

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 511/TT/2014

Coram:

**Shri A. S. Bakshi, Member
Dr. M. K. Iyer, Member**

**Date of Hearing : 27.01.2016
Date of Order : 29.02.2016**

In the matter of:

Truing up of transmission tariff for 2009-14 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 and determination of transmission tariff for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for 2nd spare converter transformer at Kolar (**Transformer I**: COD-1.6.2011) and Talcher (**Transformer II**: COD- 1.10.2011) HVDC terminals (each one at Kolar and Talcher) in Southern Region, under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

And in the matter of:

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

.....**Petitioner**

Versus

1. Karnataka Power Transmission Corporation Ltd.
(KPTCL), Kaveri Bhavan, Bangalore -560 009
2. Transmission Corporation of Andhra Pradesh Ltd.
(APTRANSCO), Vidyut Soudha, Hyderabad- 500082
3. Kerala State Electricity Board (KSEB)
Vaidyuthi Bhavanam, Pattom,
Thiruvananthapuram- 695 004
4. Tami 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- 605 001
 7. Eastern Power Distribution Company of
Andhra Pradesh Limited (APEPDCL),
P&T Colony, Seethmmadhara,
Vishakhapatnam
 8. Southern Power Distribution Company of
Andhra Pradesh Limited (APSPDCL),
Tirupati- 517 501, Chittoor District,
Andhra Pradesh
 9. Central Power Distribution Company of
Andhra Pradesh Limited (APCPDCL),
Corporate Office, Mint Compound,
Hyderabad- 500 063
 10. Northern Power Distribution Company of
Andhra Pradesh Limited (APNPDCL),
Opp. NIT Petrol Pump, Chaitayapuri,
Warangal- 506 004
 11. Bangalore Electricity Supply Company Limited (BESCOM)
Corporate Office, K.R Circle,
Bangalore- 560 001, Karnataka
 12. Gulbarga Electricity Supply Company Limited (GESCOM)
Station Road, Gulbarga, Karnataka
 13. Hubli Electricity Supply Company Limited (HESCOM)
Navanagar, PB Road, Hubli, Karnataka
 14. MESCOM Corporate Office
Paradigm Plaza, AB Shetty Circle,
Mangalore- 575 001
 15. Chamundeswari Electricity Supply Corporation Limited (CESC)
-



The following were present:-

For Petitioner: Shri Piyush Awasthi, PGCIL
 Shri A.M Pavgi, PGCIL
 Shri P.V Nath, PGCIL
 Shri Mohd Mohsin, PGCIL
 Shri M.M Mondal, PGCIL
 Shri Rakesh Prasad, PGCIL
 Shri Sangeeta Edwards, PGCIL
 Shri Subhash C Taneja, PGCIL
 Shri S.K Venkatesan, PGCIL

For Respondent: None

ORDER

The present petition has been preferred by Power Grid Corporation of India Ltd. (“the petitioner”), for truing up of capital expenditure and tariff for 2nd spare converter transformer at Kolar (Transformer I: COD- 1.6.2011) and Talcher (Transformer II: COD- 1.10.2011) HVDC terminals (each one at Kolar and Talcher) in Southern Region (hereinafter referred as “transmission asset”) 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 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.

2. The respondents are distribution licensees or electricity departments or power procurement companies of States, who are procuring transmission service from the petitioner, mainly beneficiaries of Southern Region.

3. The petitioner has served the petition to the respondents and notice of this application has been published in the newspapers in accordance with Section 64 of Electricity Act, 2003 (“the Act”). No comments have been received from the public in response to the notices published by the petitioner under Section 64 of the Act. The hearing in this matter was held on 27.1.2016. None of the respondents have filed their reply. In response to letters dated 20.1.2016 and 27.1.2016, the petitioner has submitted its replies vide affidavit dated 23.2.2016 and 29.2.2016. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

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

(a) Southern Regional Electricity Board (SREB), in its meeting held on 10.8.2004, agreed for procurement of two additional converter transformers for Talcher-Kolar HVDC Bi-pole, one each at Talcher and Kolar terminal. Accordingly, the administrative approval and expenditure sanction for the procurement of two nos. 397 MVA Converter Transformers (the Converter Transformers) was accorded by the Board of Directors of the petitioner company in its 170th meeting held on 1.8.2005



at an estimated cost of ₹6525 lakh, including Interest During Construction (IDC) of ₹104 lakh. The Board of Directors of the petitioner subsequently accorded approval for the revised estimated cost of ₹13553 lakh, including IDC of ₹527 lakh based on the 1st Quarter, 2011 price level. The revised approval was conveyed under No C/CP/Spare Conv. Talcher & Kolar dated 20.12.2011. The petitioner has built the transmission asset in the Southern Region. The date of the commercial operation of Converter Transformer at Kolar (Transformer I) and Converter Transformer at Talcher (Transformer II) is 1.6.2011 and 1.10.2011, respectively.

(b) The tariff from 1.6.2011 to 30.9.2011 for Transformer I, tariff from 1.10.2011 to 31.03.2012 and tariff for 2012-13 and 2013-14 for Combined Transformer- I & II was allowed vide order dated 20.1.2014 in Petition No. 111/TT/2011 in accordance with the 2009 Tariff Regulations. The tariff allowed for the tariff period 2009-14 is as under:-

(₹ in lakh)

| Particulars | Transformer-I | Combined Transformer-I&II | | |
|--------------------------------|--------------------------|---------------------------|----------------|----------------|
| | 2011-12 (Pro-rata) | 2011-12 (Pro-rata) | 2012-13 | 2013-14 |
| | 1.6.2011 to 30.9.2011 | 1.10.2011 to 31.3.2012 | | |
| Depreciation | 102.14 | 295.69 | 700.81 | 715.60 |
| Interest on Loan | 115.92 | 337.22 | 759.07 | 713.56 |
| Return on Equity | 101.45 | 293.69 | 696.08 | 710.76 |
| Interest on Working Capital | 6.38 | 18.51 | 43.06 | 42.74 |
| O & M Expenses | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 325.89 | 945.11 | 2199.03 | 2182.66 |



(c) In order dated 20.1.2014 in Petition No. 111-TT-2011, the tariff was determined from COD to 31.3.2014 considering the capital cost of ₹5547.53 lakh for Transformer I as on COD of 1.6.2011 and ₹9407.94 lakh for Transformer II as on COD of 1.10.2011.

(d) The MAT rate applicable as on 2008-09 was considered to arrive at rate of return on equity for the tariff period 2009-14, which is required to be adjusted as per the actual MAT rate applicable for the respective year at the time of truing up of tariff for 2009-14 tariff period.

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

5. The truing up of tariff for the 2009-14 tariff period has been determined as discussed below.

Capital Cost

6. The petitioner has claimed capital cost including IDC and IEDC of ₹5588.89 lakh for Transformer I and ₹3716.91 lakh for Transformer II as on COD (as per Auditor's Certificate) for the purpose of tariff.

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

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

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

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



(c) additional capital expenditure determined under regulation 9:

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

8. During hearing held on 27.1. 2016, the petitioner was directed to submit the reason for cost variation in Transformer-I and Transformer-II even though the assets are of similar configuration. The petitioner in response vide its affidavit dated 23.2.2016 submitted that there is variation of approximately ₹693 lakh in the completion cost of transformers at Talcher and Kolar. The major reason for higher completion cost of Converter Transformer (₹615 lakh) at Talcher is due to higher transportation cost awarded. In this regard, the petitioner has submitted the copy of extract from LOA with the price break-up and it is as follows:-

| S. No. | Item Description | Qty. (nos.) | Charges | |
|--------|--|-------------|---------------------|----------------------|
| | | | Unit Charges (in ₹) | Total Charges (in ₹) |
| | Charges for inland transportation including port handling and customs clearance at Indian port of entry and other local costs incidental to delivery of the goods to their final destination for the following equipments: | | | |
| 1.1 | For Talcher Terminal Station | | | |
| 1. | 397 MVA converter transformers (including bushings) | 1 | 106962395 | 106962395 |
| 2. | High capacity cooler fan | 15 | 297118 | 4456770 |
| | Sub-total | | | 111419165 |
| 1.2 | For Kolar Terminal Station | | | |
| 1. | 397 MVA converter transformers (including bushings) | 1 | 47918245 | 47918245 |
| 2. | High capacity cooler fan | 15 | 133106 | 1996590 |
| | Sub-total | | | 49914835 |
| | Total (1.1 + 1.2) | | | 161334000 |

9. The petitioner has submitted the Auditor's Certificate certifying the capital cost as on COD and additional capitalization claimed thereafter. Accordingly, the capital cost as on COD including IDC and IEDC (without adjustment of liquidated



damages) has been considered as ₹5588.89 lakh and ₹3716.91 lakh for Transformer I and Transformer II to work out the trued up tariff for the tariff period 2009-14. Further, the petitioner has claimed the additional capitalization of ₹202.78 lakh for Transformer I from 1.6.2011 (i.e. COD of Transformer I) to 30.9.2011 (i.e. upto COD of Transformer II) and submitted the Auditor's Certificate dated 21.11.2014 in support of the claim made. We have considered the additional capitalization of ₹202.78 lakh for Transformer I from 1.6.2011 (i.e. COD of Transformer I) to 30.9.2011 (i.e. upto COD of Transformer II) which was approved in order dated 20.1.2014. Thus, the capital cost including IDC and IEDC (without adjustment of LD amount) has been considered as ₹5588.89 lakh for Transformer I as on COD of 1.6.2011 and ₹9508.58 lakh for Combined Transformer I & II as on COD of 1.10.2011.

IDC and IEDC

10. In order dated 20.1.2014 in Petition No. 111-TT-2011, the IDC and IEDC of ₹19.16 lakh and ₹22.21 lakh for **Transformer I** and ₹35.10 lakh and ₹24.18 lakh for **Transformer II**, respectively was approved. The relevant portion of the said order is extracted hereunder:-

“41. In view of above observations of Appellate Tribunal, 50 % IDC, IEDC has been considered. Accordingly, after condoning delay of nine months in case Transformer – I and 11 months in case of Transformer - II, 50% of IDC and IEDC for fifteen months and seventeen months respectively has been deducted from the capital cost of the Converter Transformers as on the dates of commercial operation. Details of the disallowed IDC and IEDC adjusted against the capital cost are as follows:-



(₹ in lakh)

| Details of IDC and IEDC as per Management Certificate dated 15.3.2012 | | | | |
|--|----------------|--------|------------------|--------|
| Particulars | Transformer- I | | Transformer - II | |
| | IDC | IEDC | IDC | IEDC |
| Up to 31.5.2011/30.9.2011 | 122.60 | 142.13 | 214.70 | 147.93 |
| IDC and IEDC for 15/17 months | 38.31 | 44.42 | 70.19 | 48.36 |
| IDC and IEDC to be disallowed (50% of 15/17 months IDC & IEDC) | 19.16 | 22.21 | 35.10 | 24.18 |

42. It is noted that the petitioner is entitled to claim liquidated damages on account of the delay in supply of transformers by Siemens. The petitioner has not furnished the details of the liquidated damages, if any, recovered, though in its rejoinder to the reply filed by TANGEDCO it stated that the claim for liquidated damages was being processed in accordance with the terms of the contract. Therefore, presently the capital cost has been worked out by adjusting IDC/ IEDC only and liquidated damages, if any, recovered by the petitioner will be adjusted in accordance with law at the time of truing up.”

11. The petitioner has submitted the Auditor’s Certificate to justify the capital cost as on COD for Transformer I and Transformer II. The capital cost as on COD, claimed by the petitioner is the same that was allowed in order dated 20.1.2014 in Petition No. 111-TT-2011. Accordingly, the approved the IDC and IEDC of ₹19.16 lakh and ₹22.21 lakh for **Transformer I** and ₹35.10 lakh and ₹24.18 lakh for **Transformer II**, respectively, is approved.

12. Further in order dated 20.1.2014 in Petition No. 111/TT/2011, the petitioner was directed to submit the details of liquidated damages, if any, recovered by the petitioner. In this regard, the petitioner vide its affidavit dated 29.2.2016 has submitted that the details of liquidated damages recovered from M/s Siemens Ltd. Total LD of ₹189.99 lakh and ₹238.24 lakh has been recovered from the contractor in case of Transformer-I and Transformer-II, respectively and given credit to the project cost in the Auditor’s Certificate dated 25.7.2014 and 21.11.2014. The petitioner further submitted that in accordance with para 40-42



of the order 20.1.2014 in Petition No. 111/TT/2011, 50% of the LD recovered was to be adjusted in the capital cost. Since, 100% of the LD amount recovered was adjusted (credited) against the capital cost in both the transformers inadvertently, the same is being rectified as directed by the Commission, i.e. 50% of the LD amount recovered from the supplier. Thus, the LD amount of ₹95.00 lakh and ₹119.12 lakh for Transformer-I and Transformer-II has been adjusted in the capital cost.

13. We have considered the revised submissions of the petitioner. As per the order dated 20.1.2014, 50% of LD amount is to be deducted to arrive at capital cost. However, the petitioner in its revised submissions has not deducted the LD from the capital cost as on COD, but has reduced from the additional capital expenditure. We have reduced the LD amount from the capital cost as on COD.

14. Accordingly, the capital cost excluding IDC and IEDC has been considered as ₹5547.53 lakh for Transformer I as on COD of 1.6.2011 and ₹9407.94 lakh for Combined Transformer I & II as on COD of 1.10.2011. Thereafter, the capital cost after adjustment of LD amount is worked out as ₹5452.53 lakh for Transformer I as on COD of 1.6.2011 and ₹9193.82 lakh for Combined Transformer I & II as on COD of 1.10.2011.

Additional Capital Expenditure

15. The petitioner has claimed additional capitalization under Regulation 9(1)(i) of the 2009 Tariff Regulations.



16. Clause (1), sub-clause(i) of Regulation 9 of the 2009 Tariff Regulations provides that:-

“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...;”

17. With regard to Transformer I, the petitioner vide affidavit dated 29.2.2016 has claimed revised additional capitalization of ₹202.78 lakh from 1.6.2011 (i.e. COD of Transformer I) to 30.9.2011 and ₹666.09 lakh after deducting ₹95.00 lakh i.e., 50% of LD amount of ₹189.99 lakh from 1.10.2011 (i.e. COD of Transformer II) to 31.3.2012 towards balance and retention payment for works executed within cut-off date. Further for Transformer II, the petitioner has claimed additional capitalization of ₹2977.33 lakh from 1.10.2011 (i.e. COD of Transformer II) to 31.3.2012 and ₹480.60 lakh after deducting ₹119.12 lakh i.e., 50% of LD amount of ₹238.24 lakh from 1.10.2011 for 2012-13.

18. We have gone through the submissions of the petitioner and as discussed earlier we have adjusted LD amount from the capital cost as on COD and therefore no adjustment has been carried out in additional capitalisation. Further, the total capital cost of ₹5655.31 lakh for Transformer I including actual additional capitalization of ₹202.78 lakh claimed by the petitioner is within the overall apportioned approved cost of ₹6496.00 lakh. Further, the total capital cost of ₹13531.95 lakh for the combined assets including additional capitalisation of



₹3738.42 lakh in 2011-12 and ₹559.98 lakh in 2013-14 is within the approved apportioned cost of ₹13553 lakh. Hence, considering the submissions made by the petitioner, we have allowed total capital cost of ₹5655.31 lakh including additional capitalization under Regulation 9(1)(i) of the 2009 Tariff Regulations as shown in the table below:-

| (₹ in lakh) | | | | | | |
|---|--|--------------------------------|---------------------------------------|---------|--------------------------|------------------------------------|
| Particulars | Capital cost upto COD of Transformer-I (i.e. 1.6.2011) | 2011-12 1.6.2011 to 1.10.2011) | 2011-12 (from 1.10.2011 to 31.3.2012) | 2012-13 | Total add cap in 2009-14 | Total capital cost as on 31.3.2014 |
| Transformer-I | | | | | | |
| Apportioned approved cost: ₹6496.00 lakh | | | | | | |
| Approved in order dated 20.1.2014 | 5547.53 (5588.89-19.16-22.21) | 202.78 | 309.09 | | | |
| Allowed in this order | 5452.53 (5588.89-19.16-22.21-LD amount of 95.00) | 202.78 | 761.09 | | | |
| Transformer-II | | | | | | |
| Apportioned approved cost: ₹7057.00 lakh | | | | | | |
| Approved in order dated 20.1.2014 | 3657.63 (3716.91-35.1-24.18) | | 3275.99 | | | |
| Allowed in this order | 3538.51 (3716.91-35.1-24.18-LD amount of 119.12) | | 2977.33 | | | |
| Combined Transformer-I&II | | | | | | |
| Apportioned approved cost: ₹13553.00 lakh | | | | | | |
| Approved in order dated 20.1.2014 | 9407.94 (5547.53+3657.63) | | 3585.08 | 559.98 | 4145.06 | 13553.00 |
| Allowed in this order | 9193.82 | | 3738.42 | 599.72 | 4338.14 | 13531.95 |

Debt: Equity

19. Clause 1 & 3 of Regulation 12 of the 2009 Tariff Regulations provide that:-

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

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



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

.....

(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.”

20. The petitioner has claimed true up Annual Fixed Charge based on debt-equity ratio of 70:30 admitted as on 1.6.2011/1.10.2011, i.e., as on COD by the Commission in its order dated 20.1.2014 in Petition No. 111/TT/2011. The admitted debt:equity ratio of 70:30 as on COD of 1.6.2011 for Transformer-I and 1.10.2011 for Transformer-II has been considered for the purpose of trueing up of the approved tariff of tariff period 2011-14, as given under:-

| (₹ in lakh) | | |
|--|-------------------|---------------|
| Funding | Amount (₹in lakh) | (%) |
| Transformer-I (as on COD 1.6.2011) | | |
| Debt | 3816.77 | 70.00 |
| Equity | 1635.76 | 30.00 |
| Total | 5452.53 | 100.00 |
| Combined Transformer-I&II (as on COD 1.10.2011) | | |
| Debt | 6435.67 | 70.00 |
| Equity | 2758.14 | 30.00 |
| Total | 9193.82 | 100.00 |

With respect to additional capitalization, the petitioner has submitted the debt:equity ratio of 70:30 for 2011-12 (from 1.10.2011 to 31.3.2012) and 2012-13 for Combined Transformer-I & II. In this regard, the petitioner was directed to provide an undertaking on affidavit that actual equity infused for the additional capitalisation in 2011-12 is not less than 30% and for 2012-13 is not less than 29.73%. Further, the petitioner was directed to confirm the amount of balance



and retention payment yet to be made along with the details of contract for which the payment has been retained. In response, the petitioner vide affidavit dated 23.2.2016 has submitted that the balance and retention payment in instant assets in NIL. Further, the petitioner vide affidavit dated 29.2.2016 has submitted the revised tariff formats in which the additional capitalization during 2009-14 was considered in debt:equity ratio of 70:30.

21. The overall debt equity ratio as on 31.3.2014 for Combined Transformer-I & II including additional capitalization is as under:-

| (₹ in lakh) | | |
|---|-----------------|---------------|
| Funding | Amount | (%) |
| Combined Transformer- I & II | | |
| Debt | 9472.37 | 70.00 |
| Equity | 4059.59 | 30.00 |
| Total | 13531.95 | 100.00 |

Interest on Loan (“IOL”)

22. Regulation 16 of the 2009 Tariff Regulations provides the methodology for working out weighted average rate of interest on loan. The Commission in its earlier order dated 8.6.2011 in Petition No. 238/2010 has 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”.

23. The petitioner has submitted the weighted average rate of interest on loan based on its actual loan portfolio and rate of interest. We have considered the submissions of the petitioner and accordingly calculated the IOL based on actual interest rate submitted by the petitioner, in accordance with Regulation 16 of the



2009 Tariff Regulations. The details of weighted average rate of interest are placed at **Annexure-I** and the IOL has been worked out and allowed as follows:-

(₹ in lakh)

| Particulars | Transformer-I | Combined Transformer- I&II | | |
|-------------------------------------|-------------------------------------|---|---------|---------|
| | 2011-12 1.6.2011 to 30.9.2011 | 2011-12 1.10.2011 to 31.3.2012 | 2012-13 | 2013-14 |
| Approved vide order dated 20.1.2014 | 115.92 | 337.22 | 759.07 | 713.56 |
| As claimed by petitioner | 122.08 | 340.09 | 768.22 | 719.50 |
| Allowed after true up | 121.01 | 334.52 | 763.42 | 718.78 |

24. There is variation in interest on loan due to variation in Capital Cost as on COD and variation in actual additional capitalization during 2011-14 tariff period.

Return on Equity (“ROE”)

25. Clause (3), (4) and (5) of Regulation 15 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 year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.

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

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

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

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

Provided further that Annual Fixed Charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in



line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations.”

26. The petitioner has submitted that MAT rate of 11.330% applicable for 2008-09 was considered in the order dated 20.1.2014. However, for truing up purpose, the computation of RoE for the tariff period 2009-14 has been done on the basis of actual MAT rate applicable during 2009-14. The petitioner has submitted the variation in the MAT rate during 2009-14 as per the Finance Act of the relevant year for the purpose of grossing up of ROE, as below:-

| Particulars | MAT Rate (t) % | Grossed up ROE (Base rate/(1-t)) % |
|-------------|----------------|---------------------------------------|
| 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 |

27. Accordingly, the ROE as trued up is as shown in the table below:-

| Particulars | (₹ in lakh) | | | |
|-------------------------------------|-------------------------------------|---|---------|---------|
| | Transformer-I | Combined Transformer- I&II | | |
| | 2011-12 1.6.2011 to 30.9.2011 | 2011-12 1.10.2011 to 31.3.2012 | 2012-13 | 2013-14 |
| Approved vide order dated 20.1.2014 | 101.45 | 293.69 | 696.08 | 710.76 |
| As claimed by petitioner | 115.91 | 326.40 | 772.66 | 796.09 |
| Allowed after true up | 114.99 | 321.55 | 769.19 | 796.08 |

28. The return on equity allowed in the instant order is more than the return on equity allowed vide order dated 20.1.2014 due to variation in equity on account of additional capitalisation and increase in the applicable MAT rate for the purpose of grossing up of base rate of return on equity.



Depreciation

29. Clause (42) of Regulation 3 of the 2009 Tariff Regulations defines useful life as follows:-

“‘**useful life**’ in relation to a unit of a generating station and transmission system from the COD shall mean the following, namely:-

.....

| | |
|------------------------------|-----------|
| (c) AC and DC sub-station | 25 years |
| (d) Hydro generating station | 35 years |
| (e) Transmission line | 35 years” |

30. Clause (4) of Regulation 17 of the 2009 Tariff Regulations provides as follows:-

"17. Depreciation:

...

(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.”

31. In order dated 20.1.2014 in Petition No. 111/TT/2011, depreciation was worked out the depreciation in accordance with Regulation 17 of the 2009 Tariff Regulations.

32. The weighted average useful life of the transmission asset has been considered as per Regulations 3 (42) and 17 (4) of the 2009 Tariff Regulations. For the purpose of calculation, the weighted average useful life of the asset as on COD has been considered as 25 years for the Transformer-I and Transformer-II. The depreciation for the tariff period 2009-14 has been worked out in accordance



with Regulation 17 of the 2009 Tariff Regulations based on admitted capital expenditure as under:-

| Particulars | (₹ in lakh) | | | |
|-------------------------------------|-------------------------------------|---|---------|---------|
| | Transformer-I | Combined Transformer- I&II | | |
| | 2011-12 1.6.2011 to 30.9.2011 | 2011-12 1.10.2011 to 31.3.2012 | 2012-13 | 2013-14 |
| Approved vide order dated 20.1.2014 | 102.14 | 295.69 | 700.81 | 715.60 |
| As claimed by petitioner | 105.28 | 296.46 | 701.80 | 714.49 |
| Allowed after true up | 104.45 | 292.06 | 698.65 | 714.49 |

33. The variation in depreciation is on account of variation in additional capitalization vis-à-vis that approved in the order.

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

34. Since the assets are spare in nature, O&M is not applicable. Also the petitioner has not claimed O & M expenses and as such its entitlement to O & M expenses is NIL.

Interest on working capital (“IWC”)

35. 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.

36. The petitioner submitted the rate of interest on working capital as 11.75% for the period 1.6.2011 to 31.3.2014 as per Clause (3) of Regulation 18 of the 2009 Tariff Regulations and the components of working capital are also



considered in accordance with Sub-clause (c) of clause (1) of Regulation 18 of the 2009 Tariff Regulations.

37. In accordance with Clause (3) of Regulation 18 of the 2009 Tariff Regulations, the rate of interest on working capital on normative basis is equal to State Bank of India Base Rate as applicable as on 1.4.2011 plus 350 basis points. State Bank of India Base Rate on 1.4.2011 was 8.25%. Therefore, interest rate of 11.75% (8.25% plus 350 basis points) has been considered to work out the interest on working capital in the instant case.

38. The IWC trued up is as under:-

(₹ in lakh)

| Particulars | Transformer-I | Combined Transformer- I&II | | |
|----------------------|-------------------------------------|---|--------------|--------------|
| | 2011-12 1.6.2011 to 30.9.2011 | 2011-12 1.10.2011 to 31.3.2012 | 2012-13 | 2013-14 |
| Maintenance Spares | 0.00 | 0.00 | 0.00 | 0.00 |
| O & M expenses | 0.00 | 0.00 | 0.00 | 0.00 |
| Receivables | 57.88 | 161.18 | 379.31 | 378.98 |
| Total | 57.88 | 161.18 | 379.31 | 378.98 |
| Rate of Interest (%) | 11.75% | 11.75% | 11.75% | 11.75% |
| Interest | 6.80 | 18.94 | 44.57 | 44.53 |

(₹ in lakh)

| Particulars | Transformer-I | Combined Transformer- I&II | | |
|-------------------------------------|-------------------------------------|---|---------|---------|
| | 2011-12 1.6.2011 to 30.9.2011 | 2011-12 1.10.2011 to 31.3.2012 | 2012-13 | 2013-14 |
| Approved vide order dated 20.1.2014 | 6.38 | 18.51 | 43.06 | 42.74 |
| As claimed by petitioner | 6.86 | 19.24 | 44.80 | 44.54 |
| Allowed after true up | 6.80 | 18.94 | 44.57 | 44.53 |



39. The variation in IWC is on account of variation in IOL, depreciation and ROE due to variation in additional capitalization and further increase in ROE on account of applicable MAT rate during 2009-14 tariff period.

ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

40. The detailed computation of the various components of the trued up annual fixed charges for the instant assets for the tariff period 2011-12 to 2013-14 is summarised below:-

(₹ in lakh)

| Particulars | Transformer-I | Combined Transformer-I & II | | |
|---|-------------------------------------|---|----------|----------|
| | 2011-12 1.6.2011 to 30.9.2011 | 2011-12 1.10.2011 to 31.3.2012 | 2012-13 | 2013-14 |
| Gross Block | | | | |
| Opening Gross Block | 5452.53 | 9193.82 | 12932.24 | 13531.96 |
| Additional Capitalization | 963.87 | 3738.42 | 599.72 | 0.00 |
| Closing Gross block | 6416.40 | 12932.24 | 13531.96 | 13531.96 |
| Average Gross block | 5934.46 | 11063.03 | 13232.10 | 13531.96 |
| | | | | |
| Depreciation | | | | |
| Rate of Depreciation (%) | 5.280 | 5.280 | 5.280 | 5.280 |
| Depreciable Value | 5341.01 | 9956.72 | 11908.89 | 12178.76 |
| Elapsed Life of the assets at beginning of the year | 0 | 0 | 1 | 2 |
| Weighted Balance Useful life of the assets | 25 | 25 | 24 | 23 |
| Remaining Depreciable Value | 5341.01 | 9852.28 | 11512.38 | 11083.59 |
| Depreciation | 104.45 | 292.06 | 698.65 | 714.49 |
| | | | | |
| Interest on Loan | | | | |
| Gross Normative Loan | 3816.77 | 6435.67 | 9052.56 | 9472.37 |



| Particulars | Transformer-I | Combined Transformer-I & II | | |
|---|-------------------------------------|---|---------|---------|
| | 2011-12 1.6.2011 to 30.9.2011 | 2011-12 1.10.2011 to 31.3.2012 | 2012-13 | 2013-14 |
| Cumulative Repayment upto Previous Year | 0.00 | 104.45 | 396.51 | 1095.16 |
| Net Loan-Opening | 3816.77 | 6331.22 | 8656.05 | 8377.20 |
| Additions | 674.71 | 2616.89 | 419.80 | 0.00 |
| Repayment during the year | 104.45 | 292.06 | 698.65 | 714.49 |
| Net Loan-Closing | 4387.03 | 8656.05 | 8377.20 | 7662.72 |
| Average Loan | 4101.90 | 7493.64 | 8516.63 | 8019.96 |
| Weighted Average Rate of Interest on Loan (%) | 8.8506 | 8.9281 | 8.9639 | 8.9623 |
| Interest | 121.01 | 334.52 | 763.42 | 718.78 |
| | | | | |
| Return on Equity | | | | |
| Opening Equity | 1635.76 | 2758.14 | 3879.67 | 4059.59 |
| Additions | 289.16 | 1121.53 | 179.92 | 0.00 |
| Closing Equity | 1924.92 | 3879.67 | 4059.59 | 4059.59 |
| Average Equity | 1780.34 | 3318.91 | 3969.63 | 4059.59 |
| Return on Equity (Base Rate) (%) | 15.50 | 15.50 | 15.50 | 15.50 |
| MAT rate for the respective year (%) | 20.008 | 20.008 | 20.008 | 20.961 |
| Rate of Return on Equity (Pre Tax) (%) | 19.377 | 19.377 | 19.377 | 19.610 |
| Return on Equity (Pre Tax) | 114.99 | 321.55 | 769.19 | 796.08 |
| | | | | |
| Interest on Working Capital | | | | |
| Maintenance Spares | 0.00 | 0.00 | 0.00 | 0.00 |
| O & M Expenses | 0.00 | 0.00 | 0.00 | 0.00 |
| Receivables | 57.88 | 161.18 | 379.31 | 378.98 |
| Total | 57.88 | 161.18 | 379.31 | 378.98 |
| Interest | 6.80 | 18.94 | 44.57 | 44.53 |
| | | | | |
| Annual Transmission Charges | | | | |
| Depreciation | 104.45 | 292.06 | 698.65 | 714.49 |
| Interest on Loan | 121.01 | 334.52 | 763.42 | 718.78 |



| Particulars | Transformer-I | Combined Transformer-I & II | | |
|-----------------------------|-------------------------------------|---|----------------|----------------|
| | 2011-12 1.6.2011 to 30.9.2011 | 2011-12 1.10.2011 to 31.3.2012 | 2012-13 | 2013-14 |
| Return on Equity | 114.99 | 321.55 | 769.19 | 796.08 |
| Interest on Working Capital | 6.80 | 18.94 | 44.57 | 44.53 |
| O & M Expenses | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 347.25 | 967.07 | 2275.84 | 2273.88 |

DETERMINATION OF ANNUAL TRANSMISSION CHARGES FOR 2014-19

41. The petitioner has claimed the transmission charges as under:-

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|
| Depreciation | 714.49 | 714.49 | 714.49 | 714.49 | 714.49 |
| Interest on Loan | 655.67 | 592.06 | 528.29 | 464.40 | 400.45 |
| Return on equity | 796.09 | 796.09 | 796.09 | 796.09 | 796.09 |
| Interest on Working Capital | 49.86 | 48.40 | 46.93 | 45.46 | 43.99 |
| O & M Expenses | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 2216.11 | 2151.04 | 2085.80 | 2020.44 | 1955.02 |

42. 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 |
|----------------------|---------------|---------------|---------------|---------------|---------------|
| Maintenance Spares | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| O & M expenses | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Receivables | 369.35 | 358.51 | 347.63 | 336.74 | 325.84 |
| Total | 369.35 | 358.51 | 347.63 | 336.74 | 325.84 |
| Rate of Interest (%) | 13.50 | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest | 49.86 | 48.40 | 46.93 | 45.46 | 43.99 |

Capital Cost

43. Clause (1) & (3) of Regulation 9 of the 2014 Tariff Regulations specify 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.”

“(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.”

44. The petitioner has claimed capital cost of ₹13531.95 lakh as on 31.3.2014 and has not projected any additional capital expenditure during the tariff period 2014-19 for Combined Transformer-I&II. The trued up capital cost of ₹13531.95 lakh as on 31.3.2014 is considered to work out tariff for tariff period 2014-19.

Additional Capital Expenditure

45. The petitioner has not claimed any additional expenditure for Combined Asset- 1 & 2 for the tariff period 2014-19. No additional capital expenditure has been considered for the tariff period 2014-19.

Debt:Equity Ratio

46. Clause 3 of Regulation 19 of the 2014 Tariff Regulations specifies as under:-

“(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.”



47. The petitioner has considered debt: equity ratio as 70.00:30.00 as on 31.3.2014. 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. The details of the debt:equity as on 1.4.2014 for Combined Transformer-I & II considered for the purpose of tariff for the 2014-19 tariff period is as follows:-

| (₹ in lakh) | | |
|--------------------------------------|-----------------|---------------|
| Funding | Amount | (%) |
| Combined Transformer-I&II | | |
| Debt | 9472.37 | 70.00 |
| Equity | 4059.59 | 30.00 |
| Total | 13531.95 | 100.00 |

Interest on Loan (“IOL”)

48. Clause (5) & (6) of Regulation 26 of the 2014 Tariff Regulations are reproduced as under:-

“(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.”

49. The weighted average rate of IOL has been considered on the basis of rate prevailing as on 1.4.2014.



49. It is observed that the debt funding in the instant case is through bonds, which bear a fixed interest rate. The IOL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of weighted average rate of interest are placed at **Annexure-II** and the IOL has been worked out and allowed as follows:-

| (₹ in lakh) | | | | | |
|---|---------------|---------------|---------------|---------------|---------------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Gross loan opening | 9472.37 | 9472.37 | 9472.37 | 9472.37 | 9472.37 |
| Cumulative Repayment upto previous year | 1809.65 | 2524.14 | 3238.63 | 3953.11 | 4667.60 |
| Net Loan-Opening | 7662.72 | 6948.23 | 6233.74 | 5519.26 | 4804.77 |
| Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Repayment during the year | 714.49 | 714.49 | 714.49 | 714.49 | 714.49 |
| Net Loan-Closing | 6948.23 | 6233.74 | 5519.26 | 4804.77 | 4090.28 |
| Average Loan | 7305.47 | 6590.99 | 5876.50 | 5162.01 | 4447.52 |
| Rate of Interest (%) | 8.9666 | 8.9756 | 8.9846 | 8.9940 | 9.0049 |
| Interest | 655.05 | 591.58 | 527.98 | 464.27 | 400.50 |

Return on Equity (“ROE”)

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

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

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

“25. Tax on Return on Equity:

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

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



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

51. The petitioner has computed ROE at the rate of 19.610% after grossing up the ROE with MAT rate as per the above Regulation. The petitioner has further submitted that 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. 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.

52. 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 shall be recoverable/adjustable after completion of income tax assessment of the financial year.

53. 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 allowed for Combined Transformer-I&II is given below:-

| (₹ in lakh) | | | | | |
|--|---------------|---------------|---------------|---------------|---------------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Opening Equity | 4059.59 | 4059.59 | 4059.59 | 4059.59 | 4059.59 |
| Additional Capitalization | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Closing Equity | 4059.59 | 4059.59 | 4059.59 | 4059.59 | 4059.59 |
| Average Equity | 4059.59 | 4059.59 | 4059.59 | 4059.59 | 4059.59 |
| 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 Tax) (%) | 19.610 | 19.610 | 19.610 | 19.610 | 19.610 |
| Return on Equity (Pre Tax) | 796.08 | 796.08 | 796.08 | 796.08 | 796.08 |

Depreciation

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

55. The petitioner has computed depreciation considering capital expenditure of ₹13531.95 lakh as on 31.3.2014.

56. We have considered the submissions of the petitioner and have allowed depreciation considering capital expenditure of ₹13317.85 lakh as on 31.3.2014 under Regulation 27 of the 2014 Tariff Regulations. The details of the depreciation allowed are given hereunder:-

| (₹ in lakh) | | | | | |
|---|---------------|---------------|---------------|---------------|---------------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Opening Gross block | 13531.95 | 13531.95 | 13531.95 | 13531.95 | 13531.95 |
| Additional Capitalisation | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Gross block at the end of the year | 13531.95 | 13531.95 | 13531.95 | 13531.95 | 13531.95 |
| Average gross block | 13531.95 | 13531.95 | 13531.95 | 13531.95 | 13531.95 |
| Rate of Depreciation (%) | 5.280 | 5.280 | 5.280 | 5.280 | 5.280 |
| Depreciable Value | 12178.76 | 12178.76 | 12178.76 | 12178.76 | 12178.76 |
| Elapsed Life of the assets at beginning of the year | 3 | 4 | 5 | 6 | 7 |
| Weighted Balance Useful life of the assets | 22 | 21 | 20 | 19 | 18 |
| Remaining Depreciable Value | 10369.10 | 9654.62 | 8940.13 | 8225.64 | 7511.15 |
| Depreciation | 714.49 | 714.49 | 714.49 | 714.49 | 714.49 |

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

57. As already discussed in true up for tariff period 2011-14, petitioner has not claimed O & M expenses and as such its entitlement to O & M expenses is NIL.



Interest on Working Capital (“IWC”)

58. Clause 1 (c) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specify 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;”

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

60. 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 by the Commission is shown in the table below:-

| | (₹ in lakh) | | | | |
|--------------------|-------------|---------|---------|---------|---------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Maintenance Spares | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| O & M Expenses | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Receivables | 369.25 | 358.42 | 347.58 | 336.72 | 325.84 |
| Total | 369.25 | 358.42 | 347.58 | 336.72 | 325.84 |



| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|----------------------|--------------|--------------|--------------|--------------|--------------|
| Rate of Interest (%) | 13.50 | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest | 49.85 | 48.39 | 46.92 | 45.46 | 43.99 |

Annual Transmission Charges

61. The detailed computation of the various components of the annual fixed charges for the Combined Transformer-I&II for the tariff period 2014-19 is summarised below:-

(₹ in lakh)

| Particulars | Combined Transformer-I & II | | | | |
|---|-----------------------------|----------|----------|----------|----------|
| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Gross Block | | | | | |
| Opening Gross Block | 13531.95 | 13531.95 | 13531.95 | 13531.95 | 13531.95 |
| Additional Capitalisation | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Closing Gross Block | 13531.95 | 13531.95 | 13531.95 | 13531.95 | 13531.95 |
| Average Gross Block | 13531.95 | 13531.95 | 13531.95 | 13531.95 | 13531.95 |
| | | | | | |
| Depreciation | | | | | |
| Rate of Depreciation | 5.280 | 5.280 | 5.280 | 5.280 | 5.280 |
| Depreciable Value | 12178.76 | 12178.76 | 12178.76 | 12178.76 | 12178.76 |
| Elapsed Life of the assets at beginning of the year | 3 | 4 | 5 | 6 | 7 |
| Weighted Balance Useful life of the assets | 22 | 21 | 20 | 19 | 18 |
| Remaining Depreciable Value | 10369.10 | 9654.62 | 8940.13 | 8225.64 | 7511.15 |
| Depreciation | 714.49 | 714.49 | 714.49 | 714.49 | 714.49 |
| | | | | | |
| Interest on Loan | | | | | |
| Gross Normative Loan | 9472.37 | 9472.37 | 9472.37 | 9472.37 | 9472.37 |
| Cumulative Repayment upto Previous Year | 1809.65 | 2524.14 | 3238.63 | 3953.11 | 4667.60 |
| Net Loan-Opening | 7662.72 | 6948.23 | 6233.74 | 5519.26 | 4804.77 |
| Additions | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Repayment during the year | 714.49 | 714.49 | 714.49 | 714.49 | 714.49 |
| Net Loan-Closing | 6948.23 | 6233.74 | 5519.26 | 4804.77 | 4090.28 |



| Particulars | Combined Transformer-I & II | | | | |
|---|-----------------------------|----------------|----------------|----------------|----------------|
| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Average Loan | 7305.47 | 6590.99 | 5876.50 | 5162.01 | 4447.52 |
| Weighted Average Rate of Interest on Loan (%) | 8.9666 | 8.9756 | 8.9846 | 8.9940 | 9.0049 |
| Interest | 655.05 | 591.58 | 527.98 | 464.27 | 400.50 |
| | | | | | |
| Return on Equity | | | | | |
| Opening Equity | 4059.59 | 4059.59 | 4059.59 | 4059.59 | 4059.59 |
| Additions | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Closing Equity | 4059.59 | 4059.59 | 4059.59 | 4059.59 | 4059.59 |
| Average Equity | 4059.59 | 4059.59 | 4059.59 | 4059.59 | 4059.59 |
| Return on Equity (Base Rate) (%) | 15.50 | 15.50 | 15.50 | 15.50 | 15.50 |
| MAT Rate for the year 2013-14 (%) | 20.961 | 20.961 | 20.961 | 20.961 | 20.961 |
| Rate of Return on Equity (Pre Tax) (%) | 19.610 | 19.610 | 19.610 | 19.610 | 19.610 |
| Return on Equity (Pre Tax) | 796.08 | 796.08 | 796.08 | 796.08 | 796.08 |
| | | | | | |
| Interest on Working Capital | | | | | |
| Maintenance Spares | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| O & M expenses | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Receivables | 369.25 | 358.42 | 347.58 | 336.72 | 325.84 |
| Total | 369.25 | 358.42 | 347.58 | 336.72 | 325.84 |
| Interest | 49.85 | 48.39 | 46.92 | 45.46 | 43.99 |
| | | | | | |
| Annual Transmission Charges | | | | | |
| Depreciation | 714.49 | 714.49 | 714.49 | 714.49 | 714.49 |
| Interest on Loan | 655.05 | 591.58 | 527.98 | 464.27 | 400.50 |
| Return on Equity | 796.08 | 796.08 | 796.08 | 796.08 | 796.08 |
| Interest on Working Capital | 49.85 | 48.39 | 46.92 | 45.46 | 43.99 |
| O & M Expenses | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 2215.47 | 2150.54 | 2085.47 | 2020.30 | 1955.06 |



Filing Fee and Publication Expenses

62. 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

63. 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.

Service Tax

64. The petitioner has sought to recover Service Tax on Transmission Charges separately from the Respondents, if at any time service tax on transmission is withdrawn from negative list in future. We are of the view that the petitioner's prayer of Service Tax is premature

65. 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 instant assets are commissioned after 1.4.2009.
Hence, the petitioner's prayer is infructuous.

Sharing of Transmission Charges

66. 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.

67. This order disposes of Petition No. 511/TT/2014.

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

Sd/-
(A.S. Bakshi)
Member



ANNEXURE-I**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO 2009-14**

(₹ in lakh)

| Particulars | 2011-14 | | | | | | |
|--|-------------------|------------------------------|-------------------------------------|----------------|-------------------------------|--------------------------------------|----------------|
| | Transformer-I | | | | Combined Transformer-I&II | | |
| | Interest Rate (%) | Loan deployed as on 1.6.2011 | Addition from 1.6.2011 to 31.9.2011 | Total | Loan deployed as on 1.10.2011 | Addition from 1.10.2011 to 31.3.2014 | Total |
| Bond XXXIII - DOCO - Drawl on 1-Jun-2011 | 8.64 | 400.00 | 0.00 | 400.00 | 797.00 | 0.00 | 797.00 |
| Bond XXXII - DOCO - Drawl on 1-Jun-2011 | 8.84 | 50.00 | 0.00 | 50.00 | 84.00 | 0.00 | 84.00 |
| Bond XXXIV - DOCO - Drawl on 1-Jun-2011 | 8.84 | 3417.00 | 0.00 | 3417.00 | 4900.00 | 0.00 | 4900.00 |
| Bond XXXV - Addcap for 2011-12- Addcap | 9.64 | 0.00 | 29.30 | 29.30 | 0.00 | 0.00 | 0.00 |
| Bond XXXV - DOCO | 9.64 | 0.00 | 0.00 | 0.00 | 54.00 | 0.00 | 54.00 |
| Bond XXXVI - DOCO - Addcap for 2011-12- Addcap | 9.35 | 0.00 | 141.95 | 141.95 | 0.00 | 29.30 | 29.30 |
| Bond XXXVI - DOCO | 9.35 | 0.00 | 0.00 | 0.00 | 670.70 | 0.00 | 670.70 |
| Bond XXXVIII - Addcap for 2011-12- Addcap | 9.25 | 0.00 | 370.47 | 370.47 | 0.00 | 1960.41 | 1960.41 |
| Bond XXXVIII - DOCO | 9.25 | 0.00 | 0.00 | 0.00 | 79.59 | 0.00 | 79.59 |
| Bond XLI - Addcap for 2012-13- Addcap | 8.85 | 0.00 | 0.00 | 0.00 | 0.00 | 254.00 | 254.00 |
| Total | | 3867.00 | 541.72 | 4408.72 | 6585.29 | 2243.71 | 8829.00 |



**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN
FOR TARIFF PERIOD 2009-14**

(₹ in lakh)

| Particulars | Transformer-I | Combined Transformer-I&II | | |
|---|-------------------------------------|---|---------|---------|
| | 2011-12 1.6.2011 to 30.9.2011 | 2011-12 1.10.2011 to 31.3.2012 | 2012-13 | 2013-14 |
| Gross Opening Loan | 3867.00 | 6585.29 | 8575.00 | 8829.00 |
| Cumulative Repayments of Loans upto Previous Year | 0.00 | 0.00 | 0.00 | 0.00 |
| Net Loans Opening | 3867.00 | 6585.29 | 8575.00 | 8829.00 |
| Add: Drawl(s) during the year | 541.72 | 1989.71 | 254.00 | 0.00 |
| Less: Repayment(s) of Loan during the year | 0.00 | 0.00 | 0.00 | 7.00 |
| Net Closing Loan | 4408.72 | 8575.00 | 8829.00 | 8822.00 |
| Average Net Loan | 4137.86 | 7580.15 | 8702.00 | 8825.50 |
| Interest on Loan | 366.23 | 676.76 | 780.04 | 790.97 |
| Rate of Interest on Loan (%) | 8.85 | 8.9281 | 8.9639 | 8.9623 |



ANNEXURE-II**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2014-19)**

(₹ in lakh)

| Particulars | 2014-19 | | | |
|--|---------------------------|------------------------------|------------------------------------|----------------|
| | Combined Transformer-I&II | | | |
| | Interest Rate (%) | Loan deployed as on 1.4.2014 | Additions during the tariff period | Total |
| Bond XXXIII - DOCO - Drawl on 1-Jun-2011 | 8.64 | 797.00 | 0.00 | 797.00 |
| Bond XXXII - DOCO - Drawl on 1-Jun-2011 | 8.84 | 84.00 | 0.00 | 84.00 |
| Bond XXXIV - DOCO - Drawl on 1-Jun-2011 | 8.84 | 4900.00 | 0.00 | 4900.00 |
| Bond XXXV - Addcap for 2011-12- Addcap | 9.64 | 0.00 | 0.00 | 0.00 |
| Bond XXXV - DOCO | 9.64 | 54.00 | 0.00 | 54.00 |
| Bond XXXVI - DOCO - Addcap for 2011-12- Addcap | 9.35 | 29.30 | 0.00 | 29.30 |
| Bond XXXVI - DOCO | 9.35 | 670.70 | 0.00 | 670.70 |
| Bond XXXVIII - Addcap for 2011-12- Addcap | 9.25 | 1960.41 | 0.00 | 1960.41 |
| Bond XXXVIII - DOCO | 9.25 | 79.59 | 0.00 | 79.59 |
| Bond XLI - Addcap for 2012-13- Addcap | 8.85 | 254.00 | 0.00 | 254.00 |
| Total | | 8829.00 | 0.00 | 8829.00 |



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

(₹ in lakh)

| Particulars | Combined Transformer-I&II | | | | |
|---|---------------------------|---------|---------|---------|---------|
| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Gross Opening Loan | 8829.00 | 8829.00 | 8829.00 | 8829.00 | 8829.00 |
| Cumulative Repayments of Loans upto Previous Year | 7.00 | 488.75 | 975.00 | 1529.08 | 2083.16 |
| Net Loans Opening | 8822.00 | 8340.25 | 7854.00 | 7299.92 | 6745.84 |
| Add: Drawl(s) during the year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Less: Repayment(s) of Loan during the year | 481.75 | 486.25 | 554.08 | 554.08 | 554.08 |
| Net Closing Loan | 8340.25 | 7854.00 | 7299.92 | 6745.84 | 6191.76 |
| Average Net Loan | 8581.13 | 8097.13 | 7576.96 | 7022.88 | 6468.80 |
| Interest on Loan | 769.44 | 726.76 | 680.76 | 631.63 | 582.51 |
| Rate of Interest on Loan (%) | 8.9666 | 8.9756 | 8.9846 | 8.9940 | 9.0049 |

