

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 136/TT/2015

Coram:

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

Date of Hearing : 06.04.2016

Date of Order : 29.04.2016

In the matter of:

Determination of transmission tariff for **Asset-I:** Split bus arrangement at Durgapur Sub-station, **Asset-II:** Split bus arrangement at Maithon Sub-station under split arrangement for various sub-stations in Eastern Region for 2014-19 Tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

And in the matter of:

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

.....**Petitioner**

Versus

1. Bihar State Electricity Board
Vidyut Bhawan, Bailey Road
Patna- 800 001
2. West Bengal State Electricity Distribution Company Limited
Bidyut Bhawan, Bidhan Nagar
Block DJ, Sector-II, Salt Lake City,
Kolkata-700 091
3. Grid Corporation of Orissa Ltd.
Shahid Nagar,
Bhubaneswar- 751 007
4. Damodar Valley Corporation
DVC Tower, Maniktala



Kolkata- 700 054

5. Power Department
Govt. of Sikkim, Gangtok- 737 101
6. Jharkhand State Electricity Board
In front of Main Secretariat,
Doranda, Ranchi- 834002

.....**Respondents**

The following were present:-

For Petitioner: Shri A.M Pavgi, PGCIL
 Shri Mohd Mohsin, PGCIL
 Shri Piyush Awasthi, PGCIL
 Shri Amit Yadav, PGCIL
 Shri S.K Venkatasen, PGCIL
 Shri M.M. Mondal, PGCIL
 Shri Rakesh Prasad, PGCIL
 Shri S.S Raju, PGCIL
 Shri Subhash C. Taneja, PGCIL
 Shri Pankaj Sharma, PGCIL

For Respondent: None

ORDER

The present petition has been filed by Power Grid Corporation of India Ltd. ("the petitioner") for determination of tariff for **Asset-I**: Split bus arrangement at Durgapur Sub-station, **Asset-II**: Split bus arrangement at Maithon Sub-station under split arrangement for various substations in Eastern Region (herein referred as transmission asset) for 2014-19 Tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014



(hereinafter referred to as “the 2014 Tariff Regulations”) for the period from COD 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 Eastern Region.

3. 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’s company vide Memorandum no. C/CP/ Split bus arrangements dated 5.4.2013 at an estimated cost of ₹13516 lakh, which included IDC of ₹514 lakh.

(b) The scope of the instant project is as under:-

Transmission Line:

- a. 400 kV transmission line for swapping of Purnea bays (1&2) with Sasaram bays (#3&4) and Kahalgaon#1 bays with Sasaram#1 bay at Biharsharif Sub-station
- b. 400 kV transmission line for reconfiguration of Biharsharif ckt II & IV from the present position to Stage-II side of Kahalgaon switchyard of NTPC

Sub-station:

- a. To carry out splitting arrangements with tie-line breaker for the following 400 kV substations in ER
 - Maithon
 - Durgapur
 - Biharsharif



- (c) The petitioner submitted that, to address the increase in short circuit levels at 400 kV bus at various sub-stations of Eastern Region, studies were carried out to examine the short circuit levels. The study results suggested that, short circuit levels are exceeding limits of 40 kA at various 400 kV sub-stations. Accordingly, it was planned to carry out the splitting arrangement with tie line breaker for 4 nos. of sub-stations in Eastern Region at Maithon, Durgapur, Kahalgaon and Biharsharif.
- (d) The instant petition was filed on 30.4.2015 claiming tariff for Asset-I and Asset-II. The provisional tariff was allowed under Regulation 7(7) of the 2014 Tariff Regulations vide order dated 2.7.2015.
- (e) The details of commissioning and approved apportioned cost of the instant assets are given in the table below:-

| Assets | Actual COD | Approved apportioned cost (₹ in lakh) |
|---|------------|---------------------------------------|
| Asset-I: Split Bus Arrangement at Durgapur Sub-station | 14.10.2015 | 512.29 |
| Asset-II: Split Bus Arrangement at Maithon Sub-stn | 17.1.2016 | 512.29 |

4. The petitioner has claimed the revised transmission charges on the basis of actual COD vide affidavit dated 25.4.2016 as under:-

| Asset-I | (₹ in lakh) | | | |
|-----------------------------|-----------------------|---------------|---------------|---------------|
| | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | 5.69 | 17.54 | 21.56 | 21.56 |
| Interest on Loan | 6.72 | 19.85 | 22.90 | 20.90 |
| Return on Equity | 6.37 | 19.64 | 24.14 | 24.14 |
| Interest on Working Capital | 3.63 | 8.42 | 8.93 | 9.12 |
| O&M Expenses | 57.95 | 128.74 | 133.02 | 137.42 |
| Total | 80.36 | 194.19 | 210.55 | 213.14 |



(₹ in lakh)

| Asset-II | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|-----------------------|---------------|---------------|---------------|
| Depreciation | 2.74 | 17.57 | 21.89 | 21.89 |
| Interest on Loan | 3.19 | 19.59 | 22.91 | 20.97 |
| Return on Equity | 3.07 | 19.67 | 24.51 | 24.51 |
| Interest on Working Capital | 1.63 | 8.42 | 8.94 | 9.14 |
| O&M Expenses | 25.79 | 128.74 | 133.02 | 137.42 |
| Total | 36.42 | 193.99 | 211.27 | 213.93 |

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

(₹ in lakh)

| Asset-I | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
|--------------------------|-----------------------|--------------|--------------|--------------|
| Maintenance Spares | 18.69 | 19.31 | 19.95 | 20.61 |
| O & M Expenses | 10.38 | 10.73 | 11.09 | 11.45 |
| Receivables | 28.80 | 32.37 | 35.09 | 35.52 |
| Total | 57.87 | 62.41 | 66.13 | 67.58 |
| Rate of Interest (%) | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest | 7.81 | 8.42 | 8.93 | 9.12 |
| Pro-rata interest | 3.63 | 8.42 | 8.93 | 9.12 |

(₹ in lakh)

| Asset-II | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
|--------------------------|-----------------------|--------------|--------------|--------------|
| Maintenance Spares | 18.69 | 19.31 | 19.95 | 20.61 |
| O & M Expenses | 10.38 | 10.73 | 11.09 | 11.45 |
| Receivables | 29.33 | 32.33 | 35.21 | 35.66 |
| Total | 58.40 | 62.37 | 66.25 | 67.72 |
| Rate of Interest (%) | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest | 7.88 | 8.42 | 8.94 | 9.14 |
| Pro-rata interest | 1.63 | 8.42 | 8.94 | 9.14 |

6. The petitioner has submitted additional information vide affidavit dated 25.4.2016. The petitioner was also directed vide ROP (Record of Proceedings) dated 20.8.2015 and 6.4.2016 to submit certain information. In response, the



petitioner submitted its response along with revised tariff forms vide affidavit dated 25.4.2016. The petitioner also submitted Auditor's Certificate dated 21.4.2016 for both the assets.

7. The petitioner has served the petition on the respondents and notice of this application has been published in the newspapers in accordance with Section 64 of the 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 6.4.2016. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

Commercial Operation Date ("COD")

8. The petitioner has claimed the date of the commercial operation of the instant transmission asset as 14.10.2015 and 17.1.2016 for Asset-I and Asset-II. Regulation 4(3) of the 2014 Tariff Regulations provides as follows:-

"4. Date of Commercial Operation: The date of commercial operation of a generating station or unit or block thereof or a transmission system or element thereof shall be determined as under:

xxx

(3) Date of commercial operation in relation to a transmission system shall mean the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful trial operation for transmitting electricity and communication signal from sending end to receiving end:

xxx"



9. The petitioner has submitted RLDC certificate issued by ERLDC, POSOCO vide letter dated 21.4.2016 in support of the claim of commercial operation and in accordance with Regulation 5(2) of the 2014 Tariff Regulations indicating completion of successful trial run operation of the subject assets. The petitioner has also submitted the CEA Energisation certificate of the subject assets vide affidavit dated 25.4.2016 for Asset-I and Asset-II.

10. Accordingly, the commercial operation date of 14.10.2015 and 17.1.2016 for Asset-I and Asset-II respectively for the subject transmission asset and the tariff has been worked out from COD to 31.3.2019 for the assets.

Capital Cost

11. The petitioner vide affidavit dated 25.4.2016 has submitted the revised capital cost along with revised tariff forms for the said assets. The petitioner has claimed capital cost of ₹212.79 lakh and ₹256.93 lakh as on COD of the assets based on Auditor's certificate. The petitioner has submitted the Auditor's Certificate dated 21.4.2016 for Asset-I and Asset-II certifying the capital cost. The petitioner has claimed the capital cost as follows:

(₹ in lakh)

| Asset Name | Approved Apportioned Cost | Capital cost as per Auditor's Certificate | Capital Cost as on COD claimed by petitioner after adjustment of IDC on cash basis |
|--------------|---------------------------|---|--|
| Asset-I | 512.29 | 212.79 | 207.22 |
| Asset-II | 512.29 | 256.94 | 250.49 |
| Total | 1024.58 | 469.73 | 457.71 |



12. The petitioner was directed vide ROP dated 6.4.2016 to submit the details of FERV gain/loss for current assets. In response, the petitioner vide affidavit dated 25.4.2016, has submitted that, there is no deployment of foreign loans hence no FERV on the current assets.

13. The petitioner has however considered capital cost of ₹207.22 lakh and ₹250.49 lakh for Asset-I and Asset-II respectively after adjustment of IDC on cash basis for the purpose of tariff computation.

14. Regulation 9 (1) and (2) and 10 (1) of the 2014 Tariff Regulations specify as follows:-

“9. Capital Cost: (1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects.

(2) The Capital Cost of a new project shall include the following:

- a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
- b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
- c) Increase in cost in contract packages as approved by the Commission;
- d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;
- e) capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;
- f) expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;
- g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and
- h) adjustment of any revenue earned by the transmission licensee by using the assets before COD.”



“10. Prudence Check of Capital Expenditure: The following principles shall be adopted for prudence check of capital cost of the existing or new projects:

(1) In case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out taking into consideration the benchmark norms specified/to be specified by the Commission from time to time: Provided that in cases where benchmark norms have not been specified, prudence check may include scrutiny of the capital expenditure, financing plan, interest during construction, incidental expenditure during construction for its reasonableness, use of efficient technology, cost over-run and time over-run, competitive bidding for procurement and such other matters as may be considered appropriate by the Commission for determination of tariff.”

Time over-run

15. As per the investment approval dated 5.4.2013, the scheme was scheduled to be commissioned within 15 months from the date of investment approval. Accordingly, the schedule completion date works out to 29.6.2014. However, the actual commissioning of Assets-I and II was 14.10.2015 and 17.1.2016. The petitioner has submitted that there is a time over-run of 473 days (15 months 15 days) in case of Asset-I and in case of Asset-II it is 568 days (18 months 18 days).

16. The petitioner, vide affidavit dated 25.4.2016, has submitted that for carrying out works at Maithon and Durgapur Sub-stations, the work was awarded to the contractor on 8.8.2013 with completion schedule by 7.8.2014. However, the civil works could not be started at Maithon Sub-station till November, 2014 even after repeated reminders. Joint meetings were held with M/s. BHEL in July, 2014 and December, 2014 where the petitioner expressed deep concern regarding slow progress of work at the sub-stations. After rigorous follow ups, Split Bus arrangement at Durgapur Substation Sub-station was commissioned in October, 2015 with a time overrun of 16 months. The petitioner has also



submitted schedule submitted by BHEL in the minutes of meeting between petitioner and contractor

16. We have considered the submissions of the petitioner. There has been time over-run of 473 days (15 months 15 days) in case of Asset-I and in case of Asset-II the time over-run is 568 days (18 months 18 days) in the commissioning. The reasons for time over-run were due to delay in mobilization of works by the contractor. The petitioner has submitted following documents to show that it has pursued the matter with BHEL:-

| Sl. No. | Documents Submitted |
|---------|--|
| 1 | Minutes of Meeting between Powergrid and BHEL |
| 2 | Letter dated 4.4.2014. Request by Powergrid to BHEL for supply of Foundation bolt. |
| 3 | Letter dated 22.4.2014 |
| 4 | Minutes of Meeting on 7.7.2014 held between PGCIL and BHEL |
| 5 | Letter dated 10.4.2014, 20.9.2014 |

17. We have perused the documents placed on record by the petitioner. The documents placed by the petitioner are mainly minutes of meeting and letter by the petitioner to the contractor. These documents indicate the petitioner's effort to get the work done by the contractor on time. The petitioner has not produced any document originating from BHEL. Further, it is not clear what prevented BHEL to execute the works as per the time period agreed in the contract. All the documents submitted by the petitioner are its own. On the basis of the documents produced by the petitioner it is difficult for us conclude that the time over-run is not attributable to the petitioner. We are of the view that the entire



delay is on part of the contractor in the instant case due to slow mobilization of work and other reasons as stated above is attributable to the contractor.

18. The Hon'ble Appellate Tribunal for Electricity in its judgement dated 27.4.2011 in Appeal No.72/2010 has held that the additional cost due to time over-run due to factors beyond the control of project developer shall be capitalised. In the instant case, the impact of delay is due to the contractor and should not be considered as beyond the control of the petitioner. Accordingly, we disallow the delay of 473 days (15 months 15 days) for Asset-I and for Asset-II, delay is 568 days (18 months 18 days) in the instant order. The petitioner has not mentioned the liquidated damages claimed from the contractor. The petitioner is directed to submit the details of liquidated damages recovered, at the time of truing up of the petition.

Cost over-run

19. The estimated completion cost of the transmission assets is within the approved cost and hence, there is no cost over-run for the said assets.

IDC and IEDC

20. The petitioner vide affidavit dated 25.4.2016 submitted the cash basis IDC for Asset-I and Asset-II as follows:

| Particulars | IDC discharged as on COD | (₹ in lakh) | | |
|-------------|-----------------------------|-------------|-------------|--------------|
| | | 2015- 16 | 2016- 17 | Total IDC |
| Asset-I | 7.24 | 5.32 | 0.25 | 12.81 |



| Particulars | IDC discharged as on COD | 2015-16 | 2016-17 | Total IDC |
|-------------|--------------------------|---------|---------|--------------|
| Asset-II | 10.84 | 0.44 | 6.00 | 17.28 |

21. The petitioner further submitted that, IDC to be discharged during 2015-16 & 2016-17 has not been included in the add cap expenditure of 2015-16 & 2016-17 as per the Auditor Certificate. The same is included in as on DOCO. However tariff for 2015-16 & 2016-17 is claimed considering the accrued IDC as part of add cap expenditure of 2015-16 & 2016-17. The entire IEDC has been discharged as on COD of the assets.

22. The petitioner submitted the IDC/IEDC upto SCOD and from SCOD to COD for Asset-I and Asset-II vide affidavit dated 25.4.2016 as follows:-

| Particulars | ₹ in lakh | |
|-------------------------------|--------------|--------------|
| | Asset-I | Asset-II |
| IDC upto SCOD (a) | 0.00 | 0.00 |
| IDC from SCOD to COD (b) | 12.81 | 17.28 |
| IEDC upto SCOD (c) | 0.97 | 0.04 |
| IEDC from SCOD to COD (d) | 7.15 | 18.94 |
| Total allowed (a+c) | 0.97 | 0.04 |
| Total Disallowed (b+d) | 19.96 | 36.22 |

23. As held above, since the complete time over-run of the assets has been disallowed hence IDC and IEDC up to SCOD only, is capitalized and accordingly, IDC/IEDC from SCOD to COD has been deducted from the capital cost as on COD of the assets.



Treatment of Initial spares:

24. Regulation 13(d) of the 2014 Tariff Regulations provides that initial spares shall be capitalised as a percentage of plant and machinery cost upto cut-off date, subject to following ceiling norms:-

- “(a) Coal-based/lignite-fired thermal generating stations - 4.0%
- (b) Gas Turbine/Combined Cycle thermal generating stations - 4.0%
- (c) Hydro generating stations including pumped storage hydro generating station. - 4.0%

- (d) Transmission system
 - (i) Transmission line - 1.00%
 - (ii) Transmission Sub-station (Green Field) - 4.00%
 - (iii) Transmission Sub-station (Brown Field) - 6.00%
 - (iv) Series Compensation devices and HVDC Station - 4.00%
 - (v) Gas Insulated Sub-station (GIS) - 5.00%
 - (vi) Communication system - 3.5%”

25. The petitioner has claimed initial spares for Asset-I and Asset-II as ₹32.90 lakh and ₹32.90 lakh respectively. The petitioner also submitted that, no special spares are procured.

26. As held above, the time over run of 473 days and 568 days for Asset-I and Asset-II respectively has been disallowed. Hence, the excess initial spares are calculated based on the proportionate initial spares. The initial spares calculated for Asset-I and Asset-II are as shown below:-

(₹ in lakh)

| Description | Capital cost as on cut-off date based on Auditor's Certificate | Capital cost as on cut-off date computed | Initial spares claimed | Proportionate initial spares | Ceiling limits as per Regulation 8 of the 2009 Tariff Regulation | Initial spares worked out and allowed | Excess initial spares claimed |
|-------------|--|--|------------------------|------------------------------|--|---------------------------------------|-------------------------------|
|-------------|--|--|------------------------|------------------------------|--|---------------------------------------|-------------------------------|



| | (a1) | (a) | (b) | $(b1)=((b)*(a))/a1$ | (c) | $(d)=*((a-b)*c)/(100-c)\%$ | $(e)=(d)-(b)$ |
|------------------------|--------|--------|-------|---------------------|-------|----------------------------|---------------|
| Asset-I (Sub-station) | 408.42 | 388.46 | 32.90 | 31.29 | 4.00% | 14.88 | 16.41 |
| Asset-II (Sub-station) | 414.55 | 378.33 | 32.90 | 30.03 | 4.00% | 14.51 | 15.51 |

27. We have considered submissions of the petitioner. Accordingly, excess initial spares in case of Asset-I and Asset-II have been deducted from the capital cost as on COD.

28. The capital cost approved for the instant assets is as follows:-

| (₹ in lakh) | | | | | |
|--------------|--|---|------------------------|--|---|
| Asset Name | Approved apportioned cost of the asset | Capital cost as per Auditor's Certificate (a) | IDC /IEDC deducted (b) | Deduction of excess initial spares (c) | Capital cost approved in this order (a-b-c) |
| Asset-I | 512.29 | 212.79 | 19.96 | 16.41 | 176.42 |
| Asset-II | 512.29 | 256.94 | 36.22 | 15.51 | 205.21 |
| Total | 1024.58 | 463.28 | 56.18 | 31.92 | 381.63 |

Additional Capital Expenditure

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

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

- (i) Undischarged liabilities recognised to be payable at a future date;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;



- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (v) Change in Law or compliance of any existing law.”

Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff.

30. Clause (13) of Regulation 3 of the 2014 Tariff Regulations defines “cut-off” date as under:-

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

Provided that the cut-off date may be extended by the Commission if it is proved on the basis of documentary evidence that the capitalisation could not be made within the cut-off date for reasons beyond the control of the project developer;”

31. The cut-off date in the case of Asset-I is 31.3.2018 and Asset-II is 31.3.2019.

32. The petitioner has proposed additional capitalization of ₹48.72 lakh and ₹0.44 lakh for the years 2015-16, and ₹152.48 lakh and ₹163.61 lakh in 2016-17 for Asset-I and Asset-II respectively towards balance and retention payment under Regulation 14(1)(i) of 2014 Tariff Regulations, after adjustment of cash basis IDC.

33. The petitioner was directed to submit the balance and retention payment amount yet to be made along with details of contract for which payment has been



retained along with amount retained. The petitioner, vide affidavit dated 25.4.2016, has submitted the desired information.

34. The additional capitalization considered after adjustment of disallowed IDC and IEDC is ₹43.40 lakh and ₹152.23 lakh for 2015-16 and 2016-17 respectively for Asset-I and ₹157.61 lakh for 2016-17 for Asset-II. The total estimated completion cost of ₹372.05 lakh and ₹362.82 lakh, for Asset-I and Asset-II respectively including the additional capitalization (after adjustment of disallowed IDC/IEDC and excess initial spares) is as shown below. The completion cost is within the approved apportioned cost of the assets and it is within the cut-off date. Accordingly, additional capitalization proposed by the petitioner is allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations.

(₹ in lakh)

| Asset Name | Approved Apportioned Cost | Capital Cost as on COD | Additional Capitalization | | Total Additional Capitalization | Total capital Cost as on 31.3.2019 |
|--------------|---------------------------|------------------------|---------------------------|---------------|---------------------------------|------------------------------------|
| | | | 2015-16 | 2016-17 | | |
| Asset-I | 512.29 | 176.42 | 43.40 | 152.23 | 195.63 | 372.05 |
| Asset-II | 512.29 | 205.21 | 0.00 | 157.61 | 157.61 | 362.82 |
| Total | 1024.58 | 381.627 | 43.40 | 309.84 | 353.24 | 734.87 |

Debt:Equity Ratio

35. Regulation 19 (1) of the 2014 Tariff Regulations specifies as under:-

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

Provided that:



- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt : equity ratio.”

36. The petitioner has considered debt:equity ratio as 70:30 as on COD as well as for additional capitalisation. We have considered debt:equity ratio of 70:30 as on COD and for additional capitalization during 2015-16 and 2016-17. The details of the debt:equity as on the date of COD for the assets and 31.3.2019 considered for the purpose of tariff computation for the 2014-19 tariff period is as follows:-

(₹ in lakh)

| Particulars | As on COD | | Additional capitalization during 2014-19 | | As on 31.3.2019 | |
|-----------------|---------------|---------------|--|---------------|-----------------|---------------|
| | Amount | (%) | Amount | (%) | Amount | (%) |
| Asset-I | | | | | | |
| Debt | 123.49 | 70.00 | 136.95 | 70.00 | 260.44 | 70.00 |
| Equity | 52.93 | 30.00 | 58.68 | 30.00 | 111.61 | 30.00 |
| Total | 176.42 | 100.00 | 195.63 | 100.00 | 372.05 | 100.00 |
| Asset-II | | | | | | |
| Debt | 143.65 | 70.00 | 110.33 | 70.00 | 253.97 | 70.00 |
| Equity | 61.56 | 30.00 | 47.28 | 30.00 | 108.84 | 30.00 |
| Total | 205.21 | 100.00 | 157.61 | 100.00 | 362.82 | 100.00 |

Interest on Loan (“IOL”)

37. Clause (5) & (6) of Regulation 26 of the 2014 Tariff Regulations provides 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.”

38. The petitioner vide affidavit dated 25.4.2016 submitted the documents in support of interest rate for proposed loan (2014-15) and repayment schedule for loans deployed (as per Form 9C) for both the assets.

39. We have considered the weighted average rate of IOL on the basis of rate prevailing as on 1.4.2014. Further, the petitioner has prayed to allow it to bill and adjust impact on interest on loan due to change in interest rate on account of floating rate of interest applicable during 2014-19 period, if any from the respondents. The IOL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The petitioner’s prayer to bill and adjust the impact on interest on loan due to change in interest rate on account of floating rate of interest applicable during 2014-19 period from the respondents will be considered at the time of truing up. The details of weighted average rate of interest are placed at **Annexure-I** and the IOL has been worked out as follows:-

| (₹ in lakh) | | | | |
|--------------------|-----------------------|---------|---------|---------|
| Asset-I | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
| Gross loan opening | 123.49 | 153.88 | 260.44 | 260.44 |



| Asset-I | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
|---|-----------------------|--------------|--------------|--------------|
| Cumulative Repayment upto previous year | 0.00 | 4.86 | 20.48 | 40.13 |
| Net Loan-Opening | 123.49 | 149.02 | 239.96 | 220.32 |
| Additions during the year | 30.39 | 106.56 | 0.00 | 0.00 |
| Repayment during the year | 4.86 | 15.63 | 19.64 | 19.64 |
| Net Loan-Closing | 149.02 | 239.96 | 220.32 | 200.67 |
| Average Loan | 136.26 | 194.49 | 230.14 | 210.49 |
| Rate of Interest (%) | 9.0700 | 9.1000 | 9.0900 | 9.0700 |
| Interest | 5.74 | 17.70 | 20.92 | 19.09 |

(₹ in lakh)

| Asset-II | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
|---|-----------------------|--------------|--------------|--------------|
| Gross loan opening | 143.65 | 143.65 | 253.97 | 253.97 |
| Cumulative Repayment upto previous year | 0.00 | 2.22 | 17.22 | 36.37 |
| Net Loan-Opening | 143.65 | 141.42 | 236.76 | 217.60 |
| Additions during the year | 0.00 | 110.33 | 0.00 | 0.00 |
| Repayment during the year | 2.22 | 15.00 | 19.16 | 19.16 |
| Net Loan-Closing | 141.42 | 236.76 | 217.60 | 198.45 |
| Average Loan | 142.53 | 189.09 | 227.18 | 208.02 |
| Rate of Interest (%) | 8.8500 | 8.8500 | 8.8500 | 8.8500 |
| Interest | 2.58 | 16.73 | 20.11 | 18.41 |

Return on Equity (“ROE”)

40. 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 and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

xxx”



“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.”

41. The petitioner has submitted grossed up ROE at the rate of 19.705% after grossing up the ROE of 15.50% with MAT rate applicable for 2014-15. 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.

42. 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.

43. 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. The ROE allowed for the instant transmission asset is given below:-

(₹ in lakh)

| Asset-I | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
|--|-----------------------|--------------|--------------|--------------|
| Opening Equity | 52.93 | 65.94 | 111.61 | 111.61 |
| Additional Capitalization | 13.01 | 45.67 | 0.00 | 0.00 |
| Closing Equity | 65.94 | 111.61 | 111.61 | 111.61 |
| Average Equity | 59.43 | 88.77 | 111.61 | 111.61 |
| Return on Equity (Base Rate) (%) | 15.50 | 15.50 | 15.50 | 15.50 |
| Tax rate for the year (%) | 20.961 | 20.961 | 20.961 | 20.961 |
| Rate of Return on Equity (Pre Tax) (%) | 19.610 | 19.610 | 19.610 | 19.610 |
| Return on Equity (Pre Tax) | 5.41 | 17.41 | 21.89 | 21.89 |

(₹ in lakh)

| Asset-II | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
|--|-----------------------|--------------|--------------|--------------|
| Opening Equity | 61.56 | 61.56 | 108.84 | 108.84 |
| Additional Capitalization | 0.00 | 47.28 | 0.00 | 0.00 |
| Closing Equity | 61.56 | 108.84 | 108.84 | 108.84 |
| Average Equity | 61.56 | 85.20 | 108.84 | 108.84 |
| Return on Equity (Base Rate) (%) | 15.50 | 15.50 | 15.50 | 15.50 |
| Tax rate for the year (%) | 20.961 | 20.961 | 20.961 | 20.961 |
| Rate of Return on Equity (Pre Tax) (%) | 19.610 | 19.610 | 19.610 | 19.610 |
| Return on Equity (Pre Tax) | 2.47 | 16.71 | 21.34 | 21.34 |

Depreciation



44. 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."

45. Clause (67) of Regulation 3 of the 2014 Tariff Regulations defines useful life as follows:-

"(67) '**Useful life**' in relation to a unit of a generating station and transmission system from the COD shall mean the following, namely:

- (a) Coal/Lignite based thermal generating station 25 years
- (b) Gas/Liquid fuel based thermal generating station 25 years
- (c) AC and DC sub-station 25 years
- (d) Gas Insulated Substation (GIS) 25 years
- (d) Hydro generating station including pumped Storage hydro generating stations 35 years
- (e) Transmission line (including HVAC & HVDC) 35 years
- (f) Communication system 15 years"

46. The petitioner has claimed depreciation considering capital cost as on COD and additional capitalisation claimed by it for the 2014-19 tariff period.



47. We have considered the submissions of the petitioner and have computed depreciation considering capital expenditure of ₹176.42 lakh and ₹205.21 lakh as on COD for Asset-I and Asset-II with additional capitalization of ₹195.63 lakh and ₹157.61 lakh for Asset-I and Asset-II respectively. The weighted average useful life for both the assets has been considered as 25 years in accordance with the above regulation. The details of the depreciation allowed are given hereunder:-

(₹ in lakh)

| Asset-I | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
|---|-----------------------|--------------|--------------|--------------|
| Opening Gross block | 176.42 | 219.82 | 372.05 | 372.05 |
| Additional Capitalization | 43.40 | 152.23 | 0.00 | 0.00 |
| Closing Gross block | 219.82 | 372.05 | 372.05 | 372.05 |
| Average Gross block | 198.12 | 295.93 | 372.05 | 372.05 |
| Rate of Depreciation (%) | 5.280 | 5.280 | 5.280 | 5.280 |
| Depreciable Value | 178.31 | 266.34 | 334.84 | 334.84 |
| Elapsed Life of the assets at beginning of the year | 0 | 1 | 2 | 3 |
| Weighted Balance Useful life of the assets | 25 | 24 | 23 | 22 |
| Remaining Depreciable Value | 178.31 | 261.48 | 314.36 | 294.72 |
| Depreciation | 4.86 | 15.63 | 19.64 | 19.64 |

(₹ in lakh)

| Asset-II | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
|---------------------------|-----------------------|---------|---------|---------|
| Opening Gross block | 205.21 | 205.21 | 362.82 | 362.82 |
| Additional Capitalization | 0.00 | 157.61 | 0.00 | 0.00 |
| Closing Gross block | 205.21 | 362.82 | 362.82 | 362.82 |
| Average Gross block | 205.21 | 284.01 | 362.82 | 362.82 |
| Rate of Depreciation (%) | 5.280 | 5.280 | 5.280 | 5.280 |



| Asset-II | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
|---|-----------------------|--------------|--------------|--------------|
| Depreciable Value | 184.69 | 255.61 | 326.54 | 326.54 |
| Elapsed Life of the assets at beginning of the year | 0 | 1 | 2 | 3 |
| Weighted Balance Useful life of the assets | 25 | 24 | 23 | 22 |
| Remaining Depreciable Value | 184.69 | 253.39 | 309.32 | 290.16 |
| Depreciation | 2.22 | 15.00 | 19.16 | 19.16 |

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

48. The petitioner has computed normative O&M Expenses as per Regulation 29(4)(a) of the 2014 Tariff Regulations. Accordingly, the petitioner’s entitlement to O&M expenses have been worked out as given hereunder:-

| Asset-I | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
|---|-----------------------|---------------|---------------|---------------|
| 400 kV Bays (in lakh/bay) | 62.30 | 64.37 | 66.51 | 68.71 |
| 400 kV Bays (Nos) | 2 | 2 | 2 | 2 |
| Total O&M Expenses (in lakh) | 57.87 | 128.74 | 133.02 | 137.42 |

| Asset-II | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
|---|-----------------------|---------------|---------------|---------------|
| 400 kV Bays (in lakh/bay) | 62.30 | 64.37 | 66.51 | 68.71 |
| 400 kV Bays (in lakh/bay) | 2 | 2 | 2 | 2 |
| Total O&M Expenses (in lakh) | 25.53 | 128.74 | 133.02 | 137.42 |

49. The petitioner submitted that norms for O&M Expenses for the tariff period 2014-19 have been arrived on the basis of normalized actual O&M Expenses during the period 2008-13. The petitioner has further submitted that the wage revision of the employees of the petitioner is due during the 2014-19 tariff period and actual impact of wage hike, which will be effective at a future date, has not been factored in fixation of the normative O&M rate specified for the tariff period



2014-19. The petitioner has prayed to be allowed to approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase.

50. The O&M Expenses have been worked out as per the norms of O&M Expenses specified in the 2014 Tariff Regulations. As regards impact of wage revision, any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.

| O&M Expenses Allowed | (₹ in lakh) | | | |
|----------------------|--------------------|---------------|---------------|---------------|
| | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
| Asset-I | 57.87 | 128.74 | 133.02 | 137.42 |
| Asset-II | 25.53 | 128.74 | 133.02 | 137.42 |
| Total | 83.40 | 257.48 | 266.04 | 274.84 |

Interest on Working Capital (“IWC”)

51. As per 2014 Tariff Regulations the components of the working capital and the interest thereon are discussed hereinafter:-

(i) Receivables

As per Regulation 28(1) (c) (i) of the 2014 Tariff Regulations, receivables will be equivalent to two months average billing calculated on target availability level. The petitioner has claimed the receivables on the basis of 2 months transmission charges claimed in the petition. In the tariff being



allowed, receivables have been worked out on the basis of 2 months transmission charges.

(ii) Maintenance Spares

Regulation 28 (1) (c) (ii) of the 2014 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M Expenses from 1.4.2014. The petitioner has claimed maintenance spares for the instant asset and value of maintenance spares has accordingly been worked out as 15% of O&M Expenses.

(iii) O & M Expenses

Regulation 28 (1) (c) (iii) of the 2014 Tariff Regulations provides for operation and maintenance expenses for one month to be included in the working capital. The petitioner has claimed O & M Expenses for the instant asset and value of O & M Expenses has accordingly been worked out by considering 1 month O&M Expenses.

(iv) Rate of interest on working capital

Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later. Further, the 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. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points).

52. The interest on working capital allowed is shown in the table below:-

| (₹ in lakh) | | | | |
|----------------------|-----------------------|--------------|--------------|--------------|
| Asset-I | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
| Maintenance Spares | 8.68 | 19.31 | 19.95 | 20.61 |
| O & M expenses | 4.82 | 10.73 | 11.09 | 11.45 |
| Receivables | 12.91 | 31.29 | 34.04 | 34.50 |
| Total | 26.41 | 61.33 | 65.08 | 66.57 |
| Rate of Interest (%) | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest | 3.57 | 8.28 | 8.79 | 8.99 |

| (₹ in lakh) | | | | |
|----------------------|-----------------------|--------------|--------------|--------------|
| Asset-II | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
| Maintenance Spares | 3.83 | 19.31 | 19.95 | 20.61 |
| O & M expenses | 2.13 | 10.73 | 11.09 | 11.45 |
| Receivables | 5.73 | 30.90 | 33.73 | 34.21 |
| Total | 11.69 | 60.94 | 64.77 | 66.28 |
| Rate of Interest (%) | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest | 1.58 | 8.23 | 8.74 | 8.95 |

Annual Transmission Charges

53. The detailed computation of the various components of the annual fixed charges for the transmission asset for the tariff period 2014-19 is summarised below:-

| (₹ in lakh) | | | | |
|---------------------|-----------------------|---------|---------|---------|
| Asset-I | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
| Gross Block | | | | |
| Opening Gross Block | 176.42 | 219.82 | 372.05 | 372.05 |



| Asset-I | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
|---|-----------------------|---------|---------|---------|
| Additional Capitalization | 43.40 | 152.23 | 0.00 | 0.00 |
| Closing Gross Block | 219.82 | 372.05 | 372.05 | 372.05 |
| Average Gross Block | 198.12 | 295.93 | 372.05 | 372.05 |
| Rate of Depreciation | 5.280 | 5.280 | 5.280 | 5.280 |
| Depreciable Value | 178.31 | 266.34 | 334.84 | 334.84 |
| Elapsed Life of the assets at beginning of the year | 0 | 1 | 2 | 3 |
| Weighted Balance Useful life of the assets | 25 | 24 | 23 | 22 |
| Remaining Depreciable Value | 178.31 | 261.48 | 314.36 | 294.72 |
| Depreciation | 4.86 | 15.63 | 19.64 | 19.64 |
| | | | | |
| Interest on Loan | | | | |
| Gross Normative Loan | 123.49 | 153.88 | 260.44 | 260.44 |
| Cumulative Repayment upto Previous Year | 0.00 | 4.86 | 20.48 | 40.13 |
| Net Loan-Opening | 123.49 | 149.02 | 239.96 | 220.32 |
| Additions | 30.39 | 106.56 | 0.00 | 0.00 |
| Repayment during the year | 4.86 | 15.63 | 19.64 | 19.64 |
| Net Loan-Closing | 149.02 | 239.96 | 220.32 | 200.67 |
| Average Loan | 136.26 | 194.49 | 230.14 | 210.49 |
| Weighted Average Rate of Interest on Loan (%) | 9.0700 | 9.1000 | 9.0900 | 9.0700 |
| Interest | 5.74 | 17.70 | 20.92 | 19.09 |
| | | | | |
| Return on Equity | | | | |
| Opening Equity | 52.93 | 65.94 | 111.61 | 111.61 |
| Additions | 13.01 | 45.67 | 0.00 | 0.00 |
| Closing Equity | 65.94 | 111.61 | 111.61 | 111.61 |
| Average Equity | 59.43 | 88.77 | 111.61 | 111.61 |
| Return on Equity (Base Rate) (%) | 15.50 | 15.50 | 15.50 | 15.50 |
| MAT Rate for the year 2013-14 (%) | 20.961 | 20.961 | 20.961 | 20.961 |
| Rate of Return on Equity (Pre Tax) (%) | 19.610 | 19.610 | 19.610 | 19.610 |
| Return on Equity (Pre Tax) | 5.41 | 17.41 | 21.89 | 21.89 |
| | | | | |
| Interest on Working Capital | | | | |



| Asset-I | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
|------------------------------------|-----------------------|---------------|---------------|---------------|
| Maintenance Spares | 8.68 | 19.31 | 19.95 | 20.61 |
| O & M expenses | 4.82 | 10.73 | 11.09 | 11.45 |
| Receivables | 12.91 | 31.29 | 34.04 | 34.50 |
| Total | 26.41 | 61.33 | 65.08 | 66.57 |
| Interest | 3.57 | 8.28 | 8.79 | 8.99 |
| | | | | |
| Annual Transmission Charges | | | | |
| Depreciation | 4.86 | 15.63 | 19.64 | 19.64 |
| Interest on Loan | 5.74 | 17.70 | 20.92 | 19.09 |
| Return on Equity | 5.41 | 17.41 | 21.89 | 21.89 |
| Interest on Working Capital | 3.57 | 8.28 | 8.79 | 8.99 |
| O & M Expenses | 57.87 | 128.74 | 133.02 | 137.42 |
| Total | 77.45 | 187.75 | 204.26 | 207.03 |

(₹ in lakh)

| Asset-II | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
|---|-----------------------|---------|---------|---------|
| Gross Block | | | | |
| Opening Gross Block | 205.21 | 205.21 | 362.82 | 362.82 |
| Additional Capitalization | 0.00 | 157.61 | 0.00 | 0.00 |
| Closing Gross Block | 205.21 | 362.82 | 362.82 | 362.82 |
| Average Gross Block | 205.21 | 284.01 | 362.82 | 362.82 |
| Rate of Depreciation | 5.280 | 5.280 | 5.280 | 5.280 |
| Depreciable Value | 184.69 | 255.61 | 326.54 | 326.54 |
| Elapsed Life of the assets at beginning of the year | 0 | 1 | 2 | 3 |
| Weighted Balance Useful life of the assets | 25 | 24 | 23 | 22 |
| Remaining Depreciable Value | 184.69 | 253.39 | 309.32 | 290.16 |
| Depreciation | 2.22 | 15.00 | 19.16 | 19.16 |
| | | | | |
| Interest on Loan | | | | |
| Gross Normative Loan | 143.65 | 143.65 | 253.97 | 253.97 |
| Cumulative Repayment upto Previous Year | 0.00 | 2.22 | 17.22 | 36.37 |



| Asset-II | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
|---|-----------------------|---------------|---------------|---------------|
| Net Loan-Opening | 143.65 | 141.42 | 236.76 | 217.60 |
| Additions | 0.00 | 110.33 | 0.00 | 0.00 |
| Repayment during the year | 2.22 | 15.00 | 19.16 | 19.16 |
| Net Loan-Closing | 141.42 | 236.76 | 217.60 | 198.45 |
| Average Loan | 142.53 | 189.09 | 227.18 | 208.02 |
| Weighted Average Rate of Interest on Loan (%) | 8.8500 | 8.8500 | 8.8500 | 8.8500 |
| Interest | 2.58 | 16.73 | 20.11 | 18.41 |
| | | | | |
| Return on Equity | | | | |
| Opening Equity | 61.56 | 61.56 | 108.84 | 108.84 |
| Additions | 0.00 | 47.28 | 0.00 | 0.00 |
| Closing Equity | 61.56 | 108.84 | 108.84 | 108.84 |
| Average Equity | 61.56 | 85.20 | 108.84 | 108.84 |
| Return on Equity (Base Rate) (%) | 15.50 | 15.50 | 15.50 | 15.50 |
| MAT Rate for the year 2013-14 (%) | 20.961 | 20.961 | 20.961 | 20.961 |
| Rate of Return on Equity (Pre Tax) (%) | 19.610 | 19.610 | 19.610 | 19.610 |
| Return on Equity (Pre Tax) | 2.47 | 16.71 | 21.34 | 21.34 |
| | | | | |
| Interest on Working Capital | | | | |
| Maintenance Spares | 3.83 | 19.31 | 19.95 | 20.61 |
| O & M expenses | 2.13 | 10.73 | 11.09 | 11.45 |
| Receivables | 5.73 | 30.90 | 33.73 | 34.21 |
| Total | 11.69 | 60.94 | 64.77 | 66.28 |
| Interest | 1.58 | 8.23 | 8.74 | 8.95 |
| | | | | |
| Annual Transmission Charges | | | | |
| Depreciation | 2.22 | 15.00 | 19.16 | 19.16 |
| Interest on Loan | 2.58 | 16.73 | 20.11 | 18.41 |
| Return on Equity | 2.47 | 16.71 | 21.34 | 21.34 |
| Interest on Working Capital | 1.58 | 8.23 | 8.74 | 8.95 |
| O & M Expenses | 25.53 | 128.74 | 133.02 | 137.42 |
| Total | 34.39 | 185.41 | 202.37 | 205.28 |



Filing Fee and Publication Expenses

54. 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

55. 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

56. 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.

Sharing of Transmission Charges

57. 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.

58. This order disposes of Petition No. 136/TT/2015.

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

Sd/-
(A.S. Bakshi)
Member



ANNEXURE-I

DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO 2014-19

(₹ in lakh)

| Asset-I | Interest Rate (%) | Loan deployed as on COD | Additions during the tariff period | Total |
|--|-------------------|-------------------------|------------------------------------|---------------|
| BOND - XLV-Doco loan- | 9.65 | 75.00 | 0.00 | 75.00 |
| SBI (2014-15)-ADDCAP FOR 2015-2016 add cap loan- | 9.55 | 0.00 | 30.38 | 30.38 |
| Bond XLVIII-Doco loan 1- | 8.20 | 13.75 | 0.00 | 13.75 |
| BOND LI-ADDCAP FOR 2015-2016 add cap loan 1- | 8.40 | 0.00 | 3.73 | 3.73 |
| BOND LI-Doco loan 2- | 8.40 | 56.30 | 0.00 | 56.30 |
| Total | | 145.05 | 34.11 | 179.16 |

(₹ in lakh)

| Asset-II | Interest Rate (%) | Loan deployed as on 1.4.2014 | Additions during the tariff period | Total |
|--------------------------|-------------------|------------------------------|------------------------------------|---------------|
| SBI (2014-15)-Doco loan- | 9.55 | 65.00 | 0.00 | 65.00 |
| BOND XLVI -Doco loan 1- | 9.30 | 5.00 | 0.00 | 5.00 |
| BOND XLIX-Doco loan 2- | 8.15 | 2.39 | 0.00 | 2.39 |
| BOND L-Doco loan 3- | 8.40 | 102.96 | 0.00 | 102.96 |
| BOND L-add cap loan- | 8.40 | 0.00 | 0.31 | 0.31 |
| Total | | 175.35 | 0.31 | 175.66 |



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

(₹ in lakh)

| Asset-I | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---|---------------|---------------|---------------|---------------|
| Gross Opening Loan | 145.05 | 179.16 | 179.16 | 179.16 |
| Cumulative Repayments of Loans upto Previous Year | 0.00 | 0.00 | 0.00 | 6.25 |
| Net Loans Opening | 145.05 | 179.16 | 179.16 | 172.91 |
| Add: Drawl(s) during the year | 34.11 | 0.00 | 0.00 | 0.00 |
| Less: Repayment(s) of Loan during the year | 0.00 | 0.00 | 6.25 | 6.25 |
| Net Closing Loan | 179.16 | 179.16 | 172.91 | 166.66 |
| Average Net Loan | 162.11 | 179.16 | 176.04 | 169.79 |
| Rate of Interest on Loan (%) | 9.0700 | 9.1000 | 9.0900 | 9.0700 |
| Interest on Loan | 14.70 | 16.31 | 16.01 | 15.40 |

(₹ in lakh)

| Asset-II | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---|---------------|---------------|---------------|---------------|
| Gross Opening Loan | 175.35 | 175.66 | 175.66 | 175.66 |
| Cumulative Repayments of Loans upto Previous Year | 0.00 | 0.00 | 0.00 | 0.00 |
| Net Loans Opening | 175.35 | 175.66 | 175.66 | 175.66 |
| Add: Drawl(s) during the year | 0.31 | 0.00 | 0.00 | 0.00 |
| Less: Repayment(s) of Loan during the year | 0.00 | 0.00 | 0.00 | 0.00 |
| Net Closing Loan | 175.66 | 175.66 | 175.66 | 175.66 |
| Average Net Loan | 175.51 | 175.66 | 175.66 | 175.66 |
| Rate of Interest on Loan (%) | 8.8500 | 8.8500 | 8.8500 | 8.8500 |
| Interest on Loan | 15.53 | 15.54 | 15.54 | 15.54 |

