gross Block | 871.04 | 1014.63 |
| Average Gross Block | 801.25 | 942.84 |
| Rate of Depreciation (%) | 5.13 | 5.11 |
| Depreciable Value | 721.12 | 911.37 |
| Balance useful life of the asset | 25.00 | 24.00 |
| Elapsed life | 0.00 | 1.00 |
| Remaining Depreciable Value | 721.12 | 814.33 |
| Depreciation during the year | 34.22 | 48.16 |
| Cumulative depreciation (incl. of AAD) | 34.22 | 82.38 |
| Interest on Loan | | |
| Gross Normative Loan | 512.02 | 609.73 |
| Cumulative Repayments upto Previous Year | 0.00 | 34.22 |
| Net Loan-Opening | 512.02 | 575.50 |
| Additions | 97.71 | 100.51 |
| Repayment during the year | 34.22 | 48.16 |
| Net Loan-Closing | 575.50 | 627.86 |
| Average Loan | 543.76 | 601.68 |
| Weighted Average Rate of Interest on Loan (%) | 9.1328 | 9.0540 |
| Interest on Loan | 41.38 | 54.48 |
| Return on Equity | | |
| Opening Equity | 219.44 | 261.31 |
| Additions | 41.88 | 43.08 |
| Closing Equity | 261.31 | 304.39 |
| Average Equity | 240.37 | 282.85 |
| Return on Equity (Base Rate) (%) | 15.500 | 15.500 |
| MAT Rate for respective year (%) | 20.008 | 20.961 |
| Rate of Return on Equity (%) | 19.377 | 19.610 |
| Return on Equity | 38.81 | 55.47 |
| Interest on Working Capital | | |
| O & M Expenses | 5.16 | 5.46 |
| Maintenance Spares | 9.29 | 9.82 |
| Receivables | 34.30 | 38.47 |
| Total Working Capital | 48.75 | 53.74 |
| Rate of Interest (%) | 13.50 | 13.50 |
| Interest of working capital | 6.58 | 7.26 |



| Asset 3 | | |
|------------------------------------|-------------------------------|----------------|
| Particulars | 2012-13 (pro-rata) | 2013-14 |
| Annual Transmission Charges | | |
| Depreciation | 34.22 | 48.16 |
| Interest on Loan | 41.38 | 54.48 |
| Return on Equity | 38.81 | 55.47 |
| Interest on Working Capital | 5.48 | 7.26 |
| O & M Expenses | 51.60 | 65.46 |
| Total | 171.51 | 230.82 |

(₹ in lakh)

| Asset 4 | | | |
|---|-------------------------------|----------------|----------------|
| Particulars | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| Depreciation | | | |
| Opening Gross Block | 2021.01 | 2029.20 | 2311.16 |
| Additional Capitalisation | 8.19 | 281.96 | 75.84 |
| Closing Gross Block | 2029.20 | 2311.16 | 2387.00 |
| Average Gross Block | 2025.11 | 2170.18 | 2349.08 |
| Rate of Depreciation (%) | 5.28 | 5.27 | 5.26 |
| Depreciable Value | 1822.59 | 1956.85 | 2241.05 |
| Balance useful life of the asset | 25.00 | 24.00 | 23.00 |
| Elapsed life | 0.00 | 1.00 | 2.00 |
| Remaining Depreciable Value | 1822.59 | 1944.25 | 1990.85 |
| Depreciation during the year | 8.91 | 114.41 | 123.54 |
| Cumulative depreciation (incl. of AAD) | 8.91 | 123.32 | 246.87 |
| Interest on Loan | | | |
| Gross Normative Loan | 1414.91 | 1420.64 | 1618.01 |
| Cumulative Repayments upto Previous Year | 0.00 | 8.91 | 123.32 |
| Net Loan-Opening | 1414.91 | 1411.73 | 1494.69 |
| Additions | 5.73 | 197.37 | 53.09 |
| Repayment during the year | 8.91 | 114.41 | 123.54 |
| Net Loan-Closing | 1411.73 | 1494.69 | 1424.24 |
| Average Loan | 1413.32 | 1453.21 | 1459.46 |
| Weighted Average Rate of Interest on Loan (%) | 8.9614 | 9.0230 | 9.0599 |
| Interest on Loan | 126.65 | 131.12 | 132.23 |
| Return on Equity | | | |
| Opening Equity | 606.10 | 608.56 | 693.15 |
| Additions | 2.46 | 84.59 | 22.75 |
| Closing Equity | 608.56 | 693.15 | 715.90 |
| Average Equity | 607.33 | 650.85 | 704.52 |
| Return on Equity (Base Rate) (%) | 15.500 | 15.500 | 15.500 |



| Asset 4 | | | |
|------------------------------------|-------------------------------|----------------|----------------|
| Particulars | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| MAT Rate for respective year (%) | 20.008 | 20.008 | 20.961 |
| Rate of Return on Equity (%) | 19.377 | 19.377 | 19.610 |
| Return on Equity | 9.81 | 126.12 | 138.16 |
| Interest on Working Capital | | | |
| O & M Expenses | 15.13 | 16.00 | 16.91 |
| Maintenance Spares | 27.24 | 28.79 | 30.44 |
| Receivables | 91.43 | 96.70 | 102.41 |
| Total Working Capital | 133.79 | 141.49 | 149.76 |
| Rate of Interest (%) | 11.75 | 11.75 | 11.75 |
| Interest of working capital | 15.72 | 16.62 | 17.60 |
| Annual Transmission Charges | | | |
| Depreciation | 8.91 | 114.41 | 123.54 |
| Interest on Loan | 10.55 | 131.12 | 132.23 |
| Return on Equity | 9.81 | 126.12 | 138.16 |
| Interest on Working Capital | 1.31 | 16.62 | 17.60 |
| O & M Expenses | 15.13 | 191.94 | 202.92 |
| Total | 45.71 | 580.22 | 614.44 |

(₹ in lakh)

| Asset 5 | | |
|--|----------------|----------------|
| Particulars | 2012-13 | 2013-14 |
| Depreciation | | |
| Opening Gross Block | 1873.92 | 1971.36 |
| Additional Capitalisation | 97.44 | 194.91 |
| Closing Gross Block | 1971.36 | 2166.27 |
| Average Gross Block | 1922.64 | 2068.82 |
| Rate of Depreciation (%) | 5.28 | 5.28 |
| Depreciable Value | 1730.38 | 1905.78 |
| Balance useful life of the asset | 25.00 | 24.00 |
| Elapsed life | 0.00 | 1.00 |
| Remaining Depreciable Value | 1730.38 | 1760.42 |
| Depreciation during the year | 101.52 | 109.23 |
| Cumulative depreciation (incl. of AAD) | 101.52 | 210.75 |
| Interest on Loan | | |
| Gross Normative Loan | 1311.74 | 1379.95 |
| Cumulative Repayments upto Previous Year | 0.00 | 101.52 |
| Net Loan-Opening | 1311.74 | 1278.44 |
| Additions | 68.21 | 136.44 |
| Repayment during the year | 101.52 | 109.23 |
| Net Loan-Closing | 1278.44 | 1305.64 |



| Asset 5 | | |
|---|----------------|----------------|
| Particulars | 2012-13 | 2013-14 |
| Average Loan | 1295.09 | 1292.04 |
| Weighted Average Rate of Interest on Loan (%) | 9.0172 | 9.0516 |
| Interest on Loan | 116.78 | 116.95 |
| Return on Equity | | |
| Opening Equity | 562.18 | 591.41 |
| Additions | 29.23 | 58.47 |
| Closing Equity | 591.41 | 649.88 |
| Average Equity | 576.79 | 620.64 |
| Return on Equity (Base Rate) (%) | 15.500 | 15.500 |
| MAT Rate for respective year (%) | 20.008 | 20.961 |
| Rate of Return on Equity (%) | 19.377 | 19.610 |
| Return on Equity | 111.76 | 121.71 |
| Interest on Working Capital | | |
| O & M Expenses | 16.00 | 16.91 |
| Maintenance Spares | 28.79 | 30.44 |
| Receivables | 90.03 | 95.01 |
| Total Working Capital | 134.82 | 142.35 |
| Rate of Interest (%) | 13.50 | 13.50 |
| Interest of working capital | 18.20 | 19.22 |
| Annual Transmission Charges | | |
| Depreciation | 101.52 | 109.23 |
| Interest on Loan | 116.78 | 116.95 |
| Return on Equity | 111.76 | 121.71 |
| Interest on Working Capital | 18.20 | 19.22 |
| O & M Expenses | 191.94 | 202.92 |
| Total | 540.20 | 570.03 |

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

38. The petitioner has combined the Assets 1, 2, 3, 4 and 5 on 1.4.2014. The effective COD considered for the Combined Assets for computation tariff is 1.5.2012. The tariff charges claimed by the petitioner for 2014-19 tariff period is as follows:-

| Particulars | (₹ in lakh) | | | | |
|--------------------|--------------------|----------------|----------------|----------------|----------------|
| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | 859.55 | 865.37 | 865.37 | 865.37 | 865.37 |
| Interest on Loan | 908.15 | 837.73 | 759.32 | 680.67 | 602.05 |
| Return on Equity | 1003.40 | 1010.17 | 1010.17 | 1010.17 | 1010.17 |



| | | | | | |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|
| Interest on Working Capital | 103.15 | 103.12 | 102.67 | 102.25 | 101.88 |
| O & M Expenses | 712.52 | 736.20 | 760.66 | 785.88 | 811.96 |
| Total | 3586.77 | 3552.59 | 3498.19 | 3444.34 | 3391.43 |

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

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|---------|---------|---------|---------|---------|
| O&M Expenses | 59.38 | 61.35 | 63.39 | 65.49 | 67.66 |
| Maintenance Spares | 106.88 | 110.43 | 114.10 | 117.88 | 121.79 |
| Receivables | 597.80 | 592.10 | 583.03 | 574.06 | 565.24 |
| Total working capital | 764.06 | 763.88 | 760.52 | 757.43 | 754.69 |
| Rate of Interest | 13.50 | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest of working capital | 103.15 | 103.12 | 102.67 | 102.25 | 101.88 |

Capital Cost

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

“(3) The Capital cost of an existing project shall include the following:

- (a) the capital cost admitted by the Commission prior to 1.4.2014 duly tried up by excluding liability, if any, as on 1.4.2014;
- (b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and
- (c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15.”

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

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

41. The capital cost of individual assets Assets 1, 2, 3, 4 and 5 as on 31.3.2014 is mentioned below:-

(₹ in lakh)

| Assets | Capital cost as on 31.3.2014 |
|--------------------------------|------------------------------|
| Asset 1 | 6989.92 |
| Asset 2 | 4302.16 |
| Asset 3 | 1014.63 |
| Asset 4 | 2387.00 |
| Asset 5 | 2166.27 |
| Total (Combined Assets) | 16859.98 |

42. The capital cost of ₹16859.98 lakh worked out as on 31.3.2014 for Combined Assets has been considered as opening capital cost as on 1.4.2014 for determination of tariff in accordance with Regulation 9 of the 2014 Tariff Regulations.

Additional Capital Expenditure

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

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

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

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

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

45. The petitioner has claimed additional capital expenditure amounting to ₹230.00 lakh during 2014-15 in Asset 1, 2 and 3 as mentioned below:-

| Assets | Additional capital expenditure during 2014-19 (₹ in lakh) | Reasons |
|--------------------------------|--|--|
| Asset 1 | 25.00 | Towards balance and retention payments |
| Asset 2 | 180.00 | |
| Asset 3 | 25.00 | |
| Asset 4 | - | - |
| Asset 5 | - | - |
| Total (Combined Assets) | 230.00 | - |



46. The petitioner in its reply in affidavit dated 11.2.2016 and has submitted details of balance expenditure of ₹230.00 lakh to be discharged during 2014-19.

47. TANGEDCO in its reply has submitted that the petitioner has not provided reasonable justifications for the projected additional capital expenditure during 2014-19 tariff period for the transmission assets. The petitioner in its rejoinder dated 12.2.2016 has submitted that the actual COD in respect of Asset 1, Asset 2, Asset 3, Asset 4 and Asset 5 is 1.3.2012, 1.9.2012, 1.6.2012, 1.3.2012 and 1.4.2012 respectively and accordingly the cut-off date is 31.03.2015. The additional capital expenditure projected to be incurred after 31.03.2014 (during 2014-15) is to be dealt in accordance with the provisions of Regulation 14 (1) (i) of 2014 Tariff Regulations. The additional capitalization proposed in the contextual assets is on account of balance retention payments.

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

Debt: Equity

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

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

“(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2014,

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

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

50. The petitioner has considered the debt:equity ratio of 70:30 as on 31.3.2014 for the instant assets, which is in line with the 2014 Tariff Regulations. The details of the debt:equity considered for the purpose of tariff for 2014-19 tariff period is as follows:-

(₹ in lakh)

| Funding | Capital cost as on 1.4.2014 | (%) | Additional capital expenditure during 2014-19 | (%) | Total Cost as on 31.3.2019 | (%) |
|--------------|-----------------------------|---------------|---|---------------|----------------------------|---------------|
| Debt | 11801.99 | 70.00 | 161.00 | 70.00 | 11962.99 | 70.00 |
| Equity | 5058.00 | 30.00 | 69.00 | 30.00 | 5127.00 | 30.00 |
| Total | 16859.98 | 100.00 | 230.00 | 100.00 | 17089.98 | 100.00 |

Return on Equity (ROE)

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

“24. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.
(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system”

“25. Tax on Return on Equity:

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

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

Where “t” is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.”

52. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Return on Equity is allowed under Regulation 25(2) of the 2014 tariff Regulations. Accordingly, the MAT rate applicable during the 2013-14 has been considered for the purpose of ROE, which shall be trued up with actual tax rate in accordance with Clause (3) of Regulation 25 of the 2014 Tariff Regulations. The ROE has been worked out and allowed as follows:-

(₹ in lakh)

| Return on Equity | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|----------------------------------|----------------|----------------|----------------|----------------|----------------|
| Opening Equity | 5058.00 | 5127.00 | 5127.00 | 5127.00 | 5127.00 |
| Additions | 69.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Closing Equity | 5127.00 | 5127.00 | 5127.00 | 5127.00 | 5127.00 |
| Average Equity | 5092.50 | 5127.00 | 5127.00 | 5127.00 | 5127.00 |
| Return on Equity (Base Rate) (%) | 15.500 | 15.500 | 15.500 | 15.500 | 15.500 |
| MAT Rate for respective year (%) | 20.961 | 20.961 | 20.961 | 20.961 | 20.961 |
| Rate of Return on Equity (%) | 19.610 | 19.610 | 19.610 | 19.610 | 19.610 |
| Return on Equity | 998.66 | 1005.43 | 1005.43 | 1005.43 | 1005.43 |

Interest on Loan (“IoL”)

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

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

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

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

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

54. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2014. The petitioner has prayed that the change in interest rate due

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

| (₹ in lakh) | | | | | |
|---|----------|----------|----------|----------|----------|
| Interest on Loan | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Gross Normative Loan | 11801.99 | 11962.99 | 11962.99 | 11962.99 | 11962.99 |
| Cumulative Repayment upto Previous Year | 1533.10 | 2388.43 | 3249.60 | 4110.77 | 4971.93 |
| Net Loan-Opening | 10268.89 | 9574.55 | 8713.39 | 7852.22 | 6991.06 |
| Additions | 161.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Repayment during the year | 855.34 | 861.17 | 861.17 | 861.17 | 861.17 |
| Net Loan-Closing | 9574.55 | 8713.39 | 7852.22 | 6991.06 | 6129.89 |
| Average Loan | 9921.72 | 9143.97 | 8282.80 | 7421.64 | 6560.47 |
| Weighted Average Rate of Interest on Loan (%) | 9.1091 | 9.1180 | 9.1239 | 9.1280 | 9.1336 |
| Interest on Loan | 903.78 | 833.75 | 755.71 | 677.45 | 599.21 |

Depreciation

55. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations provides as follows:-

"27. Depreciation:

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

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

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

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

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

(₹ in lakh)

| Depreciation | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|----------|----------|----------|----------|----------|
| Opening Gross Block | 16859.98 | 17089.98 | 17089.98 | 17089.98 | 17089.98 |
| Additional Capitalization | 230.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Closing Gross Block | 17089.98 | 17089.98 | 17089.98 | 17089.98 | 17089.98 |
| Average Gross Block | 16974.98 | 17089.98 | 17089.98 | 17089.98 | 17089.98 |
| Freehold Land (Av. Cost) | 379.92 | 379.92 | 379.92 | 379.92 | 379.92 |
| Rate of Depreciation (%) | 5.04 | 5.04 | 5.04 | 5.04 | 5.04 |
| Elapsed life | 2 | 3 | 4 | 5 | 6 |
| Balance Useful life of the asset | 27 | 26 | 25 | 24 | 23 |
| Remaining Depreciable Value | 13402.46 | 12650.62 | 11789.46 | 10928.29 | 10067.12 |
| Depreciation during the year | 855.34 | 861.17 | 861.17 | 861.17 | 861.17 |
| Cumulative depreciation (incl. of AAD) | 2388.43 | 3249.60 | 4110.77 | 4971.93 | 5833.10 |

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

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

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|---------------|---------------|---------------|---------------|---------------|
| 220 kV Bays: | | | | | |
| No. of Bays | 6 | 6 | 6 | 6 | 6 |
| Norms (₹ lakh/Bay) | 42.210 | 43.610 | 45.060 | 46.550 | 48.100 |
| 400 kV Bays: | | | | | |
| No. of Bays | 7 | 7 | 7 | 7 | 7 |
| Norms (₹ lakh/Bay) | 60.300 | 62.300 | 64.370 | 66.510 | 68.710 |
| Line: D/C (Twin Conductor): | | | | | |
| Line Length (km) | 49.06 | 49.06 | 49.06 | 49.06 | 49.06 |
| Norms (₹ lakh/km) | 0.707 | 0.731 | 0.755 | 0.780 | 0.806 |
| Total O&M Expenses (₹ lakh) | 710.05 | 733.62 | 757.99 | 783.14 | 809.11 |



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

59. TANGEDCO in its reply has submitted that the norms determined by the Commission are in accordance and with the guidelines issued by the Central Electricity Authority and other authorities. Further, the Commission in its statement of reasons for the 2014 Tariff Regulations, has briefly discussed the issues raised by the utilities. Hence, there should not be any further increase in O&M Expenses as the expenses already allowed is on higher side. Further, there cannot be any petition seeking relaxation of the norms determined by Commission.

60. The petitioner in response to the TANGEDCO's reply has submitted that submitted that the O&M norms specified under regulation 29 (3) (a) of the 2014 Tariff Regulations for block 2014-19 has been arrived by the Commission after considering (i) normalized actual O&M expenses of the petitioner on its various projects in various regions during the year 2008-09, 2009-10, 2010-11, 2011-12 and 2012-13. The petitioner submitted that being a CPSU, the scheme of wage revision is binding on the it. However the actual impact of wage hike (due w.e.f. 1.1.2017) has not been factored in fixation of the normative O&M rates prescribed for the tariff block 2014-19. In line with the regulation 19(1) (ii) of the 2009 Tariff Regulations, norms for O&M Expenses for the

year 2009-10 were derived considering the impact of wage hike of the employees under PSUs.

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

Interest on Working Capital (“IWC”)

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

“28. Interest on Working Capital

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

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

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

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

(₹ in lakh)

| Interest on Working Capital | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|------------------------------------|----------------|----------------|----------------|----------------|----------------|
| O & M expenses | 59.15 | 61.11 | 63.14 | 65.24 | 67.40 |
| Maintenance Spares | 106.51 | 110.04 | 113.70 | 117.47 | 121.37 |
| Receivables | 595.09 | 589.44 | 580.42 | 571.50 | 562.73 |

| Interest on Working Capital | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|------------------------------------|----------------|----------------|----------------|----------------|----------------|
| Total | 760.74 | 760.59 | 757.26 | 754.21 | 751.49 |
| Rate of Interest (%) | 13.50 | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 102.70 | 102.68 | 102.23 | 101.82 | 101.45 |

ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

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

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---|----------------|----------------|----------------|----------------|----------------|
| Depreciation | | | | | |
| Opening Gross Block | 16859.98 | 17089.98 | 17089.98 | 17089.98 | 17089.98 |
| Additional Capitalisation | 230.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Closing Gross Block | 17089.98 | 17089.98 | 17089.98 | 17089.98 | 17089.98 |
| Average Gross Block | 16974.98 | 17089.98 | 17089.98 | 17089.98 | 17089.98 |
| Rate of Depreciation (%) | 5.04 | 5.04 | 5.04 | 5.04 | 5.04 |
| Depreciable Value | 14935.56 | 15142.56 | 15039.06 | 15039.06 | 15039.06 |
| Balance useful life of the asset | 27.00 | 26.00 | 25.00 | 24.00 | 23.00 |
| Elapsed life | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 |
| Remaining Depreciable Value | 13402.46 | 12650.62 | 11789.46 | 10928.29 | 10067.12 |
| Depreciation during the year | 855.34 | 861.17 | 861.17 | 861.17 | 861.17 |
| Cumulative depreciation (incl. of AAD) | 2388.43 | 3249.60 | 4110.77 | 4971.93 | 5833.10 |
| Interest on Loan | | | | | |
| Gross Normative Loan | 11801.99 | 11962.99 | 11962.99 | 11962.99 | 11962.99 |
| Cumulative Repayments upto Previous Year | 1533.10 | 2388.43 | 3249.60 | 4110.77 | 4971.93 |
| Net Loan-Opening | 10268.89 | 9574.55 | 8713.39 | 7852.22 | 6991.06 |
| Additions | 161.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Repayment during the year | 855.34 | 861.17 | 861.17 | 861.17 | 861.17 |
| Net Loan-Closing | 9574.55 | 8713.39 | 7852.22 | 6991.06 | 6129.89 |
| Average Loan | 9921.72 | 9143.97 | 8282.80 | 7421.64 | 6560.47 |
| Weighted Average Rate of Interest on Loan (%) | 9.1091 | 9.1180 | 9.1239 | 9.1280 | 9.1336 |
| Interest on Loan | 903.78 | 833.75 | 755.71 | 677.45 | 599.21 |
| Return on Equity | | | | | |
| Opening Equity | 5058.00 | 5127.00 | 5127.00 | 5127.00 | 5127.00 |
| Additions | 69.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Closing Equity | 5127.00 | 5127.00 | 5127.00 | 5127.00 | 5127.00 |
| Average Equity | 5092.50 | 5127.00 | 5127.00 | 5127.00 | 5127.00 |
| Return on Equity (Base Rate) (%) | 15.500 | 15.500 | 15.500 | 15.500 | 15.500 |

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|------------------------------------|----------------|----------------|----------------|----------------|----------------|
| MAT Rate for respective year (%) | 20.961 | 20.961 | 20.961 | 20.961 | 20.961 |
| Rate of Return on Equity (%) | 19.610 | 19.610 | 19.610 | 19.610 | 19.610 |
| Return on Equity | 998.66 | 1005.43 | 1005.43 | 1005.43 | 1005.43 |
| Interest on Working Capital | | | | | |
| O & M Expenses | 59.15 | 61.11 | 63.14 | 65.24 | 67.40 |
| Maintenance Spares | 106.51 | 110.04 | 113.70 | 117.47 | 121.37 |
| Receivables | 595.09 | 589.44 | 580.42 | 571.50 | 562.73 |
| Total Working Capital | 760.74 | 760.59 | 757.26 | 754.21 | 751.49 |
| Rate of Interest (%) | 13.50 | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest of working capital | 102.70 | 102.68 | 102.23 | 101.82 | 101.45 |
| Annual Transmission Charges | | | | | |
| Depreciation | 855.34 | 861.17 | 861.17 | 861.17 | 861.17 |
| Interest on Loan | 903.78 | 833.75 | 755.71 | 677.45 | 599.21 |
| Return on Equity | 998.66 | 1005.43 | 1005.43 | 1005.43 | 1005.43 |
| Interest on Working Capital | 102.70 | 102.68 | 102.23 | 101.82 | 101.45 |
| O & M Expenses | 710.05 | 733.62 | 757.99 | 783.14 | 809.11 |
| Total | 3570.52 | 3536.64 | 3482.53 | 3429.00 | 3376.36 |

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

Filing Fee and the Publication Expenses

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

Licence Fee & RLDC Fees and Charges

68. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 52 (2) (b) of the 2014 Tariff Regulations for 2014-19 tariff period. The

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

Service Tax

69. The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future. TANGEDCO in its reply has submitted that the petitioner’s claim of the service tax is premature and not reasonable and has prayed to the Commission that it may consider the reasonableness of the petitioner’s claim while passing any taxes to the beneficiaries. We are of the view that the petitioner’s prayer is premature.

Sharing of Transmission Charges

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

71. This order disposes of Petition No. 551/TT/2014.

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

Sd/-
(A.S. Bakshi)
Member



ASSET 1 - DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2009-14

(₹ in lakh)

| Particulars | Interest Rate (%) | Loan deployed as on COD | Additions during the tariff period | Total |
|---|-------------------|-------------------------|------------------------------------|----------------|
| BOND XXXI-DRAWL 01-MAR-2012- | 8.90 | 370.00 | 0.00 | 370.00 |
| BOND XXXIII-DRAWL 01-MAR-2012- | 8.64 | 340.00 | 0.00 | 340.00 |
| BOND-XXXIV-DRAWL 01-MAR-2012- | 8.84 | 740.00 | 0.00 | 740.00 |
| BOND-XXXV-DRAWL 01-MAR-2012- | 9.64 | 117.00 | 0.00 | 117.00 |
| BOND XXXVI-DRAWL 01-MAR-2012- | 9.35 | 340.00 | 0.00 | 340.00 |
| BOND XXXVII-DRAWL 01-MAR-2012- | 9.25 | 160.00 | 0.00 | 160.00 |
| BOND XXXVIII-ADDCAP FOR 2011-2012 DRAWL 31-MAR-2012- | 9.25 | 0.00 | 122.61 | 122.61 |
| BOND XXXVIII-DRAWL 01-MAR-2012- | 9.25 | 1907.50 | 0.00 | 1907.50 |
| SBI (21.03.2012)-ADDCAP FOR 2013-2014 Add Cap 2013-14- | 10.29 | 0.00 | 218.99 | 218.99 |
| BOND XL-ADDCAP FOR 2012-2013 ADDCAP FOR 2012-2013 ADDCAP FOR 2012-2013 DRAWL 31-MAR-2013- | 9.30 | 0.00 | 422.41 | 422.41 |
| BOND - XLII-ADDCAP FOR 2012-2013 ADDCAP FOR 2012-2013 ADDCAP FOR 2012-2013 DRAWL 31-MAR-2013- | 8.80 | 0.00 | 156.85 | 156.85 |
| BOND - XLV-ADDCAP FOR 2013-2014 Add Cap 2013-14- | 9.65 | 0.00 | 10.23 | 10.23 |
| Total | | 3974.50 | 931.09 | 4905.59 |

**ASSET 1 - WEIGHTED AVERAGE RATE OF INTEREST ON LOAN DURING 2009-14
TARIFF PERIOD**

(₹ in lakh)

| Particulars | 2011-12 | 2012-13 | 2013-14 |
|---|----------------|----------------|----------------|
| Gross Opening Loan | 3974.50 | 4097.11 | 4676.37 |
| Cumulative Repayments of Loans upto Previous Year | 0.00 | 0.00 | 0.00 |
| Net Loans Opening | 3974.50 | 4097.11 | 4676.37 |
| Add: Draw(s) during the Year | 122.61 | 579.26 | 229.22 |
| Less: Repayments of Loan during the year | 0.00 | 0.00 | 30.83 |
| Net Closing Loan | 4097.11 | 4676.37 | 4874.76 |
| Average Net Loan | 4035.81 | 4386.74 | 4775.57 |
| Rate of Interest on Loan (%) | 9.1111 | 9.1166 | 9.1476 |
| Interest on Loan | 367.71 | 399.92 | 436.85 |



ASSET 2 - DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2009-14

(₹ in lakh)

| Particulars | Interest Rate (%) | Loan deployed as on COD | Additions during the tariff period | Total |
|--|-------------------|-------------------------|------------------------------------|----------------|
| BOND XXXI-DOCO DRAWL ON 01-SEP-2012- | 8.90 | 234.00 | 0.00 | 234.00 |
| BOND XXXIII-DOCO DRAWL ON 01-SEP-2012- | 8.64 | 218.00 | 0.00 | 218.00 |
| BOND-XXXIV-DOCO DRAWL ON 01-SEP-2012- | 8.84 | 470.00 | 0.00 | 470.00 |
| BOND-XXXV-DOCO DRAWL ON 01-SEP-2012- | 9.64 | 54.00 | 0.00 | 54.00 |
| BOND XXXVI-DOCO DRAWL ON 01-SEP-2012- | 9.35 | 172.00 | 0.00 | 172.00 |
| BOND XXXVII-DOCO DRAWL ON 01-SEP-2012- | 9.25 | 79.00 | 0.00 | 79.00 |
| BOND XXXVIII-ADDCAP FOR 2012-2013 ADDCAP FOR 2012-2013 ADDCAP | 9.25 | 0.00 | 36.99 | 36.99 |
| BOND XXXVIII-DOCO DRAWL ON 01-SEP-2012- | 9.25 | 820.51 | 0.00 | 820.51 |
| BOND XL-ADDCAP FOR 2012-2013 ADDCAP FOR 2012-2013 ADDCAP FOR 2012-2013 DRAWL ON 01-Mar-2013- | 9.30 | 0.00 | 397.62 | 397.62 |
| BOND XL-DRAWL ON 01-SEP-2012- | 9.30 | 88.59 | 0.00 | 88.59 |
| BOND - XLI-DRAWL ON 01-SEP-2012- | 8.85 | 347.00 | 0.00 | 347.00 |
| BOND - XLII-DRAWL ON 01-SEP-2012- | 8.80 | 115.10 | 0.00 | 115.10 |
| BOND - XLIII-ADDCAP FOR 2013-2014 ADDCAP FOR 2013-2014 ADDCAP FOR 2013- 2014 DRAWL ON 01-Mar-2014- | 7.93 | 0.00 | 34.00 | 34.00 |
| Total | | 2598.20 | 468.61 | 3066.81 |

**ASSET 2 - WEIGHTED AVERAGE RATE OF INTEREST ON LOAN DURING 2009-14
TARIFF PERIOD**

(₹ in lakh)

| Particulars | 2012-13 | 2013-14 |
|---|----------------|----------------|
| Gross Opening Loan | 2598.20 | 3032.81 |
| Cumulative Repayments of Loans upto Previous Year | 0.00 | 0.00 |
| Net Loans Opening | 2598.20 | 3032.81 |
| Add: Draw(s) during the Year | 434.61 | 34.00 |
| Less: Repayments of Loan during the year | 0.00 | 19.50 |



| Particulars | 2012-13 | 2013-14 |
|------------------------------|----------------|----------------|
| Net Closing Loan | 3032.81 | 3047.31 |
| Average Net Loan | 2815.51 | 3040.06 |
| Rate of Interest on Loan (%) | 9.0562 | 9.0676 |
| Interest on Loan | 254.98 | 275.66 |

ASSET 3 - DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2009-14

(₹ in lakh)

| Particulars | Interest Rate (%) | Loan deployed as on COD | Additions during the tariff period | Total |
|---|-------------------|-------------------------|------------------------------------|---------------|
| BOND XXXI-DOCO DRAWL ON 01-JUN-2012- | 8.90 | 46.00 | 0.00 | 46.00 |
| BOND XXXIII-DOCO DRAWL ON 01-JUN-2012- | 8.64 | 42.00 | 0.00 | 42.00 |
| BOND-XXXIV-DOCO DRAWL ON 01-JUN-2012- | 8.84 | 90.00 | 0.00 | 90.00 |
| BOND-XXXV-DOCO DRAWL ON 01-JUN-2012- | 9.64 | 15.00 | 0.00 | 15.00 |
| BOND XXXVI-DOCO DRAWL ON 01-JUN-2012- | 9.35 | 44.00 | 0.00 | 44.00 |
| BOND XXXVII-DOCO DRAWL ON 01-JUN-2012 DRAWL ON 01-JUN-2012- | 9.25 | 20.00 | 0.00 | 20.00 |
| BOND XXXVIII-DOCO DRAWL ON 01-JUN-2012- | 9.25 | 250.00 | 0.00 | 250.00 |
| BOND XL-ADDCAP FOR 2012-2013 DRAWL ON 31-MAR-2013- | 9.30 | 0.00 | 97.71 | 97.71 |
| BOND XL-DRAWL ON 01-JUN-2012- | 9.30 | 4.78 | 0.00 | 4.78 |
| BOND - XLIII-ADDCAP FOR 2013-2014 ADDCAP FOR 2013-2014 DRAWL ON 31-MAR-2014- | 7.93 | 0.00 | 100.51 | 100.51 |
| Total | | 511.78 | 198.22 | 710.00 |

**ASSET 3 - WEIGHTED AVERAGE RATE OF INTEREST ON LOAN DURING 2009-14
TARIFF PERIOD**

(₹ in lakh)

| Particulars | 2012-13 | 2013-14 |
|---|---------------|---------------|
| Gross Opening Loan | 511.78 | 609.49 |
| Cumulative Repayments of Loans upto Previous Year | 0.00 | 0.00 |
| Net Loans Opening | 511.78 | 609.49 |
| Add: Draw(s) during the Year | 97.71 | 100.51 |



| Particulars | 2012-13 | 2013-14 |
|--|---------------|---------------|
| Less: Repayments of Loan during the year | 0.00 | 3.83 |
| Net Closing Loan | 609.49 | 706.17 |
| Average Net Loan | 560.64 | 657.83 |
| Rate of Interest on Loan (%) | 9.1328 | 9.0540 |
| Interest on Loan | 51.20 | 59.56 |

ASSET 4 - DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2009-14

(₹ in lakh)

| Particulars | Interest Rate (%) | Loan deployed as on COD | Additions during the tariff period | Total |
|--|-------------------|-------------------------|------------------------------------|----------------|
| | | | | (Rs in lakh) |
| BOND XXXI-DRAWL ON 01-MAR-2012- | 8.90 | 232.00 | 0.00 | 232.00 |
| BOND XXXIII-DRAWL 01-MAR-2012- | 8.64 | 222.00 | 0.00 | 222.00 |
| BOND-XXXIV-DRAWL 01-MAR-2012- | 8.84 | 500.00 | 0.00 | 500.00 |
| BOND-XXXV-DRAWL 01-MAR-2012- | 9.64 | 25.00 | 0.00 | 25.00 |
| BOND XXXVI-DRAWL 01-MAR-2012- | 9.35 | 60.00 | 0.00 | 60.00 |
| BOND XXXVII-DRAWL 01-MAR-2012- | 9.25 | 28.00 | 0.00 | 28.00 |
| BOND XXXVIII-ADDCAP FOR 2011-2012 DRAWL 31-MAR-2012- | 9.25 | 0.00 | 5.73 | 5.73 |
| BOND XXXVIII-DRAWL 01-MAR-2012- | 9.25 | 336.60 | 0.00 | 336.60 |
| SBI (21.03.2012)-ADDCAP FOR 2012-2013 add cap- | 10.61 | 0.00 | 119.32 | 119.32 |
| SBI (21.03.2012)-ADDCAP FOR 2013-2014 add cap- | 10.29 | 0.00 | 15.69 | 15.69 |
| BOND - XLII-ADDCAP FOR 2012-2013 add cap- | 8.80 | 0.00 | 78.05 | 78.05 |
| BOND - XLV-ADDCAP FOR 2013-2014 add cap- | 9.65 | 0.00 | 0.77 | 0.77 |
| Total | | 1403.60 | 219.56 | 1623.16 |

**ASSET 4 - WEIGHTED AVERAGE RATE OF INTEREST ON LOAN DURING 2009-14
TARIFF PERIOD**

(₹ in lakh)

| Particulars | 2011-12 | 2012-13 | 2013-14 |
|---|----------------|----------------|----------------|
| Gross Opening Loan | 1403.60 | 1409.33 | 1606.70 |
| Cumulative Repayments of Loans upto Previous Year | 0.00 | 0.00 | 0.00 |
| Net Loans Opening | 1403.60 | 1409.33 | 1606.70 |



| Particulars | 2011-12 | 2012-13 | 2013-14 |
|--|----------------|----------------|----------------|
| Add: Draw(s) during the Year | 5.73 | 197.37 | 16.46 |
| Less: Repayments of Loan during the year | 0.00 | 0.00 | 19.33 |
| Net Closing Loan | 1409.33 | 1606.70 | 1603.83 |
| Average Net Loan | 1406.47 | 1508.02 | 1605.27 |
| Rate of Interest on Loan (%) | 8.9614 | 9.0230 | 9.0599 |
| Interest on Loan | 126.04 | 136.07 | 145.43 |

ASSET 5 - DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2009-14

(₹ in lakh)

| Particulars | Interest Rate (%) | Loan deployed as on COD | Additions during the tariff period | Total |
|---|--------------------------|--------------------------------|---|----------------|
| BOND XXXI-DOCO DRAWL ON 01-APR-2012- | 8.90 | 185.00 | 0.00 | 185.00 |
| BOND XXXIII-DOCO DRAWL ON 01-APR-2012- | 8.64 | 178.00 | 0.00 | 178.00 |
| BOND-XXXIV-DOCO DRAWL ON 01-APR-2012- | 8.84 | 394.00 | 0.00 | 394.00 |
| BOND-XXXV-DOCO DRAWL ON 01-APR-2012- | 9.64 | 19.00 | 0.00 | 19.00 |
| BOND XXXVI-DOCO DRAWL ON 01-APR-2012- | 9.35 | 56.00 | 0.00 | 56.00 |
| BOND XXXVII-DOCO DRAWL ON 01-APR-2012- | 9.25 | 26.00 | 0.00 | 26.00 |
| BOND XXXVIII-DOCO DRAWL ON 01-APR-2012- | 9.25 | 317.06 | 0.00 | 317.06 |
| SBI (21.03.2012)-ADDCAP FOR 2013-2014 add cap- | 9.25 | 0.00 | 96.00 | 96.00 |
| BOND XL-ADDCAP FOR 2012-2013 DRAWL ON 31-03-2013- | 9.30 | 0.00 | 68.21 | 68.21 |
| BOND XL-DRAWL ON 01-APR-2012- | 9.30 | 136.68 | 0.00 | 136.68 |
| BOND - XLIII-ADDCAP FOR 2013-2014 add cap- | 7.93 | 0.00 | 40.49 | 40.49 |
| Total | | 1311.74 | 204.70 | 1516.44 |

**ASSET 5 - WEIGHTED AVERAGE RATE OF INTEREST ON LOAN DURING 2009-14
TARIFF PERIOD**

(₹ in lakh)

| Particulars | 2012-13 | 2013-14 |
|---|----------------|----------------|
| Gross Opening Loan | 1311.74 | 1379.95 |
| Cumulative Repayments of Loans upto Previous Year | 0.00 | 0.00 |
| Net Loans Opening | 1311.74 | 1379.95 |
| Add: Draw(s) during the Year | 68.21 | 136.49 |
| Less: Repayments of Loan during the year | 0.00 | 15.42 |
| Net Closing Loan | 1379.95 | 1501.02 |
| Average Net Loan | 1345.85 | 1440.49 |
| Rate of Interest on Loan (%) | 9.0172 | 9.0516 |
| Interest on Loan | 121.36 | 130.39 |



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

(₹ in lakh)

| Particulars | Interest Rate (%) | Loan deployed as on 1.4.2014 | Additions during the tariff period | Total |
|---|-------------------|------------------------------|------------------------------------|--------|
| BOND XXXI-1.DRAWL 01-MAR-2012- | 8.90 | 370.00 | 0.00 | 370.00 |
| BOND XXXI-13.DRAWL ON 01-MAR-2012- | 8.90 | 232.00 | 0.00 | 232.00 |
| BOND XXXI-25.DOCO DRAWL ON 01-APR-2012- | 8.90 | 185.00 | 0.00 | 185.00 |
| BOND XXXI-36.DOCO DRAWL ON 01-JUN-2012- | 8.90 | 46.00 | 0.00 | 46.00 |
| BOND XXXI-46.DOCO DRAWL ON 01-SEP-2012- | 8.90 | 234.00 | 0.00 | 234.00 |
| BOND XXXIII-14.DRAWL ON 01-MAR-2012- | 8.64 | 222.00 | 0.00 | 222.00 |
| BOND XXXIII-2.DRAWL 01-MAR-2012- | 8.64 | 340.00 | 0.00 | 340.00 |
| BOND XXXIII-26.DOCO DRAWL ON 01-APR-2012- | 8.64 | 178.00 | 0.00 | 178.00 |
| BOND XXXIII-37.DOCO DRAWL ON 01-JUN-2012- | 8.64 | 42.00 | 0.00 | 42.00 |
| BOND XXXIII-47.DOCO DRAWL ON 01-SEP-2012- | 8.64 | 218.00 | 0.00 | 218.00 |
| BOND-XXXIV-15. DRAWL ON 01-MAR-2012- | 8.84 | 500.00 | 0.00 | 500.00 |
| BOND-XXXIV-27.DOCO DRAWL ON 01-APR-2012- | 8.84 | 394.00 | 0.00 | 394.00 |
| BOND-XXXIV-3.DRAWL 01-MAR-2012- | 8.84 | 740.00 | 0.00 | 740.00 |
| BOND-XXXIV-38.DOCO DRAWL ON 01-JUN-2012- | 8.84 | 90.00 | 0.00 | 90.00 |
| BOND-XXXIV-48.DOCO DRAWL ON 01-SEP-2012- | 8.84 | 470.00 | 0.00 | 470.00 |
| BOND-XXXV-16. DRAWL ON 01-MAR-2012- | 9.64 | 25.00 | 0.00 | 25.00 |
| BOND-XXXV-28.DOCO DRAWL ON 01-APR-2012- | 9.64 | 19.00 | 0.00 | 19.00 |
| BOND-XXXV-39.DOCO DRAWL ON 01-JUN-2012- | 9.64 | 15.00 | 0.00 | 15.00 |
| BOND-XXXV-4.DRAWL 01-MAR 2012- | 9.64 | 117.00 | 0.00 | 117.00 |
| BOND-XXXV-49.DOCO DRAWL ON 01-SEP-2012- | 9.64 | 54.00 | 0.00 | 54.00 |
| BOND XXXVI-17. DRAWL ON 01-MAR-2012- | 9.35 | 60.00 | 0.00 | 60.00 |
| BOND XXXVI-29.DOCO DRAWL ON 01-APR-2012- | 9.35 | 56.00 | 0.00 | 56.00 |
| BOND XXXVI-40.DOCO DRAWL ON 01-JUN-2012- | 9.35 | 44.00 | 0.00 | 44.00 |
| BOND XXXVI-5.DRAWL 01-MAR-2012- | 9.35 | 340.00 | 0.00 | 340.00 |
| BOND XXXVI-50. DOCO DRAWL ON 01-SEP- | 9.35 | 172.00 | 0.00 | 172.00 |



| Particulars | Interest Rate (%) | Loan deployed as on 1.4.2014 | Additions during the tariff period | Total |
|--|-------------------|------------------------------|------------------------------------|---------|
| 2012- | | | | |
| BOND XXXVII-18.DRAWL ON 01-MAR-2012- | 9.25 | 28.00 | 0.00 | 28.00 |
| BOND XXXVII-30.DOCO DRAWL ON 01-APR-2012- | 9.25 | 26.00 | 0.00 | 26.00 |
| BOND XXXVII-41.DOCO DRAWL ON 01-JUN-2012 DRAWL ON 01-JUN- 2012- | 9.25 | 20.00 | 0.00 | 20.00 |
| BOND XXXVII-51.DOCO DRAWL ON 01-SEP-2012- | 9.25 | 79.00 | 0.00 | 79.00 |
| BOND XXXVII-6.DRAWL 01-MAR-2012- | 9.25 | 160.00 | 0.00 | 160.00 |
| BOND XXXVIII-19.ADDCAP FOR 2011-2012 DRAWL ON 31-MAR-2012- | 9.25 | 5.73 | 0.00 | 5.73 |
| BOND XXXVIII-20.DRAWL ON 01-MAR-2012- | 9.25 | 336.60 | 0.00 | 336.60 |
| BOND XXXVIII-31.DOCO DRAWL ON 01-APR-2012- | 9.25 | 317.06 | 0.00 | 317.06 |
| BOND XXXVIII-42.DOCO DRAWL ON 01-JUN 2012- | 9.25 | 250.00 | 0.00 | 250.00 |
| BOND XXXVIII-52.DOCO DRAWL ON 01-SEP-2012- | 9.25 | 820.51 | 0.00 | 820.51 |
| BOND XXXVIII-58.ADDCAP FOR 2012-2013 ADDCAP FOR 2012-2013 ADDCAP FOR 2012-2013 DRAWL ON 01-Mar-2013- | 9.25 | 36.99 | 0.00 | 36.99 |
| BOND XXXVIII-7.ADDCAP FOR 2011-2012 DRAWL 31-MAR-2012- | 9.25 | 122.61 | 0.00 | 122.61 |
| BOND XXXVIII-8.DRAWL 01-MAR-2012- | 9.25 | 1907.50 | 0.00 | 1907.50 |
| SBI (21.03.2012)12.ADDCAP FOR 2013-2014 Add Cap 2013-14- | 10.29 | 0.00 | 218.99 | 218.99 |
| SBI (21.03.2012)-21.ADDCAP FOR 2012-2013 add cap- | 10.29 | 119.32 | 0.00 | 119.32 |
| SBI (21.03.2012)-24.ADDCAP FOR 2013-2014 add cap- | 10.29 | 0.00 | 15.69 | 15.69 |
| SBI (21.03.2012)-35. ADDCAP FOR 2013-2014 add cap- | 10.29 | 0.00 | 96.00 | 96.00 |
| BOND XL-32.DRAWL ON 01-APR-2012- | 9.30 | 136.68 | 0.00 | 136.68 |
| BOND XL-33.ADDCAP FOR 2012-2013 DRAWL ON 31-03-2013- | 9.30 | 68.21 | 0.00 | 68.21 |
| BOND XL-43.ADDCAP FOR 2012-2013 DRAWL ON 31-MAR-2013- | 9.30 | 97.71 | 0.00 | 97.71 |
| BOND XL-44.DRAWL ON 01-JUN-2012- | 9.30 | 4.78 | 0.00 | 4.78 |
| BOND XL-53.DRAWL ON 01-SEP-2012- | 9.30 | 88.59 | 0.00 | 88.59 |
| BOND XL-57.ADDCAP FOR 2012-2013 ADDCAP FOR 2012-2013 ADDCAP FOR 2012-2013 DRAWL ON 01-Mar-2013- | 9.30 | 397.62 | 0.00 | 397.62 |
| BOND XL-9.ADDCAP FOR 2012-2013 ADDCAP FOR 2012-2013 ADDCAP FOR 2012-2013 DRAWL 31-MAR-2013- | 9.30 | 422.41 | 0.00 | 422.41 |
| BOND - XLI-54.DRAWL ON 01-SEP-2012- | 8.85 | 347.00 | 0.00 | 347.00 |



| Particulars | Interest Rate (%) | Loan deployed as on 1.4.2014 | Additions during the tariff period | Total |
|--|-------------------|------------------------------|------------------------------------|-----------------|
| BOND - XLII-10.ADDCAP FOR 2012-2013 ADDCAP FOR 2012-2013 ADDCAP FOR 2012-2013 DRAWL 31-MAR-2013- | 8.80 | 156.85 | 0.00 | 156.85 |
| BOND - XLII-22.ADDCAP FOR 2012-2013 add cap- | 8.80 | 78.05 | 0.00 | 78.05 |
| BOND - XLII-55.DRAWL ON 01-SEP-2012- | 8.80 | 115.10 | 0.00 | 115.10 |
| BOND - XLIII-34.ADDCAP FOR 2013-2014 add cap- | 7.93 | 0.00 | 40.49 | 40.49 |
| BOND - XLIII-45.ADDCAP FOR 2013-2014 ADDCAP FOR 2013-2014 DRAWL ON 31- MAR-2014- | 7.93 | 0.00 | 100.51 | 100.51 |
| BOND - XLIII-56.ADDCAP FOR 2013-2014 ADDCAP FOR 2013-2014 ADDCAP FOR 2013-2014 DRAWL ON 01-Mar-2014- | 7.93 | 0.00 | 34.00 | 34.00 |
| BOND - XLV-II.ADDCAP FOR 2013-2014 Add Cap 2013-14- | 9.65 | 0.00 | 10.23 | 10.23 |
| BOND - XLV-23.ADDCAP FOR 2013-2014 add cap- | 9.65 | 0.00 | 0.77 | 0.77 |
| Total | | 11305.32 | 516.68 | 11822.00 |

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

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|-----------------|-----------------|-----------------|-----------------|----------------|
| Gross Opening Loan | 11822.00 | 11822.00 | 11822.00 | 11822.00 | 11822.00 |
| Cumulative Repayments of Loans upto Previous Year | 88.91 | 443.99 | 844.31 | 1460.60 | 2092.38 |
| Net Loans Opening | 11733.09 | 11378.01 | 10977.69 | 10361.40 | 9729.62 |
| Add: Draw(s) during the Year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Less: Repayments of Loan during the year | 355.08 | 400.32 | 616.29 | 631.78 | 631.78 |
| Net Closing Loan | 11378.01 | 10977.69 | 10361.40 | 9729.62 | 9097.84 |
| Average Net Loan | 11555.55 | 11177.85 | 10669.55 | 10045.51 | 9413.73 |
| Rate of Interest on Loan (%) | 9.1091 | 9.1180 | 9.1239 | 9.1280 | 9.1336 |
| Interest on Loan | 1052.60 | 1019.20 | 973.48 | 916.96 | 859.81 |

