

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 110/TT/2018

Coram:

Shri P.K.Pujari, Chairperson

Dr M. K. Iyer, Member

Shri I.S.Jha, Member

Date of Order: 6.6.2019

In the matter of:

Approval under regulation-86 of CERC (Conduct of Business) Regulations'1999 and CERC (Terms and Conditions of Tariff) Regulations'2014 for determination of Transmission Tariff from anticipated DOCO to 31-03-2019 for Transmission Asset ASSET-1: 1X500 MVA 400/230kV ICT along with associated bays and equipment at Arasur Substation, ASSET-2: 1X500 MVA 400/230kV ICT along with associated bays and equipment at Karaikudi Substation, ASSET-3: 1X500 MVA 400/230kV ICT along with associated bays and equipment at Tirunelveli Substation, ASSET-4: 1 X500 MVA 400/230kV ICT along with associated bays and equipment at Pondicherry Substation, ASSET-5: 1 X500 MVA 400/220kV ICT along with bays and equipment at Kozhikode Substation under "Augmentation of transformation capacity in Southern Region".

And in the matter of

Power Grid Corporation of India Limited,
"Saudamini", Plot No.2,
Sector-29, Gurgaon -122 001(Haryana)

.....PETITIONER

Vs

1. Karnataka Power Transmission Corporation Limited (KPTCL),
Kaveri Bhawan Bangalore – 560009



2. Transmission Corporation of Andhra Pradesh Limited(APTRANSCO), Vidyut Soudha, Hyderabad- 500082
3. Kerala State Electricity Board (KSEB), Vaidyuthi Bhavanam, Pattom, Thiruvananthapuram - 695 004
4. Tamil Nadu Electricity Board (TNEB), NPKRR Maaligai, 800, AnnaSalai, Chennai - 600 002
5. Electricity Department Government of Goa, Vidyuti Bhawan, 3rdFloor, Panaji, Goa-403001
6. Electricity Department, Government of Pondicherry, Pondicherry -605001
7. Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL), P&T Colony, Seethmmadhara, Vishakhapatnam, Andhra Pradesh
8. Southern Power Distribution Company of Andhra Pradesh Limited, (APSPDCL), Srinivasasa Kalyana Mandapam Backside, Tiruchanoor Road, Kesavayana Gunta, Tirupati-517 501, Chittoor District, Andhra Pradesh
9. Central Power Distribution Company of Andhra Pradesh Limited, (APCPDCL), Corporate Office, Mint Compound, Hyderabad - 500 063, Andhra Pradesh
10. Northern Power Distribution Company of Andhra Pradesh Limited, (APNPDCL), Opp. NIT PetrolPump, Chaitanyapuri, Kazipet, Warangal - 506 004, Andhra Pradesh
11. Bangalore Electricity Supply Company Ltd. (BESCOM), Corporate Office, KR.CircleBangalore - 560001, Karnataka
12. Gulbarga Electricity Supply Company Ltd (GESCOM) Station Main Road, Gulbarga, Karnataka
13. Hubli Electricity Supply Company Ltd, (HESCOM) Navanagar, PB Road, Hubli, Karnataka



14. MESCOM Corporate Office, Paradigm Plaza, AB Shetty Circle, Mangalore – 575001, Karnataka
15. Chamundeswari Electricity Supply Corporation Ltd., (CESC), # 927, L J Avenue, Ground Floor, New Kantharaj Urs Road, Saraswathipuram, Mysore - 570009, Karnataka
16. Transmission Corporation of Telangana Limited, Vidhyut Sudha, Khairatabad, Hyderabad, 500082

.....**Respondents**

For Petitioner : Shri S.S. Raju, PGCIL
Shri.Zafrul Hasan, PGCIL
Shri S.K. Venkatesan, PGCIL

ORDER

1. The instant petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as “the petitioner”) for determination of transmission tariff for COD to 31.3.2019 for ASSET-1: 1X500 MVA 400/230kV ICT along with associated bays and equipment at Arasur Substation, ASSET-2: 1X500 MVA 400/230kV ICT along with associated bays and equipment at Karaikudi Substation, ASSET-3: 1X500 MVA 400/230kV ICT along with associated bays and equipment at Tirunelveli Substation, ASSET-4: 1X500 MVA 400/230kV ICT along with associated bays and equipment at Pondicherry Substation, ASSET-5: 1X500 MVA 400/220kV ICT along with bays and equipment at Kozhikode Substation (hereinafter referred to as “the assets”) under “Augmentation of transformation capacity in Southern Region” for tariff block 2014-19 in terms of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (herein after referred to as “the 2014 Tariff Regulations”).



2. The petitioner has made the following prayers:
- i. Approve the Transmission Tariff for the tariff block 2014-19 blocks for the assets covered under this petition.
 - ii. Admit the capital cost as claimed in the Petition and approve the Additional Capitalization incurred / projected to be incurred.
 - iii. Allow the Petitioner to approach Hon'ble Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike, if any, during period 2014-19.
 - iv. Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided under clause 25 of the Tariff regulations 2014.
 - v. Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure (if any) in relation to the filing of petition.
 - vi. Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.
 - vii. Allow the petitioner 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.
 - viii. Allow the petitioner to bill and recover GST on Transmission charges separately from the respondents, if GST on Transmission of electricity is withdrawn from the exempted (negative) list at any time in future. Further any taxes and duties including cess, etc. imposed by any Statutory/Govt./Municipal Authorities shall be allowed to be recovered from the beneficiaries.
 - ix. Allow tariff up to 90% of the Annual Fixed Charges in accordance with clause 7 (i) of Regulation 7 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for purpose of inclusion in the PoC charges.



- x. Allow the petitioner to bill Tariff from anticipated DOCO and also the petitioner may be allowed to submit revised Certificate and tariff Forms (as per the Relevant Regulation) based on actual DOCO

and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.

3. The investment approval of the project was accorded by Board of Directors of the Petitioner company vide letter dated 24.10.2016, at an estimated cost of Rs 167.75 Crores including IDC of Rs 9.94Crores, based on June 2016 price level. As per the investment approval, the transmission asset was scheduled to be commissioned within 30 months from the date of investment approval, i.e. by 21.04.2019.

4. The scope of work covered under "Augmentation of transformation capacity in Southern Region" is as follows:-

Sub Station:

- a) Arasur 400/230kV Substation
- 1 no. 400/230kV, 1x500 MVA ICT
 - 400kV ICT Bays: 1 No.
 - 230kV ICT Bays: 1 No.
- b) Karaikudi 400/230kV Substation
- 1 no. 400/230kV, 1x500 MVA ICT
 - 400kV ICT Bays: 1 No.
 - 230kV ICT Bays: 1 No.
- c) Tirunelveli 400/230kV Substation
- 1 nos. 400/230kV, 1x500 MVA ICT
 - 400kV ICT Bays: 1 No.
 - 230kV ICT Bays: 1 No.
- d) Pondicherry 400/230kV Substation
- 1 nos. 400/230kV, 1x500 MVA ICT
 - 400kV ICT Bays: 1 No.
 - 230kV ICT Bays: 1 No.



- e) Kozhikode 400/220kV Substation
- 1 nos. 400/230kV, 1x500 MVA ICT
 - 400kV ICT Bays: 1 No.
 - 230kV ICT Bays: 1 No.

5. The system requirement was discussed and agreed in the 38th & 39th SCM of Southern Region Constituents held on 07.03.2015 and 28/29.12.2015 respectively, which further has been discussed and ratified by SRPC in the 27th & 29th SRPC meetings held on 12.05.2015 and 05.03.2016 respectively.
6. The instant petition covers entire scope of the above transmission project.
- Asset wise COD is as follows:-

| Sl. No | Name of Asset | COD |
|--------|--|------------|
| 1 | Asset-1: 1X500 MVA 400/230kV ICT along with associated bays and equipment at Arasur Substation | 31.03.2018 |
| 2 | Asset-2: 1X500 MVA 400/230kV ICT along with associated bays and equipment at Karaikudi Substation | 02.04.2018 |
| 3 | Asset-3: 1X500 MVA 400/230kV ICT along with associated bays and equipment at Tirunelveli Substation | 31.03.2018 |
| 4 | Asset-4: 1X500 MVA 400/230kV ICT along with associated bays and equipment at Pondicherry Substation | 22.06.2018 |
| 5 | Asset-5: 1X500 MVA 400/220kV ICT along with bays and equipment at Kozhikode Substation | 03.04.2018 |

7. AFC was approved vide order dated 05.11.2018, subject to adjustment, as per proviso (i) of Regulation 7(7) of the 2014 Tariff Regulations.
8. The petitioner has claimed transmission charges for the instant assets as given here under:-



(Rs in lakh)

| Particulars | Asset-1 | | Asset-2 | Asset-3 | |
|---------------------|---------|---------|---------|---------|---------|
| | 2017-18 | 2018-19 | 2018-19 | 2017-18 | 2018-19 |
| Depreciation | 0.21 | 95.01 | 106.21 | 0.19 | 88.27 |
| Interest on Loan | 0.22 | 96.35 | 104.55 | 0.20 | 89.65 |
| Return on equity | 0.23 | 105.86 | 118.33 | 0.21 | 98.35 |
| Interest on Working | 0.03 | 12.39 | 12.63 | 0.03 | 11.94 |
| O & M Expenses | 0.30 | 116.81 | 116.49 | 0.30 | 116.81 |
| Total | 0.99 | 426.42 | 458.21 | 0.93 | 405.02 |

(Rs in lakh)

| Particulars | Asset-4 | Asset-5 |
|---------------------|---------|---------|
| | 2018-19 | 2018-19 |
| Depreciation | 88.03 | 127.92 |
| Interest on Loan | 88.65 | 126.34 |
| Return on equity | 98.09 | 142.53 |
| Interest on Working | 10.21 | 14.02 |
| O & M Expenses | 90.53 | 116.16 |
| Total | 375.51 | 526.97 |

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

(Rs in lakh)

| Particulars | Asset-1 | | Asset-2 | Asset-3 | |
|--------------------------------------|---------|---------|---------|---------|---------|
| | 2017-18 | 2018-19 | 2018-19 | 2017-18 | 2018-19 |
| Maintenance Spares | 16.74 | 17.52 | 17.52 | 16.74 | 17.52 |
| O & M expenses | 9.30 | 9.73 | 9.73 | 9.30 | 9.73 |
| Receivables | 61.32 | 71.07 | 76.58 | 57.74 | 67.50 |
| Total | 87.36 | 98.33 | 103.84 | 83.78 | 94.76 |
| Interest | 11.01 | 12.39 | 12.67 | 10.56 | 11.94 |
| Rate of Interest | 12.60% | 12.60% | 12.20% | 12.60% | 12.60% |
| Pro rata Interest on Working Capital | 0.03 | 12.39 | 12.63 | 0.03 | 11.94 |



| Particulars | (Rs in lakh) | |
|--------------------------------------|--------------------|--------------------|
| | Asset-4 2018-19 | Asset-5 2018-19 |
| Maintenance Spares | 17.52 | 17.52 |
| O & M expenses | 9.73 | 9.73 |
| Receivables | 80.76 | 88.32 |
| Total | 108.01 | 115.57 |
| Interest | 13.18 | 14.10 |
| Rate of Interest | 12.20% | 12.20% |
| Pro rata Interest on Working Capital | 10.21 | 14.02 |

10. The petitioner has published the notice of this application 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. No reply has been filed by beneficiaries.
11. This order has been issued after considering the petitioner’s affidavits dated 01.03.2018, 17.10.2018 and 12.11.2018.
12. Having heard the petitioner and perused the material on record, we proceed to dispose of petition.

Commercial operation Date

13. As per the Investment Approval dated 22.10.2016, the scheduled COD of the instant assets was 21.04.2019. The petitioner has submitted that Asset-1, Asset-2, Asset-3, Asset-4 and Asset-5 were put under commercial operation on 31.03.2018, 02.04.2018, 31.03.2018, 22.06.2018 and 03.04.2018 respectively. In support of CODs of the Assets, the petitioner has submitted RLDC charging certificates dated 07.05.2018 for Asset-1, Asset-2, Asset-3 and Asset-5 and



dated 29.06.2018 for Asset-4. CEA certificates dated 29.03.2018 for Asset-1 and Asset-2, dated 27.03.2018 for Asset-3, dated 18.06.2018 for asset-4, dated 03.05.2018 for Asset-5 under Regulation 43 of CEA (Measures Related to Safety & Electricity Supply) Regulations, 2010 have been submitted. CMD certificate as required under Grid Code has also been submitted by the petitioner. Accordingly, the COD of the Asset-1, Asset-2, Asset-3, Asset-4 and Asset-5 is approved as 31.03.2018, 02.04.2018, 31.03.2018, 22.06.2018 and 03.04.2018, respectively. The tariff is worked out from COD to 31.3.2019.

Capital cost

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

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

(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
- (c) 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;
- (d) Increase in cost in contract packages as approved by the Commission;

- (e) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;
- (f) Capitalized Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;
- (g) Expenditure on account of additional capitalization and decapitalisation determined in accordance with Regulation 14 of these regulations;
- (h) 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
- (i) Adjustment of any revenue earned by the transmission licensee by using the assets before COD."

15. Details of capital cost claimed by the petitioner submitted vide affidavit dated 17.10.2018 as on actual COD and estimated additional capital expenditure projected to be incurred for the instant transmission assets is summarized below:-

(Rs in lakh)

| Asset | Apportioned approved cost | Cost as on COD | Estimated additional capital expenditure | | Estimated completion cost |
|--------------|---------------------------|----------------|--|---------------|---------------------------|
| | | | 2018-19 | 2019-20 | |
| Asset-1 | 3017.69 | 1480.25 | 645.49 | 170.00 | 2295.74 |
| Asset-2 | 3380.73 | 1676.23 | 739.87 | 100.00 | 2516.10 |
| Asset-3 | 2981.07 | 1353.58 | 641.99 | 200.93 | 2196.50 |
| Asset-4 | 3620.47 | 1755.48 | 823.55 | 100.00 | 2679.03 |
| Asset-5 | 3775.02 | 2044.14 | 852.07 | 130.00 | 3026.21 |
| TOTAL | 16774.98 | 8309.68 | 3702.97 | 700.93 | 12713.58 |



Cost over-run

16. The apportioned approved cost of the asset as per FR of the project is Rs16774.98 lakh against which the estimated completion cost of the asset is Rs 12713.58 lakh. The petitioner has indicated that there is cost under run of about Rs 4061.48 lakh as compared with apportioned approved cost. The estimated completion costs of the individual assets are also within the apportioned approved cost of the respective assets. Hence there is no cost overrun in commissioning of the Assets covered in the instant petition. The petitioner has submitted the item wise reasons of cost variation along with Form-5.

Time over-run

17. As per the investment approval dated 22.10.2016, the assets covered in the instant petition were scheduled to be commissioned within 30 months from the date of investment approval (i.e. 22.10.2016). The scheduled date of commissioning of the asset works out to 21.04.2019 against which the Asset-1, Asset-2, Asset-3, asset-4 and Asset-5 were commissioned on 31.03.2018, 02.04.2018, 31.03.2018, 22.06.2018 and 03.04.2018 respectively. Accordingly, there is no delay in commissioning of the instant transmission assets.

18. Further, petitioner was directed to submit the reasons for early commissioning of the assets. In this regards, petitioner has submitted that the assets are the part of system strengthening scheme and have been commissioned early to



meet the load growth in Southern Region in 2018-19 time frame. CEA in 38th meeting also stated that augmentation of transformers is required at a number of 400 kV substation for 2018-19 time frames. It may be submitted that in SR, during summer seasons which starts from March onwards, the demand of electricity increases and the commissioning of new ICTs could benefit the concerned States in maintaining the reliability of power during peak summer season. Further, the ICTs have been commissioned in 2018-19 timeframe as planned/ decided in 38th SRPC earlier.

Treatment of Interest During Construction (IDC) and Incidental Expenditure during construction (IEDC)

19. The petitioner has claimed Interest during Construction (IDC) on accrual basis for Assets-1, Asset-2, Asset-3, Asset-4 and Asset-5. The petitioner has submitted the discharge details of IDC as under:-

(Rs in lakh)

| Asset | IDC As per Auditor certificate | IDC Discharged upto COD | IDC Discharged in 2018-19 | IDC Discharged in 2019-20 |
|---------|--------------------------------|-------------------------|---------------------------|---------------------------|
| Asset-1 | 7.19 | 0.11 | 7.08 | 0.00 |
| Asset-2 | 29.10 | 0.00 | 0.00 | 29.10 |
| Asset-3 | 5.66 | 0.09 | 5.56 | 0.00 |
| Asset-4 | 35.64 | 3.76 | 31.88 | 0.00 |
| Asset-5 | 33.98 | 0.00 | 0.00 | 33.98 |

20. The Petitioner has submitted the statement showing IDC discharged upto COD, wherein the loan wise drawl date has also been mentioned. For the purpose of determining IDC, the loan wise drawl date as provided by the petitioner has been assumed as date of infusion of debt fund for the concerned loan. IDC has



been worked out and allowed as on COD on cash basis for the assets. The balance IDC discharged after COD has been considered as part of add-cap. The allowable IDC has been worked out based on the available information and relying on loan amount as per tariff form 9C.

21. The petitioner has claimed Incidental Expenditure during Construction (IEDC) for Asset-1, Asset-2, Asset-3, Asset-4 and Asset-5. Year wise details of actual amount of IEDC discharged i.e. Form-12A has also been submitted by the petitioner. However, the petitioner vide, affidavit dated 17.10.2018, has submitted that entire IEDC claimed in Auditor Certificate is on cash basis and is paid up to COD of the assets. The IEDC is within 10.75% of the hard cost as indicated in the abstract cost estimate. Hence, the entire amount of IEDC has been allowed.

Initial spares

22. Regulation 13(d) of the 2014 Tariff Regulations provides that initial spares shall be capitalized as a percentage of plant and machinery cost up to 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%”

23. The petitioner has claimed initial spare towards sub-station for all the assets. The petitioner, vide affidavit dated 12.11.2018, has submitted the year wise



capitalization and discharge of initial spares in auditors certificate. The initial spares claimed for all the assets are within the limit prescribed in the Regulations. Thus, claimed initial spares have been allowed. The details are as follows:-

(Rs in lakh)

| Assets | Sub-station (Brown Field) | | |
|---------|---------------------------|--------------------------------|-------------------------------------|
| | Plant & Machinery Cost# | Initial spares for sub-station | Initial spares as % of Capital Cost |
| Asset-1 | 2204.87 | 131.59 | 5.97% |
| Asset-2 | 2440.82 | 142.74 | 5.85% |
| Asset-3 | 2109.28 | 125.33 | 5.94% |
| Asset-4 | 2591.56 | 144.82 | 5.59% |
| Asset-5 | 2933.23 | 167.73 | 5.72% |

#Total Cost (Plant and machinery cost excluding IDC, IEDC, land cost & cost of civil works for the purpose of initial spares)

However, the initial spares considered are on cash basis and included in the capital cost of the asset as per Auditor's Certificate.

Capital cost as on COD

24. The following capital cost as on COD, after taking into account the allowable IEDC, IDC and initial spares, is considered for the computation of tariff for the assets:



(Rs in lakh)

| Asset | Capital cost as on COD claimed by the petitioner | Less: Un-discharged IDC as on COD. | Less: Un-discharged Initial Spares as on COD. | Capital cost considered as on COD |
|---------|--|------------------------------------|---|-----------------------------------|
| Asset-1 | 1480.25 | 7.08 | 0.00 | 1473.17 |
| Asset-2 | 1676.23 | 29.10 | 0.00 | 1647.13 |
| Asset-3 | 1353.58 | 5.56 | 0.00 | 1348.02 |
| Asset-4 | 1755.48 | 31.88 | 0.00 | 1723.60 |
| Asset-5 | 2044.14 | 33.98 | 0.00 | 2010.16 |

Additional capital expenditure (ACE)

25. 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) Un-discharged liabilities recognized to be payable at a future date;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 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.”

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”.

26. The cut-off date for the instant assets are as follows:-

| Asset | COD | Cut-off date |
|-------|------------|--------------|
| 1 | 31.03.2018 | 31.03.2021 |
| 2 | 02.04.2018 | 31.03.2021 |
| 3 | 31.03.2018 | 31.03.2021 |
| 4 | 22.06.2018 | 31.03.2021 |
| 5 | 03.04.2018 | 31.03.2021 |

27. The Petitioner has claimed ACE as per as per Clause (1) of Regulation 14 of the 2014 Tariff Regulations based on the cost certified by the Auditors. In addition, the Petitioner has also claimed the ACE towards discharge of IDC liability for 2018-19 as part of ACE. The additional capital expenditure claimed by the Petitioner for the instant assets for the period 2018-19 is within the cut-off date and is on account of balance and retention payments and accordingly it



is allowed under Regulation 14(1) (i) of the 2014 Tariff Regulations. The ACE claimed by the petitioner is summarized in the table below:-

| (Rs in lakh) | |
|---------------------|----------------|
| Asset | 2018-19 |
| Asset-1 | 645.49 |
| Asset-2 | 739.87 |
| Asset-3 | 641.99 |
| Asset-4 | 823.55 |
| Asset-5 | 852.07 |

28. The un-discharged IDC and Initial spares as on COD has been considered as part of Additional Capital Expenditure during the year of discharge. Accordingly, the Additional Capital expenditure allowed has been summarized as under:

| (Rs in lakh) | | | | |
|---------------------|--------------------------------|--|--|--|
| Asset | ACE claimed for 2018-19 | Add:IDC Discharged during 2018-19 | Add:Initial Spare discharged during 2018-19 | Total Add Cap allowed upto 31.03.2019 |
| Asset-1 | 645.49 | 7.08 | 0.00 | 652.57 |
| Asset-2 | 739.87 | 0.00 | 0.00 | 739.87 |
| Asset-3 | 641.99 | 5.56 | 0.00 | 647.55 |
| Asset-4 | 823.55 | 31.88 | 0.00 | 855.43 |
| Asset-5 | 852.07 | 0.00 | 0.00 | 852.07 |

Capital cost as on 31.3.2019

29. The capital cost considered for the purpose of computation of tariff is as follows:-



(Rs in Lakh)

| Asset | Capital Cost Allowed as on COD | ACE allowed for 2018-19 | Total estimated completion cost up to 31.3.2019 |
|---------|--------------------------------|-------------------------|---|
| Asset-1 | 1473.17 | 652.57 | 2125.74 |
| Asset-2 | 1647.13 | 739.87 | 2387.00 |
| Asset-3 | 1348.02 | 647.55 | 1995.57 |
| Asset-4 | 1723.60 | 855.43 | 2579.03 |
| Asset-5 | 2010.16 | 852.07 | 2862.23 |

Debt- equity ratio

30. The Petitioner has claimed Debt: Equity ratio of 70:30 as on the date of commercial operation. Debt: Equity ratio of 70:30 is considered as provided in Regulation 19 of the 2014 Tariff Regulations. The details of Debt : Equity ratio in respect of the instant assets as on the date of commercial operation and as on 31.3.2019 are as under:

(Rs in lakh)

| Particulars | Capital cost as on COD | | Capital cost as on 31.3.2019 | |
|----------------|------------------------|---------------|------------------------------|---------------|
| | Amount | % | Amount | % |
| Asset-1 | | | | |
| Debt | 1031.22 | 70.00 | 1488.02 | 70.00 |
| Equity | 441.95 | 30.00 | 637.72 | 30.00 |
| Total | 1473.17 | 100.00 | 2125.74 | 100.00 |
| Asset-2 | | | | |
| Debt | 1152.99 | 70.00 | 1670.90 | 70.00 |
| Equity | 494.14 | 30.00 | 716.10 | 30.00 |
| Total | 1647.13 | 100.00 | 2387.00 | 100.00 |
| Asset-3 | | | | |
| Debt | 943.61 | 70.00 | 1396.90 | 70.00 |
| Equity | 404.41 | 30.00 | 598.67 | 30.00 |
| Total | 1348.02 | 100.00 | 1995.57 | 100.00 |
| Asset-4 | | | | |
| Debt | 1215.91 | 70.00 | 1814.71 | 70.00 |
| Equity | 507.69 | 30.00 | 764.32 | 30.00 |
| Total | 1723.60 | 100.00 | 2579.03 | 100.00 |



| Asset-5 | | | | |
|----------------|----------------|---------------|----------------|---------------|
| Debt | 1407.11 | 70.00 | 2003.56 | 70.00 |
| Equity | 603.05 | 30.00 | 858.67 | 30.00 |
| Total | 2010.16 | 100.00 | 2862.23 | 100.00 |

Return on equity

31. This has been dealt with in line with Clause (1) and (2) of Regulation 24 and Clause (2) of Regulation 25 of the 2014 Tariff Regulations.

32. The petitioner has submitted that it is liable to pay income tax at MAT rate, the RoE has been calculated @ 19.610% after grossing up the RoE with MAT rate of 20.961% as provided under Regulation 25(2)(i) of the 2014 Tariff Regulations. As per Regulation 25(3) of the 2014 Tariff Regulations, the grossed up rate of RoE at the end of the financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the 2014-19 period on actual gross income of any financial year.

33. We have considered the submissions made by the petitioner and respondent. 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. 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 as follows:-

(Rs in lakh)

| Particulars | Asset-1 | | Asset-2 | Asset-3 | |
|-------------------------------------|---------|---------|---------|---------|---------|
| | 2017-18 | 2018-19 | 2018-19 | 2017-18 | 2018-19 |
| Opening Equity | 441.95 | 441.95 | 494.14 | 404.41 | 404.41 |
| Addition due to Additional | 0.00 | 195.77 | 221.96 | 0.00 | 194.27 |
| Closing Equity | 441.95 | 637.72 | 716.10 | 404.41 | 598.67 |
| Average Equity | 441.95 | 539.84 | 605.12 | 404.41 | 501.54 |
| Return on Equity (Base Rate) | 15.50% | 15.50% | 15.50% | 15.50% | 15.50% |
| Tax rate for the year 2008-09 (MAT) | 20.961% | 20.961 | 20.961 | 20.961 | 20.961 |
| Rate of Return on Equity (Pre Tax) | 19.610% | 19.610 | 19.610 | 19.610 | 19.610 |
| Return on Equity (Pre Tax) | 0.24 | 105.86 | 118.34 | 0.22 | 98.35 |

(Rs in lakh)

| Particulars | Asset-4 | Asset-5 |
|-------------------------------------|---------|---------|
| | 2018-19 | 2018-19 |
| Opening Equity | 507.69 | 603.05 |
| Addition due to Additional | 256.63 | 255.62 |
| Closing Equity | 764.32 | 858.67 |
| Average Equity | 636.00 | 730.86 |
| Return on Equity (Base Rate) | 15.50% | 15.50% |
| Tax rate for the year 2008-09 (MAT) | 20.961% | 20.961% |
| Rate of Return on Equity (Pre Tax) | 19.610% | 19.610% |
| Return on Equity (Pre Tax) | 96.70 | 142.54 |

Interest on loan (IOL)

34. This has been dealt with in line with Regulation 26 of 2014 Tariff Regulations.

35. IOL has been worked out as under:-

(i) Gross amount of loan, repayment of installments and rate of interest on actual average loan have been considered as per the petition;



- (ii) The yearly repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that year; and
- (iii) Weighted average rate of interest on actual average loan worked out as per (i) above is applied on the notional average loan during the year to arrive at the interest on loan.

36. Based on above, details of IOL calculated are as follows:-

(Rs in lakh)

| Particulars | Asset-1 | | Asset-2 | Asset-3 | |
|---|---------|---------|---------|---------|--------|
| | 2017-18 | 2018-19 | 2018-19 | 2017-18 | 2018- |
| Gross Normative Loan | 1031.22 | 1031.22 | 1152.99 | 943.61 | 943.61 |
| Cumulative Repayment up to Previous | | 0.21 | 0.00 | 0.00 | 0.20 |
| Net Loan-Opening | 1031.22 | 1031.01 | 1152.99 | 943.61 | 943.42 |
| Addition due to Additional Capitalization | 0.0 | 456.80 | 517.91 | 0.00 | 453.29 |
| Repayment during the year | 0.20 | 95.01 | 106.21 | 0.20 | 88.27 |
| Net Loan-Closing | 1031.01 | 1392.79 | 1564.69 | 943.42 | 1308.4 |
| Average Loan | 1031.11 | 1211.90 | 1358.84 | 943.52 | 1125.9 |
| Weighted Avg Rate of Interest on Loan | 7.9650% | 7.9497% | 7.7154% | 7.9620% | 7.9622 |
| Interest on Loan | 0.23 | 96.34 | 104.55 | 0.21 | 89.65 |

(Rs in lakh)

| Particulars | Asset-4 | Asset-5 |
|---------------------------------------|---------|---------|
| | 2018-19 | 2018-19 |
| Gross Normative Loan | 1215.91 | 1407.11 |
| Cumulative Repayment up to Previous | 0.00 | 0.00 |
| Net Loan-Opening | 1215.91 | 1407.11 |
| Addition due to Additional | 598.80 | 596.45 |
| Repayment during the year | 88.07 | 127.93 |
| Net Loan-Closing | 1726.64 | 1875.63 |
| Average Loan | 1471.28 | 1641.37 |
| Weighted Avg Rate of Interest on loan | 7.8247% | 7.7400% |
| Interest on Loan | 89.26 | 126.35 |

Depreciation

37. Depreciation has been dealt with in line of Regulation 27 of 2014 Tariff Regulations.

38. The instant transmission assets were put under commercial operation during 2017-18 and 2018-19. Accordingly, they will complete 12 years after 2018-19. As such, depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-II to the 2014 Tariff Regulations.

39. Details of the depreciation allowed are as under:-

| Particulars | (Rs in lakh) | | | | |
|--------------------------------|--------------|---------|---------|---------|---------|
| | Asset-1 | | Asset-2 | Asset-3 | |
| | 2017-18 | 2018-19 | 2018-19 | 2017-18 | 2018-19 |
| Opening Gross Block | 1473.17 | 1473.17 | 1647.13 | 1348.02 | 1348.02 |
| Additional Capital Expenditure | 0.00 | 652.57 | 739.87 | 0.00 | 647.55 |
| Closing Gross Block | 1473.17 | 2125.74 | 2387.00 | 1348.02 | 1995.57 |
| Average Gross Block | 1473.17 | 1799.46 | 2017.07 | 1348.02 | 1671.80 |
| Rate of Depreciation | 5.2800% | 5.2800% | 5.2800% | 5.2800% | 5.2800% |
| Depreciable Value | 1325.85 | 1619.51 | 1815.36 | 1213.22 | 1504.62 |
| Remaining Depreciable Value | 1325.85 | 1619.30 | 1709.15 | 1213.22 | 1504.42 |
| Depreciation | 0.21 | 95.01 | 106.21 | 0.20 | 88.27 |

| Particulars | (Rs in lakh) | |
|--------------------------------|--------------|---------|
| | Asset-4 | Asset-5 |
| | 2018-19 | 2018-19 |
| Opening Gross Block | 1723.60 | 2010.16 |
| Additional Capital Expenditure | 855.43 | 852.07 |
| Closing Gross Block | 2579.03 | 2862.23 |
| Average Gross Block | 2151.32 | 2436.20 |
| Rate of Depreciation | 5.2800% | 5.2800% |
| Depreciable Value | 1936.18 | 2192.58 |
| Remaining Depreciable Value | 1848.15 | 2104.55 |
| Depreciation | 88.07 | 127.93 |



Operation & Maintenance Expenses (O&M Expenses)

40. This has been dealt with in line with Clause 29(4)(a) of 2014 Tariff Regulations.
41. The petitioner has submitted that O&M Expenses for the tariff period 2014- 19 had been arrived at on the basis of normalized actual O&M Expenses during the period 2008-09 to 2012-13. The petitioner has further submitted that the wage revision of the employees is due during 2014-19 and actual impact of wage hike effective from a future date has not been factored in fixation of the normative O&M rates specified for the tariff block 2014-19. The petitioner has submitted that it would approach the Commission for suitable revision in norms for O&M Expenses for claiming the impact of wage hike during 2014-19, if any.
42. We have considered the submissions of the Petitioner. The O&M Expenses have been worked out as per the norms 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. Accordingly, the O&M Expenses have been allowed as under:-

| Assets (COD) | (Rs in lakh) | |
|-----------------------------|---------------------|----------------|
| | 2017-18 | 2018-19 |
| Asset-1 (31.03.2018) | 0.30 | 116.81 |
| Asset-2 (02.04.2018) | - | 116.49 |
| Asset-3 (31.03.2018) | 0.30 | 116.81 |
| Asset-4 (22.06.2018) | - | 90.24 |
| Asset-5 (03.04.2018) | - | 115.52 |



Interest on working capital (IWC)

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

a) Maintenance spares:

Maintenance spares @ 15 % of Operation and Maintenance expenses specified in Regulation 28.

b) O & M expenses:

O&M expenses have been considered for one month of the O&M expenses.

c) Receivables:

The receivables have been worked out on the basis of 2 months' of annual fixed cost as worked out above.

d) Rate of interest on working capital:

As per Clause 28 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, SBI Base Rate 9.10% as on 01.04.2017 Plus 350 Bps i.e. 12.60% for Asset-1 and Asset-3, SBI Base Rate 8.70% as on 01.04.2018 Plus 350 Bps i.e 12.20% for Asset-2, Asset-4 and asset-5 have been considered as the rate of interest on working capital for all the assets.

44. Accordingly, the interest on working capital is summarized as under:-

| Particulars | Asset-1 | | Asset-2 | Asset-3 | |
|-----------------------------|-----------------------|---------|-----------------------|-----------------------|-----------------------|
| | 2017-18 (Pro-rata) | 2018-19 | 2018-19 (Pro-rata) | 2017-18 (Pro-rata) | 2018-19 (Pro-rata) |
| Maintenance Spares | 16.43 | 17.52 | 17.52 | 16.43 | 17.52 |
| O & M expenses | 9.13 | 9.73 | 9.73 | 9.13 | 9.73 |
| Receivables | 0.16 | 71.07 | 76.58 | 0.15 | 67.50 |
| Total | 25.71 | 98.32 | 103.84 | 25.70 | 94.76 |
| Rate of Interest | 12.60% | 12.60% | 12.20% | 12.60% | 12.60% |
| Interest on working capital | 0.01 | 12.39 | 12.63 | 0.01 | 11.94 |



(Rs in lakh)

| Particulars | Asset-4 | | Asset-5 | |
|-----------------------------|-----------------------|--|-----------------------|--|
| | 2018-19 (Pro-rata) | | 2018-19 (Pro-rata) | |
| Maintenance Spares | 17.46 | | 17.42 | |
| O & M expenses | 9.70 | | 9.68 | |
| Receivables | 80.49 | | 88.20 | |
| Total | 107.65 | | 115.31 | |
| Rate of Interest | 12.20% | | 12.20% | |
| Interest on working capital | 10.18 | | 13.99 | |

Annual Transmission charges

45. Accordingly, the annual transmission charges allowed for the instant assets are summarized hereunder:-

(Rs in lakh)

| Particulars | Asset-1 | | Asset-2 | Asset-3 | |
|-----------------------------|-----------------------|---------|-----------------------|------------------|-----------------------|
| | 2017-18 (Pro-rata) | 2018-19 | 2018-19 (Pro-rata) | 2017-18 (Pro- | 2018-19 (Pro-rata) |
| Depreciation | 0.21 | 95.01 | 106.21 | 0.20 | 88.27 |
| Interest on Loan | 0.23 | 96.34 | 104.55 | 0.21 | 89.65 |
| Return on Equity | 0.24 | 105.86 | 118.34 | 0.22 | 98.35 |
| Interest on Working Capital | 0.01 | 12.39 | 12.63 | 0.01 | 11.94 |
| O & M Expenses | 0.30 | 116.81 | 116.49 | 0.30 | 116.81 |
| Total | 0.98 | 426.41 | 458.22 | 0.93 | 405.02 |

(Rs in lakh)

| Particulars | Asset-4 | | Asset-5 | |
|---------------------|-----------------------|--|-----------------------|--|
| | 2018-19 (Pro-rata) | | 2018-19 (Pro-rata) | |
| Depreciation | 88.07 | | 127.93 | |
| Interest on Loan | 89.26 | | 126.35 | |
| Return on Equity | 96.70 | | 142.54 | |
| Interest on Working | 10.18 | | 13.99 | |
| O & M Expenses | 90.24 | | 115.52 | |
| Total | 374.45 | | 526.32 | |

Filing fee and the publication expenses

46. 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.

License fee and RLDC Fees and Charges

47. The petitioner has requested to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. We are of the view that the petitioner shall be entitled for reimbursement of license fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a), respectively, of Regulation 52 of the 2014 Tariff Regulations.

Goods and Service tax

48. The petitioner has prayed for reimbursement of tax, if any, on account of proposed implementation of GST. GST is not levied on transmission service at present and we are of the view that petitioner's prayer is premature.

Sharing of Transmission Charges

49. The transmission charges shall be recovered on monthly basis in accordance with Regulation 43 of the 2014 Tariff Regulations and shall be shared by the beneficiaries and long term transmission customers in Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 as amended from time to time.

50. This order disposes of Petition No.110/TT/2018.

Sd/-
(I.S.Jha)
Member

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

Sd/-
(P. K. Pujari)
Chairperson

