

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 44/TT/2014

Coram:

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

**Date of Hearing : 27.1.2016
Date of Order : 18.4.2016**

In the matter of:

Determination of transmission tariff for 2009-14 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for **Asset-I** 3x80 MVAR line reactor with associated bays at Gwalior Sub-station used as bus reactor till commissioning of 765 kV Bina-Gwalior ckt-3, **Asset-II** 3x80 MVAR line reactor with associated bays at Bina Sub-station to be used as bus reactor till commissioning of 765 kV S/C Bina-Gwalior till commissioning of 765 kV Bina-Gwalior Ckt-3, **Asset-III** 765 kV S/C Bina-Gwalior Ckt-3 under "Transmission System for Phase-I Generation Projects in Orissa Part-C" in Western 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. Madhya Pradesh Power Management Company Ltd.
Shakti Bhawan, Rampur, Jabalpur-482008
2. Maharashtra State Electricity Distribution Co. Ltd.
Prakashgad, 4th Floor, Andheri (East), Mumbai-400052
3. Gujarat Urja Vikas Nigam Ltd.
Sardar Patel Vidyut Bhawan,
Race Course Road



Vadodara- 390007

4. Electricity Department
Govt. Of GOA,
Vidyut Bhawan, Panaji- 403001
5. Electricity Department
Administration of Daman & Diu,
Daman- 396210
6. Electricity Department
Administration of Dadar Nagar Haveli,
U.T., Silvassa- 396230
7. Chhattisgarh State Electricity Board
P.O Sunder Nagar, Dangania, Raipur
Chhatisgaarh-492013
8. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Ltd.
3/54, Press Complex, Agra-Bombay Road
Indore-452008...

.....Respondents

The following were present:-

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

For Respondent: None

ORDER

The present petition has been preferred by Power Grid Corporation of India Ltd. ("the petitioner") for determination of transmission 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”) for 3x80 MVAR line reactor with associated bays at Gwalior Sub-station used as bus reactor till commissioning of 765 kV Bina-Gwalior Ckt-3 (short as “**Asset-I**”), 3x80 MVAR line reactor with associated bays at Bina Sub-station to be used as bus reactor till commissioning of 765 kV S/C Bina- Gwalior till commissioning of 765 kV Bina-Gwalior Ckt-3 (short as “**Asset-II**”), 765 kV S/C Bina-Gwalior Ckt-3 (short as “**Asset-III**”) under “Transmission System for Phase-I Generation Projects in Orissa Part-C” in Western Region (hereinafter referred as “transmission asset”) based on actual capital expenditure from COD to 31.3.2014.

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 Western Region.

3. The petitioner has served the petition to the respondents and notice of this application has been published in the newspaper in accordance with the 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. Respondent No. 2 Maharashtra State Electricity Distribution Co. Ltd (MSEDCL) has filed its reply vide affidavit dated 11.4.2014. 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) The investment approval for the project was accorded by Board of Directors of the petitioner company vide its letter C/CP/Orissa Ph-I IPPs (Part-C) dated 17.03.2011 at an estimated cost of ₹296925 lakh including IDC of ₹16902 lakh. Subsequently, the approval was revised vide memorandum no. C/CP/RCE-ER dated 9.3.2015 at an estimated cost of ₹310551.01 lakh including IDC of ₹25897 lakh.

(b) The scope of work covered under the project is as follows:-

Transmission Line:

- (i) 765 kV D/C Jabalpur Pooling Station – Bina Line
- (ii) 765 kV S/C Bina – Gwalior (3rd Circuit) Line
- (iii) 765 kV S/C Gwalior -Jaipur (2nd Circuit) Line
- (iv) 765 kV S/C Jaipur- Bhiwani Line

Sub-station:

- (i) Extension of 765/400 kV Jabalpur Sub-station
- (ii) Extension of 765/400 kV Bina Sub-station
- (iii) Extension of 765/400 kV Indore Sub-station
- (iv) Extension of 765/400 kV Gwalior Sub-station
- (v) Extension of 765/400 kV Jaipur (RVPN) Sub-station
- (vi) Extension of 765/400 kV Bhiwani Sub-station

Reactive Compensation:

- (i) 765/400 kV Jabalpur Pooling Station
765 kV 3 x 80 MVAR line Reactor- 2 nos.
- (ii) 765/400 kV Bina Sub-station
765 kV, 3 x 80 MVAR line Reactors- 3 nos.
765 kV, 3 x 80 MVAR Bus Reactor- 1 no.
- (iii) 765/400 kV Indore Sub-station
765 kV, 3 x 80 MVAR Bus Reactor- 1 no.
400 kV, 125 MVAR Bus Reactor- 1 no.
- (iv) 765/400 kV Gwalior Sub-station
765 kV 3 x 80 MVAR line Reactors- 2 nos.



400 kV, 125 MVAR Bus Reactors- 2 nos.

(v) 765/400 kV Jaipur (RVPNL) Sub-station
765 kV 3 x 80 MVAR line Reactors- 2 nos.
765 kV, 3 x 80 MVAR Bus Reactor- 1 no.

(vi) 765/400 kV Bhiwani Sub-station
765 kV 3 x 80 MVAR line Reactors

5. The Assets-I, II and III were put under commercial operation on 1.2.2014, 1.3.2014 and 7.5.2014 respectively and provisional tariff was allowed vide order dated 13.5.2014 for the assets. Provisional tariff was not allowed for Asset-III as it was not anticipated to be commissioned during the 2009-14 tariff period. The relevant portion of the order dated 13.5.2014 is extracted hereunder:-

“We are not inclined to allow provisional tariff for the Asset-III, since Asset-III has not been commissioned as anticipated during 2009-14 tariff period. As per CEA report, stage-II forest clearance is awaited. The petitioner is given liberty to approach the Commission after commissioning of Asset-III for provisional tariff. Accordingly, provisional tariff for Asset-I, commissioned on 1.2.2014, and Asset-II, commissioned on 1.3.2014 is being allowed in the instant order.”

6. As Asset-III was commissioned during the 2014-19 tariff period, the petitioner has filed Petition No. 422/TT/2014 as per the 2014 Tariff Regulations for determination of tariff for Asset-III. Tariff is determined for Asset-I and Asset-II in the instant petition.

ANNUAL FIXED CHARGES FOR TARIFF PERIOD 2009-14

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



(₹ in lakh)

| Particulars | 2013-14 (Pro rata) | |
|-----------------------------|--------------------|-------------|
| | Asset-I | Asset-II |
| Depreciation | 18.29 | 10.47 |
| Interest on Loan | 18.7 | 10.87 |
| Return on equity | 20.38 | 11.66 |
| Interest on Working Capital | 2.12 | 1.16 |
| O & M Expenses | 15.27 | 7.64 |
| Total | 74.76 | 41.8 |

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

(₹ in lakh)

| Particulars | 2013-14 (Pro rata) | |
|----------------------|--------------------|-------------|
| | Asset-I | Asset-II |
| Maintenance Spares | 13.74 | 13.75 |
| O & M expenses | 7.64 | 7.64 |
| Receivables | 74.76 | 83.59 |
| Total | 96.14 | 104.98 |
| Rate of Interest (%) | 13.20 | 13.20 |
| Interest | 2.12 | 1.16 |

Capital Cost

9. The petitioner has claimed the capital cost as under:-

| Claimed | Capital cost as on COD | Additional capitalisation including IDC discharged during 2013-14 | Completion cost as on 31.3.2014 |
|----------|------------------------|---|---------------------------------|
| Asset-I | 2031.09 | 94.85 | 2125.94 |
| Asset-II | 2305.34 | 146.41 | 2451.75 |

10. Regulation 7 of the 2009 Tariff Regulations specifies as follows:-

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

(a) The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan – (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30%



of the fund deployed, up to the date of commercial operation of the project, as admitted by the Commission, after prudence check.

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

(c) additional capital expenditure determined under regulation 9:

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

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

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

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

11. The admissible capital cost as on COD is worked out in accordance with above said Regulation as discussed in subsequent paragraphs.

12. The details of apportioned approved cost, capital expenditure as on date of commercial operation and additional capital expenditure projected to be incurred for the instant asset are summarized below:-

(₹ in lakh)

| * Assets | Approved apportioned cost as per RCE | Approved apportioned cost as per RCE-2 | Actual cost incurred as on COD | Total estimated expenditure for 2013-14, 2014-15 and 2015-16 | Total estimated completion cost |
|----------|--------------------------------------|--|--------------------------------|--|---------------------------------|
| Asset-I | 3282.27 | 3282.27 | 2031.09 | 1251.18 | 3282.27 |
| Asset-II | 3339.93 | 3685.69 | 2305.34 | 1380.35 | 3685.69 |

13. The total estimated completion cost shown in the above table is including the additional capital expenditure proposed during 2014-19 period. The



petitioners claim for additional capitalization projected to be incurred during 2014-19 has not been considered because the claim pertains to the period beyond the control period 2009-14.

Cost Over-run

13. There is no cost over-run in case of the instant assets. However, there is substantial difference in cost Asset-I and II even though they are of the same configuration. MSEDCL has submitted that Commission may conduct the prudence check of the cost variation of the assets. In this regard, the Commission during hearing enquired the reason for such huge variation. In response, the representative of the petitioner submitted that cost of the spare reactor has been included in the cost of Asset-II and hence the cost of Asset II is more than the cost of Asset I even though they are of same configuration.

Time Over-run

14. As per the investment approval, the commissioning schedule of the project was 36 months from the date of investment approval. The investment approval was accorded on 17.3.2011 and the schedule date of commercial operation was 16.3.2014 i.e. 1.4.2014. The COD of Assets-I and II was 1.2.2014 and 1.3.2014, therefore, there is no time over-run for both the assets.

Initial Spares

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



| | |
|---|-------|
| “Transmission line: | 0.75% |
| Transmission sub-station Series compensation devices: | 2.5% |
| & HVDC Station: | 3.5%” |

16. We have computed allowable initial spares considering the capital cost upto 31.3.2014 as it lies within the control period 2009-14. The initial spares claimed are within the ceiling limit for both Assets-I and II. In response to Commission’s query on whether entire amount pertaining to initial spares of Asset-I and Asset-II has been discharged as on COD, the petitioner submitted the details of initial spares discharged after COD. The petitioner further submitted that the initial spares discharged after COD has been included in additional capitalization.

17. In response to Commissions query regarding the amount of IDC and IEDC discharged upto COD and after COD on cash basis, the petitioner submitted the details of IDC discharged during 2013-14 and 2014-15 for both the assets. With regard to IEDC the petitioner has submitted that entire IEDC amount mentioned in the Auditor Certificate is on cash basis and is paid upto COD for both the assets. We have considered the submission of the petitioner. The IDC discharged after COD has been adjusted from the capital cost as on COD and has been considered as part of additional capitalization. Accordingly, the details of the capital cost as on the date of COD has been worked after adjustment of IDC to be discharged during 2013-14 for all the assets as follows:-



| (₹ in lakh) | | |
|---|----------------|----------------|
| Particulars | Asset-I | Asset-II |
| Capital cost claimed as on COD | 2031.09 | 2305.34 |
| Less: IDC discharged during 2013-14 | 3.08 | 2.37 |
| Less: IDC discharged during 2014-15 | 54.78 | 75.63 |
| Capital cost considered as on COD for tariff computation | 1973.23 | 2227.34 |

Additional Capital Expenditure

18. As regards Additional Capital Expenditure, Clause 9(1) of the 2009 Tariff

Regulations provides as under:-

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

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

19. The petitioner has claimed additional capital expenditure towards balance and retention payment for all the assets. The petitioner vide affidavit dated 28.10.2015 has revised the additional capitalization for both the assets. Further, the petitioner's claim for additional capitalization projected to be incurred during 2014-19 has not been considered because the claim pertains to the period beyond the control period 2009-14. As discussed above, the IDC discharged during 2013-14 has also been considered as part of additional capitalization for 2013-14 in addition to the actual additional capitalization claimed for 2013-14 for



both the assets. The completion cost as on 31.3.2014 is within the revised approved apportioned cost for both the assets, therefore we have allowed the additional capitalization towards balance and retention payment under Regulation 9(1)(i) of the 2009 Tariff Regulations. The additional capitalization claimed and approved for 2013-14 for all the assets is as below:-

| Revised approved apportioned cost is ₹3282.27 lakh | | | |
|---|------------------------|---|---------------------------------|
| Asset-I | Capital cost as on COD | Additional capitalisation including IDC discharged during 2013-14 | Completion cost as on 31.3.2014 |
| Claimed | 2031.09 | 94.85 | 2125.94 |
| Approved in this order | 1973.23 | 97.93 | 2071.16 |

| Revised approved apportioned cost is ₹3685.69 lakh | | | |
|---|------------------------|---|---------------------------------|
| Asset-II | Capital cost as on COD | Additional capitalisation including IDC discharged during 2013-14 | Completion cost as on 31.3.2014 |
| Claimed | 2305.34 | 146.41 | 2451.75 |
| Approved in this order | 2227.34 | 148.78 | 2376.12 |

Debt:Equity Ratio

20. 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:

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

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(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.”

21. We have considered the capital cost as on COD and additional capitalization during 2013-14 for the transmission assets for computation of tariff.

The details of the debt:equity in respect of the asset as on the date of COD and as on 31.3.2014 is shown in Table below:-

(₹ in lakh)

| Asset-I | As on 1.2.2014 | | Additional capitalization during 2009-14 | | As on 31.3.2014 | |
|--------------|----------------|---------------|--|---------------|-----------------|---------------|
| | Amount | (%) | Amount | (%) | Amount | (%) |
| Debt | 1381.26 | 70.00 | 68.55 | 70.00 | 1449.81 | 70.00 |
| Equity | 591.97 | 30.00 | 29.38 | 30.00 | 621.35 | 30.00 |
| Total | 1973.23 | 100.00 | 97.93 | 100.00 | 2071.16 | 100.00 |

(₹ in lakh)

| Asset-II | As on 1.3.2014 | | Additional capitalization during 2009-14 | | As on 31.3.2014 | |
|--------------|----------------|---------------|--|---------------|-----------------|---------------|
| | Amount | (%) | Amount | (%) | Amount | (%) |
| Debt | 1559.14 | 70.00 | 104.15 | 70.00 | 1663.28 | 70.00 |
| Equity | 668.20 | 30.00 | 44.63 | 30.00 | 712.84 | 30.00 |
| Total | 2227.34 | 100.00 | 148.78 | 100.00 | 2376.12 | 100.00 |

Interest on Loan (“IOL”)

22. Regulation 16 of the 2009 Tariff Regulations provides that:-

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

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

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



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

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

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

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

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

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

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

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

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

23. In view of provisions of the 2009 Tariff Regulations, interest on loan has been computed as detailed hereinafter:-



- (a) Gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual average loan have been considered as per the petition;
- (b) The repayment for the tariff period 2009-14 have been considered as equal to the depreciation allowed for that period;
- (d) Weighted average rate of interest on actual average loan worked out as per (a) above is applied on the notional average loan during the year to arrive at the interest on loan.
- (e) As per Regulation 16(5) only actual loans have been considered for computation of weighted average rate of interest.

24. The petitioner has prayed to be allowed to bill and adjust impact of interest on loan due to change in interest rate on account of floating rate of interest applicable, if any, during the tariff period 2009-14, from the respondents. The interest on loan has been calculated on the basis of prevailing rate of actual loan available as on the date of commercial operation. Any change in rate of interest subsequent to the date of commercial operation will be considered at the time of truing-up.

25. Detailed calculation of the weighted average rate of interest for instant assets is given at Annexure to this order.

| Particulars | (₹ in lakh) | |
|-------------------------------|--------------------|----------|
| | 2013-14 (pro-rata) | |
| | Asset-I | Asset-II |
| Gross loan opening as on COD | 1381.26 | 1559.14 |
| Cumulative Repayment upto COD | 0.00 | 0.00 |
| Net Loan-Opening as on COD | 1381.26 | 1559.14 |



| Particulars | 2013-14 (pro-rata) | |
|-----------------------------------|--------------------|--------------|
| | Asset-I | Asset-II |
| Additions during the year | 68.55 | 104.15 |
| Repayment during the year | 17.80 | 10.13 |
| Net Loan-Closing | 1432.02 | 1653.16 |
| Average Loan for the year | 1406.64 | 1606.15 |
| Rate of Interest (%) for the year | 7.7617% | 7.8608% |
| Interest | 18.20 | 10.52 |

Return on Equity (“ROE”)

26. Regulation 15 of the 2009 Tariff Regulations provides that:-

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

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

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

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

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

(4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below: Rate of pre-tax return on equity = Base rate / (1-t) Where t is the applicable tax rate in accordance with clause (3) of this regulation.

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



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

27. The petitioner has computed ROE at the rate of 19.61 % after grossing up the ROE with MAT rate. The petitioner has also prayed for additional RoE, however in the revised tariff forms the petitioner has not claimed the same for any of the assets. 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 2009-14 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.

28. 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.

29. Regulation 15 provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. The petitioner has submitted that MAT rate is applicable to the petitioner's company. We have considered actual MAT rate applicable during 2013-14 i.e. 20.961% for the purpose of return on equity.



30. As regards the petitioner's prayer for additional RoE, the Commission has already stated in order dated 1.8.2011 in Petition No. 329/2010 that all the elements of the transmission systems need to be completed within the time schedule and the same has also been upheld by Appellate Tribunal in its judgment dated 10.5.2012 in Appeal No. 155/2011. It is observed that out of three assets of the project, there is time over-run in case of Asset-III. Moreover, the petitioner has not pressed for the additional RoE at the time of filing revised forms. In view of the above, the petitioner's claim for additional RoE for the asset covered in the instant petition is not admissible. Accordingly, the ROE allowed for the instant assets is shown in the table below:-

| Particulars | (₹ in lakh) | |
|---|--------------------|--------------|
| | 2013-14 (Pro rata) | |
| | Asset-I | Asset-II |
| Opening Equity as on COD | 591.97 | 668.20 |
| Additional Capitalization after COD | 29.38 | 44.63 |
| Closing Equity | 621.35 | 712.84 |
| Average Equity for the year | 606.66 | 690.52 |
| Return on Equity (Base Rate) (%) for the year | 15.50 | 15.50 |
| MAT rate for the year (%) | 20.961 | 20.961 |
| Rate of Return on Equity (Pre Tax) (%) | 19.610 | 19.610 |
| Return on Equity (Pre Tax) | 19.83 | 11.28 |

Depreciation

31. Regulation 17 of the 2009 Tariff Regulations provides for computation of depreciation in the following manner, namely:-

“17. Depreciation

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



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

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

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

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

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

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

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

(6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.”

32. The instant asset has been put under commercial operation during 2013-14. Accordingly, assets will complete 12 years beyond 2013-14. Thus, depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-III of the 2009 Tariff Regulations. Details of the depreciation worked out for Asset-I are as follows:-

| Particulars | (₹ in lakh) | |
|-------------|--------------------|----------|
| | 2013-14 (Pro rata) | |
| | Asset-I | Asset-II |



| Particulars | 2013-14 (Pro rata) | |
|--|--------------------|--------------|
| | Asset-I | Asset-II |
| Gross block as on COD | 1973.23 | 2227.34 |
| Additional Capitalization after COD | 97.93 | 148.97 |
| Gross block at the end of the year | 2071.16 | 2376.31 |
| Average gross block for the year | 2022.20 | 2301.82 |
| Rate of Depreciation (%) for the year | 5.280 | 5.280 |
| Depreciable Value | 1819.98 | 2071.64 |
| Elapsed Life at the beginning of the year | 0 | 0 |
| Weighted Balance Useful life of the assets | 25 | 25 |
| Remaining Depreciable Value | 1819.98 | 2071.64 |
| Depreciation | 17.80 | 10.13 |

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

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

34. The petitioner has also submitted that the claim for transmission tariff is exclusive of any statutory taxes, levies, duties, cess or any other kind of impositions, etc. Such kinds of payments are generally included in the O&M Expenses. While specifying the norms for the O&M Expenses, the Commission has in the 2009 Tariff Regulations, given effect to impact of pay revision by factoring 50% on account of pay revision of the employees of PSUs after



extensive consultations with the stakeholders, as one time compensation for employee cost. We do not see any reason why the admissible amount is inadequate to meet the requirement of the employee cost. In this order, we have allowed O&M Expenses as per the existing norms.

35. Clause (g) of Regulation 19 of the 2009 Tariff Regulations specifies norms for O&M Expenses for transmission system based on type of sub-stations and the transmission line. The O&M Expenses allowed for transmission asset covered in the instant petition are as hereinafter:-

| Particulars | (₹ in lakh) | |
|---|--------------------|-------------|
| | 2013-14 (Pro rata) | |
| | Asset-I | Asset-II |
| O&M Expenses for Bays | | |
| Norm (₹ lakh/Bay) | | |
| 765 kV | 91.64 | 91.64 |
| Bays | | |
| 765 kV | 1 | 1 |
| Total O&M expense (Bay) (₹ lakh) | 15.27 | 7.64 |

Interest on Working Capital (“IWC”)

36. 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.

37. The petitioner has considered the rate of interest on working capital as 13.20% 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 Regulations.



38. In accordance with Clause (3) of Regulation 18 of the 2009 Tariff Regulations, as amended, rate of interest on working capital shall be on normative basis and in case of transmission assets declared under commercial operation after 1.7.2010 shall be equal to SBI Base Rate plus 350 basis points as on 1st April of the year in which the transmission asset was declared under commercial operation. The State Bank of India base Bate as on 1.4.2013 was 9.70%. Therefore, interest rate of 13.20% has been considered to work out the interest on working capital in the instant case.

39. Computations in support of interest on working capital allowed are as follows:-

| Particulars | 2013-14 (pro-rata) | |
|----------------------|--------------------|-------------|
| | Asset-I | Asset-II |
| Maintenance Spares | 2.29 | 1.15 |
| O & M expenses | 1.27 | 0.64 |
| Receivables | 12.20 | 6.78 |
| Total | 15.76 | 8.57 |
| Rate of Interest (%) | 13.20 | 13.20 |
| Interest | 2.08 | 1.13 |

Annual Transmission Charges

40. The detailed computation of the various components of the annual fixed charges for the transmission asset for the tariff period 2009-14 is summarised below:-



(₹ in lakh)

| Particulars | 2013-14 (pro-rata) | |
|--|--------------------|----------|
| | Asset-I | Asset-II |
| Gross Block | | |
| Opening Gross Block as on COD | 1973.23 | 2227.34 |
| Additional Capitalization after COD | 97.93 | 148.97 |
| Closing Gross Block | 2071.16 | 2376.31 |
| Average Gross Block for the year | 2022.20 | 2301.82 |
| | | |
| Depreciation | | |
| Rate of Depreciation (%) for a year | 5.280 | 5.280 |
| Depreciable Value | 1819.98 | 2071.64 |
| Elapsed Life at the beginning of the year | 0 | 0 |
| Weighted Balance Useful life of the assets | 25 | 25 |
| Remaining Depreciable Value | 1819.98 | 2071.64 |
| Depreciation for the year | 17.80 | 10.13 |
| | | |
| Interest on Loan | | |
| Gross Normative Loan as on COD | 1381.26 | 1559.14 |
| Cumulative Repayment upto COD | 0.00 | 0.00 |
| Net Loan-Opening upto COD | 1381.26 | 1559.14 |
| Additional Capitalization after COD | 68.55 | 104.15 |
| Repayment during the year | 17.80 | 10.13 |
| Net Loan-Closing | 1432.02 | 1653.16 |
| Average Loan for the year | 1406.64 | 1606.15 |
| Weighted Average Rate of Interest on Loan(%) | 7.7617 | 7.8608 |
| Interest | 18.20 | 10.52 |
| | | |
| Return on Equity | | |
| Opening Equity as on COD | 591.97 | 668.20 |
| Additional Capitalization after COD | 29.38 | 44.63 |
| Closing Equity | 621.35 | 712.84 |
| Average Equity for the year | 606.66 | 690.52 |
| Return on Equity (Base Rate) (%) | 15.50 | 15.50 |
| MAT rate for the respective year (%) | 20.961 | 20.961 |
| Rate of Return on Equity (%) | 19.610 | 19.610 |
| Return on Equity | 19.83 | 11.28 |
| | | |
| Interest on Working Capital | | |
| Maintenance Spares | 2.29 | 1.15 |
| O & M expenses | 1.27 | 0.64 |
| Receivables | 12.20 | 6.78 |
| Total | 15.76 | 8.57 |



| Particulars | 2013-14 (pro-rata) | |
|------------------------------------|--------------------|--------------|
| | Asset-I | Asset-II |
| Interest | 2.08 | 1.13 |
| | | |
| Annual Transmission Charges | | |
| Depreciation | 17.80 | 10.13 |
| Interest on Loan | 18.20 | 10.52 |
| Return on Equity | 19.83 | 11.28 |
| Interest on Working Capital | 2.08 | 1.13 |
| O & M Expenses | 15.27 | 7.64 |
| Total | 73.17 | 40.70 |

Filing Fee and the Publication Expenses

41. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 42 of the 2009 Tariff Regulations. MSEDCL submitted that the issue of filing of fees has already been taken up by the Commission vide its reply against order dated 20.8.2010 in Petition No. 70/2010. In view of the same requested not to consider the claim of filing of fees. We have considered the submissions of the petitioner and MSEDCL. 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 42 of the 2009 Tariff Regulations.

Licence Fee

42. The petitioner has requested to allow the petitioner to bill and recover Licence fee separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee in accordance with Clause (1)(b) of Regulation 42A of the 2009 Tariff Regulations.



Service Tax

43. 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. MSEDCL submitted that service tax shall be applicable as notified by the appropriate authority. We are of the view that the petitioner's prayer is premature.

Sharing of Transmission Charges

44. 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.

45. This order disposes of Petition No. 44/TT/2014.

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

Sd/-
(A.S. Bakshi)
Member



ANNEXURE**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO****(₹ in lakh)**

| Particulars (Asset-I) | Interest Rate (%) | Loan deployed as on COD | Additions during the tariff period | Total |
|--|-------------------|-------------------------|------------------------------------|----------------|
| BOND XXXVII-Loan-1 | 9.25% | 130 | 0 | 130.00 |
| BOND XXXIX-Loan-2 | 9.40% | 25 | 0 | 25.00 |
| SBI (21.3.2012)-Loan 3- | 10.25% | 35 | 0 | 35.00 |
| BOND XL- Loan 4- | 9.30% | 75 | 0 | 75.00 |
| BOND XLI- Loan 5- | 8.85% | 2 | 0 | 2.00 |
| BOND XLII- Loan 6- | 8.80% | 6 | 0 | 6.00 |
| IFC (IFC-B LOAN)(31419-01)- Loan 7- 63.12 | 2.42% | 40.02 | 0 | 40.02 |
| IFC (ICFF-B LOAN)(31419-02)- Loan 8- 63.12 | 3.27% | 20.01 | 0 | 20.01 |
| FC -BOND (17.01.2013)-Loan 9-63.12 | 4.10% | 92.98 | 0 | 92.98 |
| BOND XLIII- Loan 10- | 7.93% | 995.76 | 0 | 995.76 |
| BOND- XLIV- ADDCAP FOR 2013-2014 Loan 11- | 8.70% | 0 | 66.4 | 66.40 |
| Total | | 1421.77 | 66.40 | 1488.17 |

(₹ in lakh)

| Particulars (Asset-II) | Interest Rate (%) | Loan deployed as on COD | Additions during the tariff period | Total |
|--|-------------------|-------------------------|------------------------------------|----------------|
| BOND XXXVII-Loan-1 | 9.25% | 187 | 0 | 187.00 |
| BOND XXXIX-Loan-2 | 9.40% | 20 | 0 | 20.00 |
| SBI (21.3.2012)-Loan 3- | 10.25% | 30 | 0 | 30.00 |
| BOND XL- Loan 4- | 9.30% | 65 | 0 | 65.00 |
| IFC (IFC-B LOAN)(31419-01)-doco- 62.65 | 2.41% | 36.18 | 0 | 36.18 |
| IFC (ICFF-B LOAN)(31419-02)-doco- 62.65 | 3.26% | 15.5 | 0 | 15.50 |
| FC -BOND (17.01.2013)-doco- 62.65 | 4.10% | 82.69 | 0 | 82.69 |
| BOND XLIII- Loan 8- | 7.93% | 1177.36 | 0 | 1177.36 |
| BOND- XLIV- ADDCAP FOR 2013-2014 Loan 9- | 8.70% | 0 | 102.49 | 102.49 |
| Total | | 1613.73 | 102.49 | 1716.22 |



**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN
FOR TARIFF PERIOD 2013-14**

(₹ in lakh)

| Details of Loan | Asset-I | Asset-II |
|---|---------|----------|
| | 2013-14 | 2013-14 |
| Gross Opening Loan | 1421.77 | 1613.73 |
| Cumulative Repayment of loan upto previous year | 0 | 0 |
| Net Loan Opening | 1421.77 | 1613.73 |
| Additions during the year | 66.4 | 102.49 |
| Repayment during the year | 0 | 0 |
| Net Loan Closing | 1488.17 | 1716.22 |
| Average Loan | 1454.97 | 1664.98 |
| Weighted Average Rate of Interest (%) | 7.7617% | 7.8608% |
| Interest | 112.93 | 130.88 |

