

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 257/TT/2015

Coram:

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

Date of Hearing : 29.04.2016

Date of Order : 26.05.2016

In the matter of:

Determination of transmission tariff of **Asset-I:** 160 MVA 220/132 kV Transformer I at Purnea Sub-station along with associated bays and **Asset-II:** 160 MVA 220/132 kV transformer II at Purnea Sub-station along with associated bays under "Transmission Augmentation of Transformation Capacity and Reactive Compensation" for 2014-19 Tariff block period in Northern and Eastern Region for the 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 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. Bihar State Power (Holding) Company Board,
Vidyut Bhawan,
Bailey Road, Patna-800001
2. West Bengal State Electricity Distribution Company Ltd.
Bidyut Bhawan, Bidhan Nagar, Block DJ, Sector-II,
Salt Lake City, Calcutta-700091
3. Grid Corporation of Orissa Ltd., Shahid Nagar,
Bhubaneshwar-751007
4. Jharkhand State Electricity Board,



In front of Main Secretariat,
Doranda, Ranchi-834002

5. Damodar Valley Corporation, DVC Tower, Maniktala
Civic Centre, VIPO Road, Calcutta-700054

6. Power Department, Govt. of Sikkim,
Gangtok-737101

.....**Respondents**

The following were present:

For Petitioner: Shri Amit Yadav, PGCIL
 Shri M.M Mondal, PGCIL
 Shri Rakesh Prasad, PGCIL
 Shri S.S. Raju, PGCIL
 Shri Jatinder Singh, Lanco
 Shri Amit Banerjee, Lanco

For Respondent: None

ORDER

The present petition has been preferred by Power Grid Corporation of India Ltd. ("the petitioner") for determination of tariff for 160 MVA 220/132 kV Transformer I at Purnea Sub-station along with associated bays (referred as "**Asset-I**") and 160 MVA 220/132 kV transformer II at Purnea Sub-station along with associated bays (referred as "**Asset-II**") under "Transmission Augmentation of Transformation Capacity and Reactive Compensation" for 2014-19 Tariff block period for 2014-19 Tariff block period in Northern and Eastern Region (hereinafter referred as "transmission asset") 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 of respective assets to 31.3.2019.

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

3. 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 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. None of the respondents have filed any reply to the petition. The hearing in this matter was held on 29.4.2016. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

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

- (a) The administrative approval and expenditure sanction to the transmission project was accorded by the Board of Directors of POWERGRID vide C/CP/Aug of Transformation Capacity in NR & ER dated 2.7.2012 for ₹9197 lakh including IDC of ₹290 lakh for Part-I, i.e. Augmentation of transformation capacity in NR and reactive compensation in ER, based on April 2012 price level. Subsequently, Revised Cost Estimate (RCE) of “Augmentation of transformer capacity in Northern and Eastern Regions- Part-II” was approved by Board of Directors of the petitioner, vide Memorandum No. C/CP/RCE Aug Tfr NR & ER Part-II dated 11.3.2016 at



an estimated cost of ₹3294 lakh, which included IDC of ₹86 lakh (based on August 2015 price level).

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

Part-I: Augmentation of transformer capacity in NR

Sub-station:

1. 1x315 MVA, 400/220 kV transformer at Nalagarh Sub-station along with associated bays;
2. 1x315 MVA, 400/220 kV transformer at Abdullapur Sub-station along with associated bays;
3. 1x500 MVA, 400/220 kV transformer at Amritsar Sub-station along with associated bays and 3 nos. of 220 kV line bays;
4. 4x105 MVA, 400/220 kV transformer at Kisenpur Sub-station along with associated bays;

Part-II: Augmentation of transformer capacity and reactive compensation in ER

Sub-station:

1. 2x160 MVA, 220/132 kV transformer at Purnea Sub-station along with associated bays;
2. 1x125 MVA, 400 kV bus reactor at Biharsharif Sub-station along with associated bays;

(c) The transmission asset was scheduled to be commissioned within 20 months from the date of investment approval i.e. 27.6.2012. The scheduled date of commissioning (SCOD) of the transmission system works out to 27.2.2014 against which the Assets-I and II have been commissioned on 3.4.2016 and 11.6.2015, respectively. Hence, there is time over-run of 25 months and 7 days in case of Asset-I and 15 months and 15 days in case of Asset-II.



(d) The petitioner, vide its affidavit dated 25.4.2016, has submitted the approved Revised Cost Estimate (RCE) for the project.

(e) The petitioner had submitted the capital cost and tariff forms for the Asset-I and II on the basis of unaudited figures. Subsequent to filing of applications, the petitioner was directed to submit Auditor's Certificate and revised tariff forms for the Asset-I and II. Further, the petitioner was directed to submit concerned RLDC certificates in support of trial operation for the purpose of declaration of commercial operation date of the assets. In response, the petitioner vide its affidavit dated 13.5.2016, has submitted the revised tariff forms along with Auditor's Certificates Asset-I and II. The petitioner has also submitted the RLDC certificates indicating trial operation as per the 2014 Tariff Regulations in respect of both the assets.

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

(₹ in lakh)

| Asset-I | | | |
|-----------------------------|-----------------------|---------------|---------------|
| Particulars | 2016-17 (Pro-rata) | 2017-18 | 2018-19 |
| Depreciation | 47.10 | 55.76 | 58.19 |
| Interest on Loan | 50.40 | 55.70 | 53.63 |
| Return on equity | 52.74 | 62.42 | 65.15 |
| Interest on Working Capital | 3.46 | 4.00 | 4.07 |
| O & M Expenses | 0.00 | 0.00 | 0.00 |
| Total | 153.70 | 177.88 | 181.04 |



(₹ in lakh)

| Asset-II | | | | |
|-----------------------------|-----------------------|---------------|---------------|---------------|
| Particulars | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | 27.04 | 42.85 | 50.33 | 53.32 |
| Interest on Loan | 28.83 | 43.17 | 47.53 | 46.52 |
| Return on equity | 30.28 | 47.98 | 56.35 | 59.70 |
| Interest on Working Capital | 1.98 | 3.08 | 3.55 | 3.67 |
| O & M Expenses | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 88.13 | 137.08 | 157.76 | 163.21 |

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

(₹ in lakh)

| Particulars | 2016-17 (Pro-rata) | 2017-18 | 2018-19 |
|--------------------------|-----------------------|-------------|-------------|
| Maintenance Spares | 0.00 | 0.00 | 0.00 |
| O & M Expenses | 0.00 | 0.00 | 0.00 |
| Receivables | 25.76 | 29.65 | 30.17 |
| Total | 25.76 | 29.65 | 30.17 |
| Rate of Interest | 13.50 | 13.50 | 13.50 |
| Interest | 3.48 | 4.00 | 4.07 |
| Pro-rata Interest | 3.46 | 4.00 | 4.07 |

(₹ in lakh)

| Asset-II | | | | |
|--------------------------|-----------------------|-------------|-------------|-------------|
| Particulars | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
| Maintenance Spares | 0.00 | 0.00 | 0.00 | 0.00 |
| O & M Expenses | 0.00 | 0.00 | 0.00 | 0.00 |
| Receivables | 18.24 | 22.85 | 26.29 | 27.20 |
| Total | 18.24 | 22.85 | 26.29 | 27.20 |
| Rate of Interest | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest | 2.46 | 3.08 | 3.55 | 3.67 |
| Pro-rata Interest | 1.98 | 3.08 | 3.55 | 3.67 |

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



Date of Commercial Operation (“COD”)

8. The petitioner has claimed the date of the commercial operation of the Asset-I and II as 3.4.2016 and 11.6.2015, respectively. 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:

(i) where the transmission line or substation is dedicated for evacuation of power from a particular generating station, the generating company and transmission licensee shall endeavour to commission the generating station and the transmission system simultaneously as far as practicable and shall ensure the same through appropriate Implementation Agreement in accordance with Regulation 12(2) of these Regulations :

(ii) in case a transmission system or an element thereof is prevented from regular service for reasons not attributable to the transmission licensee or its supplier or its contractors but is on account of the delay in commissioning of the concerned generating station or in commissioning of the upstream or downstream transmission system, the transmission licensee shall approach the Commission through an appropriate application for approval of the date of commercial operation of such transmission system or an element thereof.”

9. The petitioner has submitted RLDC certificate issued by ERLDC, POSOCO for Asset-I and II in support of the claim of commercial operation in accordance with Regulation 5(2) of the 2014 Tariff Regulations indicating completion of successful trial operation.



10. Accordingly, the commercial operation date of the transmission asset has been considered as 3.4.2016 and 11.6.2015 for Assets-I and II, respectively and the tariff is worked out from COD to 31.3.2019.

Capital Cost

11. The details of apportioned approved cost, capital cost as on date of commercial operation and estimated additional capital expenditure incurred or projected to be incurred for the instant assets as submitted by the petitioner are as under:-

| Asset | Approved apportioned cost as per FR | Revised Apportioned Cost as per RCE | Capital cost as on COD | Additional capitalization | | | Total estimated completion cost |
|----------|-------------------------------------|-------------------------------------|------------------------|---------------------------|---------|---------|---------------------------------|
| | | | | 2015-16 | 2016-17 | 2017-18 | |
| Asset-I | 956.19 | 1123.78 | 784.39 | 0.00 | 225.37 | 92.41 | 1102.17 |
| Asset-II | 956.19 | 993.51 | 545.09 | 181.49 | 169.97 | 92.41 | 988.96 |

* The petitioner has considered capital cost as per Auditor's Certificate after excluding un-discharged IDC/IEDC upto COD.

12. Regulations 9 and 10 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.

...

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

- a) The assets forming part of the project, but not in use;
- b) Decapitalisation of Asset;
- c) In case of hydro generating station any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State government by following a two stage transparent process of bidding; and
- d) the proportionate cost of land which is being used for generating power from generating station based on renewable energy:

Provided that any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment shall be excluded from the Capital Cost for the purpose of computation of interest on loan, return on equity and depreciation;

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.”

13. The petitioner has submitted Auditor’s Certificates for all the assets in support of capital cost incurred up to COD. As per the Auditor’s Certificates, the capital cost as on COD is ₹839.79 lakh and ₹556.29 lakh for Asset-I and Asset-II, respectively.



Cost Over-run

14. The petitioner, vide its affidavit dated 25.4.2016, has submitted the RCE for the project. The details are as given below:-

(₹ in lakh)

| Asset | COD | Apportioned cost as per FR (Submitted by the petitioner) | Revised apportioned cost as per RCE | Estimated completion cost an on 31.3.2019 |
|----------|-----------|--|-------------------------------------|---|
| Asset-I | 3.4.2016 | 956.19 | 1123.78 | 1102.17 |
| Asset-II | 11.6.2015 | 956.19 | 993.51 | 988.96 |

The petitioner submits that cost variation is mainly due to actual site conditions and award cost received in competitive bidding. The completion cost of the instant assets is within the apportioned costs as per revised RCE and hence there is no cost over-run.

Time Over-run

15. As per the investment approval dated 27.6.2012, the project was scheduled to be commissioned within 20 months from the date of investment approval. Hence, the assets were to be commissioned progressively upto 27.2.2014. Asset-I and II were put under commercial operation with effect as below:-

| Assets name | SCOD | Actual date of commercial operation | Delay in months |
|-------------|-----------|-------------------------------------|-----------------------|
| Asset-I | 27.2.2014 | 3.4.2016 | 25 months and 7 days |
| Asset-II | | 11.6.2015 | 15 months and 15 days |



16. As regards the time over-run in case of Asset-I and II, the petitioner has submitted that the same was due to delay in award of contract for extension of 220/132 kV Purnea Sub-station. The procurement for the package was initially taken up together with extension of 765/400 kV Gaya Sub-station and 400 kV Patna Sub-station associated with transmission system for evacuation of power from Nabinagar-II STPP, being developed by NTPC, for the purpose of cost effectiveness, efficiency and availability of prospective bidders, for which the bids were invited in April 2012 and opened in June 2012. The bidding process was required to be annulled due to deferment of Nabinagar-II scheme as the Steam Generator (SG) and Turbine Generator (TG) packages were put on hold by NTPC on account of non-availability of land for Nabinagar Power Project.

17. Accordingly, after the annulment of the said bidding process and deletion of transmission system for evacuation of power from Nabinagar-II STPP from the scope, fresh bids for the subject package were immediately invited for which invitation for bids was published on 1.10.2012 under single stage two envelope bidding procedure (SSTE). Assessment of capability and capacity of three of the bidders were involved, which took considerable time. Subsequent to the same, the award was placed on 8.8.2013. Thus, the annulment of bidding process and again starting the bidding process afresh under SSTE bidding procedure has caused an unavoidable delay of 15 months and work could be physically started after August, 2013. Accordingly, the petitioner has requested to condone the delay in award of contract as the time overrun was beyond the control of petitioner.



18. We have considered the submissions of the petitioner. The time over-run of 15 months in case of both the assets is on account of delay in award of contract due to combined procurement opted by the petitioner. The petitioner had opted for combined procurement of various transmission elements to achieve the cost effectiveness. Deferment of Nabinagar-II scheme has disrupted the combined planning of the petitioner. We are of the view that the entire process of procurement whether it is combined procurement or standalone procurement, is within the control of petitioner and any delay on account of combination of different packages under the same tender cannot be a ground for seeking condonation of time over-run. The combined procurement is petitioner's administrative decision and is attributable to the petitioner. Hence, the time over-run due to delay in award of contract is not condoned.

19. The Hon'ble Appellate Tribunal for Electricity in its Judgment dated 27.4.2011 in Appeal No.72/2010 has held that the additional cost due to time over-run due to the factors entirely attributable to the project developer shall be entirely borne by the project developer. As discussed above, the time over-run of 15 months in case of Assets-I and II on account of delay in award of contract is entirely attributable to the petitioner. As per the judgement of Hon'ble Tribunal, the additional cost due to time over-run attributable to the petitioner shall be entirely borne by the petitioner.

20. It is observed from the Auditor Certificate that the petitioner has not made any expenditure towards the IDC and IEDC amount upto SCOD. The IDC and IEDC amount considered in the investment approval is corresponding to the scheduled



time line specified in investment approval dated 27.6.2012. As per the investment approval, scheduled timeline for commissioning of the assets was 20 months from the date of investment approval. In case of Asset-II, there is a time overrun of 15 months and 15 days, which is within the limit of 20 months timeline, therefore, the entire IDC and IEDC in case of Asset-II is capitalized. However, in case of Asset-I, the time overrun is of 25 months and 7 days, therefore, the IDC and IEDC has been capitalized for the time period of 20 months only and the balance amount shall be borne by the petitioner.

21. Accordingly, the time overrun in case of the Asset-I and II is not condoned, however, IDC and IEDC are capitalized for the period of scheduled COD for the assets, i.e., for 20 months in case of Asset-I and entire delay in case of Asset-II.

| Assets name | SCOD | Actual date of commercial operation | Delay in months | Delay condoned | Delay not condoned |
|-------------|-----------|-------------------------------------|-----------------------|----------------|-----------------------|
| Asset-I | 27.2.2014 | 3.4.2016 | 25 months and 7 days | 0 months | 25 months and 7 days |
| Asset-II | | 11.6.2015 | 15 months and 15 days | 0 months | 15 months and 15 days |

IDC and IEDC

22. The petitioner was directed to provide the computation of IDC and IEDC on cash basis (i) from date of infusion of debt fund to scheduled COD and (ii) from scheduled COD to actual COD. In response, the petitioner vide its affidavit dated 13.5.2016 submitted the breakup of IDC and IEDC as follows:-

| Statement showing IDC and IEDC | (₹ in lakh) | | | |
|-----------------------------------|-------------|-------|----------|-------|
| | Asset-I | | Asset-II | |
| | IDC | IEDC | IDC | IEDC |
| Total IDC/IEDC as per certificate | 55.40 | 87.44 | 11.20 | 18.43 |



| Statement showing IDC and IEDC | Asset-I | | Asset-II | |
|---|---------|-------|----------|-------|
| | IDC | IEDC | IDC | IEDC |
| IDC/IEDC discharged upto SCOD(27.2.2014) | 0.00 | 0.00 | 0.00 | 0.00 |
| IDC/IEDC discharged from SCOD to actual COD | 55.40 | 87.44 | 11.20 | 18.43 |

23. Further, the petitioner vide its affidavit dated 13.5.2016 submitted the Auditor's Certificate for all the assets. In this regard, the the petitioner has submitted that entire IEDC amount mentioned in the Auditor's Certificate has been discharged upto COD. The petitioner has also submitted the details of IDC claimed on cash basis is as given below:-

| Particulars | (₹ in lakh) | |
|---------------------------------|-------------|----------|
| | Asset-I | Asset-II |
| IDC as per Certificate | 55.40 | 11.20 |
| IDC discharged upto COD | 0.00 | 0.00 |
| IDC discharged in 2015-16 | 0.00 | 11.20 |
| IDC to be discharged in 2016-17 | 55.40 | 0.00 |

24. As discussed above, we have disallowed the entire delay of 25 months and 7 days in case of Asset-I and 15 months and 15 days in case of Asset-II, however, the IDC and IEDC amount claimed by the petitioner has been capitalized for the period of scheduled COD for the assets, i.e., for 20 months in case of Asset-I and entire delay in case of Asset-II for the purpose of tariff.

25. Accordingly, we have worked out the IDC and IEDC for Asset-II as follows:-

| Particulars | (₹ in lakh) | | |
|---|-------------|-------|--------|
| | IDC | IEDC | Total |
| Delay in days (from SCOD to COD) | 766 | 766 | |
| Total IDC and IEDC from date of infusion of debt fund to SCOD | 0.00 | 0.00 | 0.00 |
| Total IDC and IEDC from SCOD to COD | 55.40 | 87.44 | 142.84 |
| Total delay in days disallowed by the Commission | 159 | 159 | |



| | | | |
|---|-------|-------|--------|
| IDC and IEDC disallowed | 11.50 | 18.15 | 29.65 |
| IDC and IEDC allowed by the Commission | 43.90 | 69.29 | 113.19 |
| As worked out (after adjustment of above IDC and IEDC disallowed by the commission due to time overrun): | | | |
| Total IDC and IEDC upto COD | 0.00 | 69.29 | 69.29 |
| Accrued IDC and IEDC discharged in 2014-15 | 0.00 | 0.00 | 0.00 |
| Accrued IDC and IEDC to be discharged in 2015-16 | 0.00 | 0.00 | 0.00 |
| Accrued IDC and IEDC to be discharged in 2016-17 | 43.90 | 0.00 | 43.90 |

Initial Spares

26. 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:-

| | |
|---|--------|
| “(d) Transmission System | |
| Transmission line: | 1.00% |
| Transmission sub-station (Green Field): | 4.00% |
| Transmission sub-station (Brown Field): | 6.00%” |

27. The petitioner has claimed initial spares of ₹57.56 lakh and ₹57.56 lakh for Asset-I and II, respectively, pertaining to sub-station. The initial spares for sub-station (brown-field) claimed by the petitioner are within the specified ceiling limits as given below:

| (₹ in lakh) | | | | | | |
|--|--------------|---|------------------------|--|--|-------------------------------|
| Description Sub-station (including PLCC) | Cut-off date | Plant & Machinery Cost as on cut-off date | Initial spares claimed | Ceiling limits as per Regulation 8 of the 2009 Tariff Regulation | Initial spares worked out as per Regulations | Excess initial spares claimed |
| | | (a) | (b) | (c) | (d)= ((a-b)*c)/(100-c)% | (e)=(d)-(b) |
| Sub-station (Brownfield) | | | | | | |
| Asset-I | 31.3.2019 | 959.33 | 57.56 | 6.00% | 57.56 | 0.00 |
| Asset-II | 31.3.2018 | 959.33 | 57.56 | 6.00% | 57.56 | 0.00 |



28. The capital cost for Asset-I and II has been worked out by adjusting IDC and IEDC and excess initial spares as given below:-

| Particulars | (₹ in lakh) | |
|---|---------------|---------------|
| | Asset-I | Asset-II |
| Capital Cost as on COD as per Auditor's Certificate | 839.79 | 556.29 |
| Total IDC/IEDC disallowed by the Commission | 29.65 | 0.00 |
| Accrued IDC and IEDC discharged in 2014-15 | 0.00 | 0.00 |
| Accrued IDC and IEDC to be discharged in 2015-16 | 0.00 | 11.20 |
| Accrued IDC and IEDC to be discharged in 2016-17 | 43.90 | 0.00 |
| Capital Cost as on COD (after deducting disallowed IDC/IEDC and accrual IDC to be discharged in 2014-17) | 766.24 | 545.09 |
| Excess Initial Spares (for transmission line) | 0.00 | 0.00 |
| Excess Initial Spares (for sub-station) | 0.00 | 0.00 |
| Capital Cost as on COD (after deducting accrual IDC/IEDC and excess initial spares) | 766.24 | 545.09 |

29. The capital cost as on COD of ₹766.24 lakh and ₹545.09 lakh, as worked out above is within the approved apportioned cost of ₹1123.78 lakh and ₹993.51 lakh for Asset-I and Asset-II, respectively. Accordingly, capital cost as worked out as on COD is allowed and considered for the purpose of tariff computation for 2014-19 tariff period, which shall be trued up at the time of truing up of tariff for 2014-19 period.

Additional Capital Expenditure

30. The petitioner has claimed additional capital expenditure for Asset-I and II, during 2014-19 tariff period, towards balance and retention payments under Clause 1(i) of Regulation 14 of the 2014 Tariff Regulations.



31. Clause 1, sub-clause (i) of Regulation 14 of the 2014 Tariff Regulations provides as follows:

“(3) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:

.....

(i) Undischarged liabilities recognized to be payable at a future date;

32. It is observed that total estimated completion cost including additional capitalization for 2014-15, 2015-16 and 2016-17 is within the approved apportioned cost for both Asset-I and II.

33. Clause 13 of Regulation 3 of the 2014 Tariff Regulations defines “cut-off” as follows:-

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

34. The cut-off date for Asset-I and II works out to be 31.3.2019 and 31.3.2018, respectively. The additional capitalization claimed by the petitioner is within the cut-off date. As the total cost including additional capitalization is within the approved apportioned cost, the additional capitalization for 2015-16, 2016-17 and 2017-18 is allowed under Regulation 14(1)(i) of 2014 Tariff Regulations for both Asset-I and Asset-II. The details of additional capitalization allowed is as follows:-

| Name of the element | Particulars | Approved Apportioned Cost | Expenditure upto COD* | Additional Capital Expenditure [#] | | | | Total estimated completion cost |
|---------------------|--------------------|---------------------------|---------------------------|---|-------------------------------|---------|--------|---------------------------------|
| | | | | 2015-16 | 2016-17 | 2017-18 | Total | |
| Asset-I | Petitioner's Claim | 1123.78 | 784.39 (=839.79-55.40) | 0.00 | 225.37 (=169.97+ 55.40) | 92.41 | 317.78 | 1102.17 |
| | Approved | 1123.78 | 766.24 | 0.00 | 213.87 | 92.41 | 306.28 | 1072.52 |



| Name of the element | Particulars | Approved Apportioned Cost | Expenditure upto COD* | Additional Capital Expenditure [#] | | | | Total estimated completion cost |
|---------------------|------------------------|---------------------------|---------------------------|---|-----------------|---------|--------|---------------------------------|
| | | | | 2015-16 | 2016-17 | 2017-18 | Total | |
| | in this order | | | | (=169.97+43.90) | | | |
| Asset-II | Petitioner's Claim | 993.51 | 545.09 (=556.29-11.20) | 181.49 (=170.29+11.20) | 169.97 | 92.41 | 443.87 | 988.96 |
| | Approved in this order | 993.51 | 545.09 (=556.29-11.20) | 181.49 (=170.29+11.20) | 169.97 | 92.41 | 443.87 | 988.96 |

* Capital Cost after deducting accrued IDC discharged # Additional capital expenditure after addition of IDC discharged in respective years

Debt: Equity Ratio

35. Clause 3 of Regulation 19 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. in case of Asset-I and II for capital cost as on COD. Further, the petitioner has considered debt:equity ratio as 70:30 for both the assets for additional capitalization during the tariff period 2014-19. We have considered the petitioner's submission. The details of the debt:equity as on COD and for the additional capital expenditure considered for the purpose of tariff for the 2014-19 tariff period is as follows:-

| (₹ in lakh) | | | | |
|-------------|------------------------|-----|---|-----|
| Asset-I | | | | |
| Particulars | Capital cost as on COD | | Estimated completion cost including additional capitalization | |
| | Amount | (%) | Amount | (%) |
| | | | | |



| Asset-I | | | | |
|--------------|------------------------|---------------|---|---------------|
| Particulars | Capital cost as on COD | | Estimated completion cost including additional capitalization | |
| | Amount | (%) | Amount | (%) |
| Debt | 536.37 | 70.00 | 750.76 | 70.00 |
| Equity | 229.87 | 30.00 | 321.76 | 30.00 |
| Total | 766.24 | 100.00 | 1072.52 | 100.00 |

(₹ in lakh)

| Asset-II | | | | |
|--------------|------------------------|---------------|---|---------------|
| Particulars | Capital cost as on COD | | Estimated completion cost including additional capitalization | |
| | Amount | (%) | Amount | (%) |
| Debt | 381.56 | 70.00 | 692.27 | 70.00 |
| Equity | 163.53 | 30.00 | 296.69 | 30.00 |
| Total | 545.09 | 100.00 | 988.96 | 100.00 |

Interest on Loan (“IOL”)

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

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

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

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

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

38. The weighted average rate of IOL has been considered on the basis of rate prevailing as on COD. The petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2014-19 tariff period will be adjusted at the time of truing up.



39. We have considered the petitioner's submissions. The IOL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. Further, with regard to floating rate of interest, variation in interest rate if any shall be considered at the time of true up. The details of weighted average rate of interest are placed at **Annexure-I** and the IOL has been worked out and allowed as follows:-

(₹ in lakh)

| Asset-I | | | |
|--|-----------------------|--------------|--------------|
| Details of Loan | 2016-17 (Pro-rata) | 2017-18 | 2018-19 |
| Gross loan opening | 536.37 | 686.08 | 750.76 |
| Cumulative Repayment upto DOCO/previous year | 0.00 | 45.85 | 100.04 |
| Net Loan-Opening | 536.37 | 640.23 | 650.72 |
| Additions during the year | 149.71 | 64.69 | 0.00 |
| Repayment during the year | 45.85 | 54.19 | 56.63 |
| Net Loan-Closing | 640.23 | 650.72 | 594.09 |
| Average Loan | 588.30 | 645.47 | 622.41 |
| Rate of Interest (%) | 8.3861 | 8.3861 | 8.3861 |
| Interest | 49.06 | 54.13 | 52.20 |

(₹ in lakh)

| Asset-II | | | | |
|--|-----------------------|--------------|--------------|--------------|
| Details of Loan | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
| Gross loan opening | 381.56 | 508.61 | 627.58 | 692.27 |
| Cumulative Repayment upto DOCO/previous year | 0.00 | 27.06 | 69.91 | 119.69 |
| Net Loan-Opening | 381.56 | 481.55 | 557.67 | 572.58 |
| Additions during the year | 127.04 | 118.98 | 64.69 | 0.00 |
| Repayment during the year | 27.06 | 42.85 | 49.78 | 52.22 |
| Net Loan-Closing | 481.55 | 557.67 | 572.58 | 520.37 |
| Average Loan | 431.55 | 519.61 | 565.13 | 546.48 |
| Rate of Interest (%) | 8.2939 | 8.3071 | 8.3071 | 8.3071 |
| Interest | 28.85 | 43.16 | 46.95 | 45.40 |



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...

Provided that:

i. in case of projects commissioned on or after 1st April, 2014, an additional return of **0.50 %** shall be allowed, if such projects are completed within the timeline specified in **Appendix-I:**

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

iii. additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:"

"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 computed ROE at the rate of 19.705% for tariff period 2014-19 after grossing up the ROE with MAT rate as per the above Regulation. The petitioner has further submitted that the grossed up ROE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted for any



refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial year. Any under-recovery or over-recovery of grossed up ROE after truing up shall be recovered or refunded to the beneficiaries on year to year basis.

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. We have computed ROE at the rate of 19.610% for tariff period 2014-19 after grossing up the ROE with MAT rate as per the above Regulation. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the ROE allowed is given below:-

| Particulars | (₹ in lakh) | | |
|---|-----------------------|---------|---------|
| | 2016-17 (Pro-rata) | 2017-18 | 2018-19 |
| Opening Equity | 229.87 | 294.03 | 321.76 |
| Addition due to Additional Capitalisation | 64.16 | 27.72 | 0.00 |



| Particulars | 2016-17 (Pro-rata) | 2017-18 | 2018-19 |
|---------------------------------------|-----------------------|--------------|--------------|
| Closing Equity | 294.03 | 321.76 | 321.76 |
| Average Equity | 261.95 | 307.89 | 321.76 |
| Return on Equity (Base Rate) (%) | 15.50 | 15.50 | 15.50 |
| MAT rate for the year (%) | 20.961 | 20.961 | 20.961 |
| Rate of Return on Equity (Pre Tax)(%) | 19.610 | 19.610 | 19.610 |
| Return on Equity (Pre Tax) | 51.09 | 60.38 | 63.10 |

(₹ in lakh)

| Asset-II | | | | |
|---|-----------------------|--------------|--------------|--------------|
| Particulars | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
| Opening Equity | 163.53 | 217.97 | 268.96 | 296.69 |
| Addition due to Additional Capitalisation | 54.45 | 50.99 | 27.72 | 0.00 |
| Closing Equity | 217.97 | 268.96 | 296.69 | 296.69 |
| Average Equity | 190.75 | 243.47 | 282.83 | 296.69 |
| Return on Equity (Base Rate) (%) | 15.50 | 15.50 | 15.50 | 15.50 |
| MAT 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) | 30.15 | 47.74 | 55.46 | 58.18 |

Depreciation

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

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

.....

- (c) AC and DC Sub-station: 25 years
- (d) Gas Insulated Sub-station: 25 years
- (e) Transmission line (including HVAC & HVDC): 35 years”

45. 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.”

46. The petitioner in its petition has computed depreciation considering capital cost as on COD of ₹784.39 lakh and ₹545.09 lakh for Asset-I and Asset-II, respectively.

47. As per Clause 67 of Regulation 3 of the 2014 Tariff Regulations, weighted average value of asset as on COD has been considered to work out the weighted average life of the transmission system as 25 years for Asset-I and II.

48. We have computed depreciation considering approved capital cost as on COD and allowed additional capitalisation. Depreciation is allowed as provided under Regulation 27 of the 2014 Tariff Regulations. The details of the depreciation allowed are given hereunder:-

| Particulars | (₹ in lakh) | | |
|---------------------------|-----------------------|---------|---------|
| | 2016-17 (Pro-rata) | 2017-18 | 2018-19 |
| Opening Gross Block | 766.24 | 980.11 | 1072.52 |
| Additional Capitalization | 213.87 | 92.41 | 0.00 |
| Closing Gross block | 980.11 | 1072.52 | 1072.52 |
| Average Gross block | 873.17 | 1026.32 | 1072.52 |
| Rate of Depreciation (%) | 5.280 | 5.280 | 5.280 |



| Particulars | 2016-17 (Pro-rata) | 2017-18 | 2018-19 |
|--|-----------------------|--------------|--------------|
| Depreciable Value | 785.86 | 923.68 | 965.27 |
| Elapsed Life of the asset at beginning of the year | 0 | 1 | 2 |
| Weighted Balance Useful life of the asset | 25 | 24 | 23 |
| Remaining Depreciable Value | 785.86 | 877.83 | 865.23 |
| Depreciation | 45.85 | 54.19 | 56.63 |

(₹ in lakh)

| Asset-II | | | | |
|--|-----------------------|--------------|--------------|--------------|
| Particulars | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
| Opening Gross Block | 545.09 | 726.58 | 896.55 | 988.96 |
| Additional Capitalization | 181.49 | 169.97 | 92.41 | 0.00 |
| Closing Gross block | 726.58 | 896.55 | 988.96 | 988.96 |
| Average Gross block | 635.83 | 811.56 | 942.75 | 988.96 |
| Rate of Depreciation (%) | 5.280 | 5.280 | 5.280 | 5.280 |
| Depreciable Value | 572.25 | 730.41 | 848.48 | 890.06 |
| Elapsed Life of the asset at beginning of the year | 0 | 1 | 2 | 3 |
| Weighted Balance Useful life of the asset | 25 | 24 | 23 | 22 |
| Remaining Depreciable Value | 572.25 | 703.35 | 778.57 | 770.38 |
| Depreciation | 27.06 | 42.85 | 49.78 | 52.22 |

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

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

Interest on Working Capital (“IWC”)

50. 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 12.80% (SBI Base Rate of 9.30% plus 350 basis points) in case of Asset-I and 13.50% (SBI Base Rate of 10% plus 350 basis points) in case of Asset-II.

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

| (₹ in lakh) | | | |
|----------------------|-----------------------|--------------|--------------|
| Particulars | 2016-17 (Pro-rata) | 2017-18 | 2018-19 |
| Maintenance Spares | 0.00 | 0.00 | 0.00 |
| O & M expenses | 0.00 | 0.00 | 0.00 |
| Receivables | 24.86 | 28.73 | 29.28 |
| Total | 24.86 | 28.73 | 29.28 |
| Rate of Interest (%) | 12.80 | 13.50 | 13.50 |
| Interest | 3.18 | 3.68 | 3.75 |

| (₹ in lakh) | | | | |
|----------------------|-----------------------|--------------|--------------|--------------|
| Asset-II | | | | |
| Particulars | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
| Maintenance Spares | 0.00 | 0.00 | 0.00 | 0.00 |
| O & M expenses | 0.00 | 0.00 | 0.00 | 0.00 |
| Receivables | 14.67 | 22.81 | 25.95 | 26.56 |
| Total | 14.67 | 22.81 | 25.95 | 26.56 |
| Rate of Interest (%) | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest | 1.98 | 3.08 | 3.50 | 3.59 |



Annual Transmission Charges

52. 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)

| Particulars | Asset-I | | |
|---|-----------------------|---------|---------|
| | 2016-17 (Pro-rata) | 2017-18 | 2018-19 |
| Gross Block | | | |
| Opening Gross Block | 766.24 | 980.11 | 1072.52 |
| Additional Capitalisation | 213.87 | 92.41 | 0.00 |
| Closing Gross Block | 980.11 | 1072.52 | 1072.52 |
| Average Gross Block | 873.17 | 1026.32 | 1072.52 |
| Rate of Depreciation | 5.280 | 5.280 | 5.280 |
| Depreciable Value | 785.86 | 923.68 | 965.27 |
| Elapsed Life of the assets at beginning of the year | 0.00 | 1.00 | 2.00 |
| Weighted Balance Useful life of the assets | 25.00 | 24.00 | 23.00 |
| Remaining Depreciable Value | 785.86 | 877.83 | 865.23 |
| Depreciation | 45.85 | 54.19 | 56.63 |
| | | | |
| Interest on Loan | | | |
| Gross Normative Loan | 536.37 | 686.08 | 750.76 |
| Cumulative Repayment upto Previous Year | 0.00 | 45.85 | 100.04 |
| Net Loan-Opening | 536.37 | 640.23 | 650.72 |
| Additions | 149.71 | 64.69 | 0.00 |
| Repayment during the year | 45.85 | 54.19 | 56.63 |
| Net Loan-Closing | 640.23 | 650.72 | 594.09 |
| Average Loan | 588.30 | 645.47 | 622.41 |
| Weighted Average Rate of Interest on Loan (%) | 8.3861 | 8.3861 | 8.3861 |
| Interest | 49.06 | 54.13 | 52.20 |
| | | | |
| Return on Equity | | | |
| Opening Equity | 229.87 | 294.03 | 321.76 |
| Additions | 64.16 | 27.72 | 0.00 |
| Closing Equity | 294.03 | 321.76 | 321.76 |
| Average Equity | 261.95 | 307.89 | 321.76 |
| Return on Equity (Base Rate) (%) | 15.50 | 15.50 | 15.50 |
| MAT Rate for the year 2013-14 (%) | 20.961 | 20.961 | 20.961 |
| Rate of Return on Equity (Pre Tax) (%) | 19.610 | 19.610 | 19.610 |
| Return on Equity (Pre Tax) | 51.09 | 60.38 | 63.10 |



| | | | |
|------------------------------------|---------------|---------------|---------------|
| Interest on Working Capital | | | |
| Maintenance Spares | 0.00 | 0.00 | 0.00 |
| O & M expenses | 0.00 | 0.00 | 0.00 |
| Receivables | 24.86 | 28.73 | 29.28 |
| Total | 24.86 | 28.73 | 29.28 |
| Interest | 3.18 | 3.68 | 3.75 |
| Annual Transmission Charges | | | |
| Depreciation | 45.85 | 54.19 | 56.63 |
| Interest on Loan | 49.06 | 54.13 | 52.20 |
| Return on Equity | 51.09 | 60.38 | 63.10 |
| Interest on Working Capital | 3.18 | 3.68 | 3.75 |
| O & M Expenses | 0.00 | 0.00 | 0.00 |
| Total | 149.19 | 172.38 | 175.67 |

(₹ in lakh)

| Particulars | Asset-II | | | |
|---|-----------------------|---------|---------|---------|
| | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
| Gross Block | | | | |
| Opening Gross Block | 545.09 | 726.58 | 896.55 | 988.96 |
| Additional Capitalisation | 181.49 | 169.97 | 92.41 | 0.00 |
| Closing Gross Block | 726.58 | 896.55 | 988.96 | 988.96 |
| Average Gross Block | 635.83 | 811.56 | 942.75 | 988.96 |
| Rate of Depreciation | 5.280 | 5.280 | 5.280 | 5.280 |
| Depreciable Value | 572.25 | 730.41 | 848.48 | 890.06 |
| 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 | 572.25 | 703.35 | 778.57 | 770.38 |
| Depreciation | 27.06 | 42.85 | 49.78 | 52.22 |
| Interest on Loan | | | | |
| Gross Normative Loan | 381.56 | 508.61 | 627.58 | 692.27 |
| Cumulative Repayment upto Previous Year | 0.00 | 27.06 | 69.91 | 119.69 |
| Net Loan-Opening | 381.56 | 481.55 | 557.67 | 572.58 |
| Additions | 127.04 | 118.98 | 64.69 | 0.00 |
| Repayment during the year | 27.06 | 42.85 | 49.78 | 52.22 |
| Net Loan-Closing | 481.55 | 557.67 | 572.58 | 520.37 |
| Average Loan | 431.55 | 519.61 | 565.13 | 546.48 |
| Weighted Average Rate of Interest on Loan (%) | 8.2939 | 8.3071 | 8.3071 | 8.3071 |
| Interest | 28.85 | 43.16 | 46.95 | 45.40 |
| Return on Equity | | | | |



| Particulars | Asset-II | | | |
|--|-----------------------|---------------|---------------|---------------|
| | 2015-16 (Pro-rata) | 2016-17 | 2017-18 | 2018-19 |
| Opening Equity | 163.53 | 217.97 | 268.96 | 296.69 |
| Additions | 54.45 | 50.99 | 27.72 | 0.00 |
| Closing Equity | 217.97 | 268.96 | 296.69 | 296.69 |
| Average Equity | 190.75 | 243.47 | 282.83 | 296.69 |
| Return on Equity (Base Rate) (%) | 15.500 | 15.500 | 15.500 | 15.500 |
| 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) | 30.15 | 47.74 | 55.46 | 58.18 |
| | | | | |
| Interest on Working Capital | | | | |
| Maintenance Spares | 0.00 | 0.00 | 0.00 | 0.00 |
| O & M expenses | 0.00 | 0.00 | 0.00 | 0.00 |
| Receivables | 14.67 | 22.81 | 25.95 | 26.56 |
| Total | 14.67 | 22.81 | 25.95 | 26.56 |
| Interest | 1.98 | 3.08 | 3.50 | 3.59 |
| | | | | |
| Annual Transmission Charges | | | | |
| Depreciation | 27.06 | 42.85 | 49.78 | 52.22 |
| Interest on Loan | 28.85 | 43.16 | 46.95 | 45.40 |
| Return on Equity | 30.15 | 47.74 | 55.46 | 58.18 |
| Interest on Working Capital | 1.98 | 3.08 | 3.50 | 3.59 |
| O & M Expenses | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 88.04 | 136.84 | 155.69 | 159.38 |

Filing Fee and the Publication Expenses

53. 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



54. 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

55. 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 is premature.

Sharing of Transmission Charges

56. 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.

57. This order disposes of Petition No. 257/TT/2015.

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

Sd/-
(A.S. Bakshi)
Member



DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO

(₹ in lakh)

| Particulars | ASSET-I | | |
|-------------------------|-------------------------|------------------------------------|---------------|
| | 2014-19 | | |
| | Loan deployed as on COD | Additions during the tariff period | Total |
| BOND XLVI-Doco loan | 64.00 | 0.00 | 64.00 |
| BOND XLVIII-Doco loan 1 | 326.19 | 0.00 | 326.19 |
| BOND L-Doco loan 2 | 158.88 | 0.00 | 158.88 |
| Total | 549.07 | 0.00 | 549.07 |

(₹ in lakh)

| Particulars | ASSET-II | | | |
|---|-------------------|-------------------------|------------------------------------|---------------|
| | 2014-19 | | | |
| | Interest Rate (%) | Loan deployed as on COD | Additions during the tariff period | Total |
| BOND XLVI-Doco loan 1 | 9.30 | 20.00 | 0.00 | 20.00 |
| BOND XLVIII-Doco loan 2 | 8.20 | 326.19 | 0.00 | 326.19 |
| BOND L-Doco Addcap for 2015-16 addcap- loan | 8.40 | 0.00 | 7.84 | 7.84 |
| BOND L-Doco loan 3 | 8.40 | 35.37 | 0.00 | 35.37 |
| BOND-LI-Addcap for 2015-16 addcap loan | 8.40 | 0.00 | 119.20 | 119.20 |
| | | 381.56 | 127.04 | 508.60 |



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

(₹ in lakh)

| Particulars | ASSET-I | | |
|---|---------|---------|---------|
| | 2016-17 | 2017-18 | 2018-19 |
| Gross Opening Loan | 549.07 | 549.07 | 549.07 |
| Cumulative Repayments of Loans upto Previous Year | 0.00 | 0.00 | 0.00 |
| Net Loans Opening | 549.07 | 549.07 | 549.07 |
| Add: Drawl(s) during the year | 0.00 | 0.00 | 0.00 |
| Less: Repayment(s) of Loan during the year | 0.00 | 0.00 | 0.00 |
| Net Closing Loan | 549.07 | 549.07 | 549.07 |
| Average Net Loan | 549.07 | 549.07 | 549.07 |
| Interest on Loan | 46.05 | 46.05 | 46.05 |
| Rate of Interest on Loan (%) | 8.3861 | 8.3861 | 8.3861 |

(₹ in lakh)

| Particulars | ASSET-II | | | |
|---|----------|---------|---------|---------|
| | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Gross Opening Loan | 381.56 | 508.60 | 508.60 | 508.60 |
| Cumulative Repayments of Loans upto Previous Year | 0.00 | 0.00 | 0.00 | 0.00 |
| Net Loans Opening | 381.56 | 508.60 | 508.60 | 508.60 |
| Add: Drawl(s) during the year | 127.04 | 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 | 508.60 | 508.60 | 508.60 | 508.60 |
| Average Net Loan | 445.08 | 508.60 | 508.60 | 508.60 |
| Interest on Loan | 36.91 | 42.25 | 42.25 | 42.25 |
| Rate of Interest on Loan (%) | 8.2939 | 8.3071 | 8.3071 | 8.3071 |

