#### CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

### Petition No. 20/TT/2020

#### Coram:

#### Shri P. K. Pujari, Chairperson Shri I. S. Jha, Member

#### Date of Order: 02 .02.2021

#### In the Matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing-up of transmission tariff of the 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of Asset-1: 765 kV Line Bay and 240 MVAr Switchable Line Reactor at Jabalpur Pooling Sub-station for 765 kV S/C Jabalpur-Bina ckt.-III (IPTC), Asset-2: 765 kV Line Bay and 240 MVAr Line Reactor (Nonswitchable) at Bina Sub-station for 765 kV S/C Jabalpur-Bina ckt.-III (IPTC), Asset-3: 765 kV Line Bay and 240 MVAr Line Reactor at Jabalpur PS and 765 kV Line Bay and 330 MVAr Switchable Line Reactor at Dharamjaygarh Sub-station for ckt. 3 of 765 kV D/C (ckt. 3 and 4) Dharamjaygarh-Jabalpur PS Transmission line (IPTC) and Asset-4: 765 kV Line Bay and 240 MVAr Line Reactor at Jabalpur PS and 765 kV Line Bay and 330 MVAr Switchable Line Reactor at Dharamjaygarh Sub-station for ckt. 4 of 765 kV D/C (ckt. 3 and 4) Dharamjaygarh-Jabalpur PS Transmission line (IPTC) under "Line Bays and Reactor Provisions at POWERGRID Sub-stations associated with System Strengthening common for Western Region and Northern Region" in Western Region.

#### And in the Matter of:

Power Grid Corporation of India Ltd. "SAUDAMINI", Plot No. 2, Sector 29, Gurgaon-122001, Haryana. Vs

....Petitioner

- Madhya Pradesh Power Management Company Ltd., Shakti Bhawan, Rampur, Jabalpur-482008, Madhya Pradesh.
- Madhya Pradesh Power Transmission Company Ltd., Shakti Bhawan, Rampur, Jabalpur-482008, Madhya Pradesh.
- 3. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Ltd.,

3/54, Press Complex, Agra-Bombay Road, Indore-452008, Madhya Pradesh.

- Maharashtra State Electricity Distribution Company Ltd., Hongkong Bank Building, 3<sup>rd</sup> Floor, M.G. Road, Fort, Mumbai-400001, Maharashtra.
- Maharashtra State Electricity Transmission Company Ltd., Prakashganga, 6<sup>th</sup> Floor, Plot No. C-19, E-Block, Bandra Kurla Complex, Bandra (East) Mumbai-400051.
- Gujarat Urja Vikas Nigam Ltd., Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara-390007, Gujarat.
- Electricity Department, Government of Goa, Vidyut Bhawan, Panaji, Near Mandvi Hotel, Goa-403001.
- 8. Electricity Department, Administration of Daman & Diu, Daman-396210.
- DNH Power Distribution Corporation Ltd., Vidyut Bhawan, 66 kv Road, Near Secretariat Amli, Silvassa-396230, Dadra and Nagar Haveli.
- Chhattisgarh State Power Transmission Company Ltd., Office of The Executive Director (C&P), State Load Despacth Building, Dangania, Raipur-492013, Chhattisgarh.
- Chhattisgarh State Power Distribution Company Ltd., P.O. Sunder Nagar, Dangania, Raipur-492013, Chhattisgarh.
- Sterlite Technologies Ltd., C2, Mira Corporate Suits, 2<sup>nd</sup> Floor, Okhla Crossing, Mathura Road, Ishwar Nagar, New Delhi-110066.
- Adhunik Power & Natural Resources Ltd., Crescent Towers (3<sup>rd</sup> Floor)
   229A, J C Bose Road, Kolkata-700020, West Bengal.



- Corporate Power Ltd., 8<sup>th</sup> and 9<sup>th</sup> Floor Mahabir Tower, Main Road, Ranchi, Jharkhand-834001.
- Essar Power (Jharkhand) Ltd., Essar House, 11 K Road, Mahalaxmi, Mumbai-400034, Maharashtra.
- West Bengal State Electricity Distribution Company Ltd., Bidhyut Bhawan, 7<sup>th</sup> Floor, DJ Block, Sector II, Salt Lake City, Kolkata-700091, West Bengal.
- MB Power (Madhya Pradesh) Ltd.,
   213 B Okhala Industrial Area,
   Phase III New Delhi-110020.

...Respondent(s)

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

For Respondents : None

### <u>ORDER</u>

The present petition has been filed by Power Grid Corporation of India Ltd. (hereinafter referred to as "the Petitioner"), a deemed transmission licensee, for truing up of the tariff of the period from COD to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") and for determination of the tariff of the 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of the following assets (hereinafter referred to as "the transmission assets/Combined Asset") under "Line Bays and Reactor Provisions at POWERGRID Sub-stations associated with System Strengthening common for



Western Region and Northern Region" in Western Region (hereinafter referred to as "the transmission project"):

**Asset-1**: 765 kV Line Bay and 240 MVAr Switchable Line Reactor at Jabalpur Pooling Sub-station for 765 kV S/C Jabalpur-Bina ckt.- III (IPTC);

**Asset-2**: 765 kV Line Bay and 240 MVAr Line Reactor (Non-switchable) at Bina Sub-station for 765 kV S/C Jabalpur-Bina ckt.- III (IPTC);

**Asset-3**: 765 kV Line Bay and 240 MVAr Line Reactor at Jabalpur PS and 765 kV Line Bay and 330 MVAr Switchable Line Reactor at Dharamjaygarh Substation for ckt. 3 of 765 kV D/C (ckt. 3 and 4) Dharamjaygarh-Jabalpur PS Transmission line (IPTC);

**Asset-4**: 765 kV Line Bay and 240 MVAr Line Reactor at Jabalpur PS and 765 kV Line Bay and 330 MVAr Switchable Line Reactor at Dharamjaygarh Substation for ckt. 4 of 765 kV D/C (ckt. 3 and 4) Dharamjaygarh - Jabalpur PS Transmission line (IPTC).

2. The Petitioner has made the following prayers in this petition:

1. Approve the trued-up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 8.4 and 9.0 above.

2. 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 in Tariff Regulation 2014 and Tariff regulations 2019 as per para 9 above for respective block.

3. Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.

4. Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

5. 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 2019-24 period, if any, from the respondents.



6. Allow the Petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 9 above.

7. Allow the Petitioner to claim the capital spares at the end of tariff block as per actual.

8. Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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."

### Background

3. The brief facts of the case are as under:

(a) The Investment Approval (IA) and expenditure sanction for the transmission project was accorded by the Board of Directors of the Petitioner vide Memorandum No. C/CP/WR-246 dated 22.3.2012 with an estimated cost of ₹21378.00 lakh including IDC of ₹998.00 lakh, based on 4<sup>th</sup> quarter, 2011 price level. The total approved apportioned cost for the transmission project is ₹21377.58 lakh. The Petitioner has submitted the Revised Cost Estimate (RCE) approved by the Board of the Petitioner and apportioned approved cost vide affidavit dated 31.5.2016. The RCE has been approved in 327th meeting of Board of Directors of the Petitioner Company held on 2.4.2016 and conveyed vide letter C/CP/RCE/line bays WR-NR dated 13.4.2016 with an estimated cost of ₹24341.00 lakh including IDC of ₹1510.00 lakh.

(b) The scope of the transmission project is as follows:

## **Transmission line**

| 765 kV Dharamjaygarh Sub-station [Extn]    |   |   |
|--|---|---|
| <u>765 kV</u>                              |   |   |
| Line Bays                                  | : | 2 |
| 330 (3 X 110) MVAr Switchable line reactor | : | 2 |

| 765/400 kV Jabalpur Pooling Sub-station [ | Exti | <b>n]</b> |
|---|------|-----------|
| <u>765 kV</u>                             |      |           |
| Line Bays                                 | :    | 2         |
| 240 (3 X 80) MVAr line reactor            | :    | 2         |

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| <u>765 kV</u>                             |   |   |
|---|---|---|
| Line Bays                                 | : | 2 |
| 240 (3 X 80) MVAr Switchable line reactor | : | 2 |

# 765/400 kV Bina Sub-station [Extn]

| <u>765 kV</u>                  |   |   |
|--------------------------------|---|---|
| Line Bays                      | : | 2 |
| 240 (3 X 80) MVAr line reactor | : | 2 |
| 40 (3 X 80) MVAr line reactor  | : | 2 |

(c)The transmission tariff of the transmission assets from their respective COD to 31.3.2019 was determined by the Commission in Petition No.261/TT/2015 *vide* order dated 27.5.2016 as per the 2014 Tariff Regulations. As per the Investment Approval, the transmission assets were scheduled to be put into commercial operation on 1.4.2014. As against SCOD of 1.4.2014, Asset-1, Asset-2, Asset-3 and Asset-4 were put into commercial operation on 5.10.2014, 13.11.2014, 14.9.2015 and 15.9.2015 respectively. Thus, there was time over-run of 187 days, 226 days, 531 days and 532 days in case of Asset-1, Asset-2, Asset-3 and Asset-4 respectively and the same was condoned by the Commission *vide* order dated 27.5.2016 in Petition No.261/TT/2015.

(d)The transmission tariff in respect of the above assets approved *vide* order dated 27.5.2016 in Petition No.261/TT/2015 and the trued up tariff claimed by the Petitioner in the instant Petition is as under:

| Assets   | Particular   | 2014-15 | 2015-16 | 2016-17  | 2017-18  | 2018-19  |
|----------|--|---------|---------|----------|----------|----------|
| Asset-1  | Annual Fixed Charges approved <i>vide</i> order dated 27.5.2016                  | 423.48  | 994.79  | 1105.82  | 1117.41  | 1096.92  |
| A3561-1  | Claimed by the Petitioner based on true-up in the instant Petition               | 427.78  | 928.9   | 974.04   | 1,031.71 | 1,069.79 |
| Accest 2 | Annual Fixed Charges approved <i>vide</i> order dated 27.5.2016                  | 204.94  | 603.72  | 668.05   | 669.40   | 655      |
| ASSet-2  | Asset-2<br>Claimed by the Petitioner based on<br>true-up in the instant Petition | 206.45  | 564.16  | 576.86   | 578.54   | 599.48   |
| Accet 2  | Annual Fixed Charges approved vide order dated 27.5.2016                         | 0       | 672.02  | 1366.98  | 1441.46  | 1425.65  |
| Asset-3  | Claimed by the Petitioner based on true-up in the instant Petition               | 0       | 637.66  | 1,200.97 | 1,220.09 | 1,251.43 |



| Asset-4 | Annual Fixed Charges approved <i>vide</i> order dated 27.5.2016    | 0 | 632.05 | 1284.56 | 1352.80 | 1339.41 |
|---------|--|---|--------|---------|---------|---------|
|         | Claimed by the Petitioner based on true-up in the instant Petition | 0 | 601.24 | 1126.47 | 1144.84 | 1190.98 |

4. The Respondents are the distribution licensees and transmission licensees, which are procuring transmission services from the Petitioner and are mainly beneficiaries of the Western Region.

5. The Petitioner has served the petition on the Respondents and notice of this petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No suggestions and objections have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. Notices dated 14.1.2020 and 12.3.2020 directing the beneficiaries/ Respondents to file reply in the matter was also published on the Commission's website. M.P. Power Management Company Ltd. ("MPPMCL") i.e. the Respondent No.1 has filed its reply *vide* affidavit dated 16.1.2020 and has raised issues like grossing up Return on Equity (RoE), Additional Capital Expenditure (ACE) for 2015-16 and 2016-17 and Initial spares claims pertaining to Asset-3. The Petitioner *vide* affidavit dated 14.2.2020 has filed its reply filed by MPPMCL.

6. The hearing in this matter was held on 26.2.2020 and the order was reserved. The Petitioner was directed to submit certain information and the same was furnished by the Petitioner *vide* affidavit dated 13.3.2020.

7. This order is issued considering the submissions made by the Petitioner in the petition dated 16.12.2019, replies submitted by the Petitioner *vide* affidavits dated 25.2.2020 and 13.3.2020, reply field by MPPMCL *vide* affidavit dated 16.1.2020 and the rejoinder of the Petitioner filed *vide* affidavit dated 24.2.2020.

8. Having heard the representatives of the Petitioner and having perused the material on record, we proceed to dispose of the petition.

## Truing Up of Annual Fixed Charges for the 2014-19 Tariff Period

9. The details of the trued-up transmission charges claimed by the Petitioner in respect of the transmission assets are as under:

(₹ in lakh)

| Asset-1                     |         |         |         |         |         |  |  |
|-----------------------------|---------|---------|---------|---------|---------|--|--|
| Particulars                 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |  |
| Depreciation                | 101.13  | 226.48  | 243.37  | 266.74  | 284.49  |  |  |
| Interest on Loan            | 122.66  | 254.93  | 252.62  | 249.37  | 241.74  |  |  |
| Return on Equity            | 109.43  | 246.65  | 270.22  | 300.30  | 321.03  |  |  |
| Interest on Working Capital | 12.22   | 26.40   | 27.59   | 29.08   | 30.13   |  |  |
| O & M Expenses              | 82.34   | 174.44  | 180.24  | 186.22  | 192.40  |  |  |
| Total                       | 427.78  | 928.90  | 974.04  | 1031.71 | 1069.79 |  |  |

(₹ in lakh)

| Asset-2                     |      |         |         |         |         |         |  |  |
|-----------------------------|------|---------|---------|---------|---------|---------|--|--|
| Particulars                 |      | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |  |
| Depreciation                |      | 49.71   | 140.70  | 149.57  | 157.20  | 167.77  |  |  |
| Interest on Loan            |      | 64.21   | 165.63  | 156.67  | 139.08  | 133.46  |  |  |
| Return on Equity            |      | 54.72   | 155.17  | 164.68  | 173.20  | 185.53  |  |  |
| Interest on Working Capital |      | 5.66    | 15.44   | 15.82   | 15.95   | 16.52   |  |  |
| O & M Expenses              |      | 32.15   | 87.22   | 90.12   | 93.11   | 96.20   |  |  |
| Т                           | otal | 206.45  | 564.16  | 576.86  | 578.54  | 599.48  |  |  |

(₹ in lakh)

| Asset-3                     |         |         |         |         |  |  |  |  |
|-----------------------------|---------|---------|---------|---------|--|--|--|--|
| Particulars                 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |  |  |  |
| Depreciation                | 141.92  | 275.05  | 291.24  | 306.79  |  |  |  |  |
| Interest on Loan            | 175.03  | 312.16  | 287.00  | 273.93  |  |  |  |  |
| Return on Equity            | 158.88  | 307.86  | 326.27  | 344.86  |  |  |  |  |
| Interest on Working Capital | 18.85   | 35.54   | 36.25   | 37.25   |  |  |  |  |
| O & M Expenses              | 142.98  | 270.36  | 279.33  | 288.60  |  |  |  |  |
| Total                       | 637.66  | 1200.97 | 1220.09 | 1251.43 |  |  |  |  |

| Asset-4                     |         |         |         |         |  |  |  |
|-----------------------------|---------|---------|---------|---------|--|--|--|
| Particulars                 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |  |  |
| Depreciation                | 131.26  | 252.27  | 268.42  | 288.23  |  |  |  |
| Interest on Loan            | 162.66  | 287.20  | 261.37  | 253.86  |  |  |  |
| Return on Equity            | 147.04  | 282.78  | 301.16  | 324.40  |  |  |  |
| Interest on Working Capital | 18.01   | 33.86   | 34.56   | 35.89   |  |  |  |
| O & M Expenses              | 142.27  | 270.36  | 279.33  | 288.60  |  |  |  |
| Total                       | 601.24  | 1126.47 | 1144.84 | 1190.98 |  |  |  |

10. The details of trued up Interest on Working Capital (IWC) claimed by the Petitioner in respect of the transmission assets are as under:

| Asset-1                                 |         |         |         |         |         |  |  |  |
|---|---------|---------|---------|---------|---------|--|--|--|
| Particulars                             | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |  |  |
| O & M Expenses                          | 14.07   | 14.54   | 15.02   | 15.52   | 16.03   |  |  |  |
| Maintenance Spares                      | 25.33   | 26.17   | 27.04   | 27.93   | 28.86   |  |  |  |
| Receivables                             | 146.20  | 154.82  | 162.34  | 171.95  | 178.30  |  |  |  |
| Total                                   | 185.60  | 195.53  | 204.40  | 215.40  | 223.19  |  |  |  |
| Rate of Interest (%)                    | 13.50   | 13.50   | 13.50   | 13.50   | 13.50   |  |  |  |
| Interest on Working Capital             | 25.06   | 26.40   | 27.59   | 29.08   | 30.13   |  |  |  |
| Pro rata Interest on<br>Working Capital | 12.22   | 26.40   | 27.59   | 29.08   | 30.13   |  |  |  |

(₹ in lakh)

| Asset-2                                 |         |         |         |         |         |  |  |  |
|---|---------|---------|---------|---------|---------|--|--|--|
| Particulars                             | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |  |  |
| O & M Expenses                          | 7.04    | 7.27    | 7.51    | 7.76    | 8.02    |  |  |  |
| Maintenance Spares                      | 12.66   | 13.08   | 13.52   | 13.97   | 14.43   |  |  |  |
| Receivables                             | 90.35   | 94.03   | 96.14   | 96.42   | 99.91   |  |  |  |
| Total                                   | 110.05  | 114.38  | 117.17  | 118.15  | 122.36  |  |  |  |
| Rate of Interest (%)                    | 13.50   | 13.50   | 13.50   | 13.50   | 13.50   |  |  |  |
| Interest on Working Capital             | 14.86   | 15.44   | 15.82   | 15.95   | 16.52   |  |  |  |
| Pro rata Interest on<br>Working Capital | 5.66    | 15.44   | 15.82   | 15.95   | 16.52   |  |  |  |

(₹ in lakh)

|   | Asset-3 |         |         |         |  |  |  |
|---|---------|---------|---------|---------|--|--|--|
| Particulars                             | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |  |  |
| O & M Expenses                          | 21.80   | 22.53   | 23.28   | 24.05   |  |  |  |
| Maintenance Spares                      | 39.25   | 40.55   | 41.90   | 43.29   |  |  |  |
| Receivables                             | 194.49  | 200.16  | 203.35  | 208.57  |  |  |  |
| Total                                   | 255.54  | 263.24  | 268.53  | 275.91  |  |  |  |
| Rate of Interest (%)                    | 13.50   | 13.50   | 13.50   | 13.50   |  |  |  |
| Interest on Working Capital             | 34.50   | 35.54   | 36.25   | 37.25   |  |  |  |
| Pro rata Interest on Working<br>Capital | 18.85   | 35.54   | 36.25   | 37.25   |  |  |  |
| (₹ in lakh)                             |         |         |         |         |  |  |  |

|                                      | Asset-4 |         |         |         |
|--------------------------------------|---------|---------|---------|---------|
| Particulars                          | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| O & M Expenses                       | 21.81   | 22.53   | 23.28   | 24.05   |
| Maintenance Spares                   | 39.25   | 40.55   | 41.90   | 43.29   |
| Receivables                          | 184.30  | 187.75  | 190.81  | 198.50  |
| Total                                | 245.36  | 250.83  | 255.99  | 265.84  |
| Rate of Interest (%)                 | 13.50   | 13.50   | 13.50   | 13.50   |
| Interest on Working Capital          | 33.12   | 33.86   | 34.56   | 35.89   |
| Pro rata Interest on Working Capital | 18.01   | 33.86   | 34.56   | 35.89   |



## Capital Cost

11. The Commission *vide* order dated 27.5.2016 in Petition No.261/TT/2015 allowed the capital cost (after adjustment of IDC) of ₹3593.06 lakh, ₹2379.90 lakh, ₹4855.52 lakh, and ₹4515.61 lakh as on COD for Asset-1, Asset-2, Asset-3 and Asset-4 respectively for determination of tariff for the 2014-19 tariff period.

12. The Petitioner has submitted the details of the capital cost upto COD, ACE upto 31.3.2019 and estimated ACE during the period 1.4.2019 to 31.3.2020 *vide* Auditor's Certificate dated 2.8.2019 for Assets-1 and 2 and Auditor's Certificate dated 20.8.2019 for Asset-3 and Auditor's Certificate dated 9.9.2019 for Asset-4. The details of FR apportioned approved capital cost, capital cost as on COD and ACE incurred during the 2014-19 tariff period as claimed by the Petitioner for the transmission assets are as under:

|             |   |                                     |                              |         | dditiona    | I Capital E | vnenditur   | 0           | (₹ in lakh)<br>Total                       |
|-------------|---|-------------------------------------|------------------------------|---------|-------------|-------------|-------------|-------------|--|
| Assets      | FR Appor-<br>tioned<br>Approved<br>Cost | RCE<br>Appor-<br>tioned<br>Approved | Claimed<br>Cost as<br>on COD | 2014-15 | 2015-<br>16 | 2016-<br>17 | 2017-<br>18 | 2018-<br>19 | comple-<br>tion cost<br>as on<br>31.3.2019 |
| Asset-<br>1 | 4132.56                                 | 5869.28                             | 3598.50                      | 435.64  | 276.57      | 520.87      | 496.63      | 175.67      | 5503.88                                    |
| Asset-<br>2 | 3629.54                                 | 3555.27                             | 2390.73                      | 117.30  | 237.47      | 80.63       | 207.50      | 192.83      | 3226.46                                    |
| Asset-<br>3 | 7114.96                                 | 7444.40                             | 4858.55                      | 0.00    | 117.54      | 463.34      | 159.60      | 438.12      | 6037.15                                    |
| Asset-<br>4 | 6500.52                                 | 7472.21                             | 4515.61                      | 0.00    | 115.12      | 305.63      | 316.29      | 440.74      | 5693.39                                    |
| Total       | 21377.58                                | 24341.16                            | 15363.39                     | 552.94  | 746.7       | 1370.47     | 1180.02     | 1247.36     | 20460.88                                   |

13. The capital cost as on COD also includes the cost of IDC, IEDC and Initial Spares.

14. The completion cost of the transmission assets including ACE is within the RCE apportioned approved capital cost. Therefore, there is no cost over-run in respect of the transmission assets.

15. As stated in para 3(b) above, the time over-run of 187 days, 226 days, 531 days and 532 days for Asset-1, Asset-2, Asset-3 and Asset-4 respectively has already been condoned by the Commission *vide* order dated 27.5.2016 in Petition No.261/TT/2015.

## Interest During Construction (IDC)

16. The Petitioner has claimed IDC for the transmission assets and has submitted the Auditor's Certificates in support of the same. The Petitioner has submitted computation of IDC along with the year-wise details of the IDC discharged.

17. IDC has been allowed considering the information submitted by the Petitioner for the individual assets separately on cash basis. The loan details submitted in Form-9C for the 2014-19 tariff period and the IDC computation sheet have been considered for the purpose of IDC calculation on cash and accrued basis. The un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged. Accordingly, IDC considered is as under:

|             |  |                   |                                 |                                     |                                    | (₹ in lak   | h)         |
|-------------|--|-------------------|---------------------------------|-------------------------------------|------------------------------------|-------------|------------|
| Assets      | IDC as per<br>Auditor's<br>Certificate | IDC<br>Admissible | Computational difference in IDC | IDC Dis-<br>charged<br>as on<br>COD | IDC Un-<br>discharged<br>as on COD | ID<br>Disch | C<br>arged |
| Α           | В                                      | С                 | D=B-C                           | E                                   | F=C-E                              | 2014-       | 2015-      |
|             |  |                   |                                 |                                     |                                    | 15          | 16         |
| Asset-<br>1 | 67.12                                  | 67.12             | 0.00                            | 61.67                               | 5.44                               | 1.01        | 4.43       |
| Asset-<br>2 | 134.08                                 | 134.08            | 0.00                            | 123.24                              | 10.83                              | 4.39        | 6.44       |
| Asset-<br>3 | 466.66                                 | 466.66            | 0.00                            | 463.64                              | 3.02                               | 0.00        | 3.02       |
| Asset-<br>4 | 439.84                                 | 439.84            | 0.00                            | 438.51                              | 1.33                               | 0.00        | 1.33       |

## Incidental Expenditure During Construction (IEDC)

18. The Petitioner has claimed IEDC of ₹49.43 lakh, ₹26.91 lakh, ₹55.00 lakh and
₹51.02 lakh for Asset-1, Asset-2, Asset-3 and Asset-4 respectively and has submitted



Auditor's certificate in support of the same. The Petitioner has also submitted that the entire IEDC has been discharged as on COD in respect of the transmission assets. Hence, the IEDC claimed has been allowed.

### **Initial Spares**

19. The Petitioner has claimed following Initial Spares for the transmission assets and prayed to revise the Initial Spares allowed earlier in light of the judgement of the Appellate Tribunal for Electricity (APTEL) dated 14.9.2019 in Appeal No.74 of 2017:-

| Assets  | Particulars<br>Head | Plant and Machinery<br>Cost (excluding IDC<br>and IEDC, land cost<br>and cost of civil<br>works)<br>(A)<br>(₹ in lakh) | Initial Spares<br>claimed<br>(B)<br>(₹ in lakh) | Ceiling<br>(C)<br>(in %) | Initial<br>Spares<br>worked<br>out by the<br>Petitioner<br>(₹ in lakh) |
|---------|---------------------|--|---|--------------------------|--|
| Asset-1 |                     | 4730.90  | 254.18  | 6.00                     | 285.75   |
| Asset-2 | Cub Station         | 3022.06  | 180.00  | 6.00                     | 181.41   |
| Asset-3 | Sub-Station         | 4620.40  | 293.30  | 6.00                     | 276.20   |
| Asset-4 |                     | 4896.38  | 284.11  | 6.00                     | 294.40   |
|         | Total               | 17269.74   | 1011.59   |                          | 1037.75  |

20. MPPMCL has submitted that the Commission has nowhere agreed to club the cost of all the assets for the purpose of consideration of Initial Spares. MPPMCL has further submitted that in number of cases, the Commission has differentiated Initial Spares on the basis of assets while deciding the permissible cost of Initial Spares. MPPMCL has requested that the claim of the Petitioner must be restricted to the ceiling limits prescribed in the 2014 Tariff Regulations separately for each asset. In response, the Petitioner in its rejoinder has submitted that the said claim of Initial Spares on overall project basis has been endorsed by the APTEL *vide* judgement dated 14.9.2019 in Appeal No.74 of 2017 and has requested to allow the entire Initial Spares as claimed in Auditor's certificate for the transmission assets under subject project.

21. We have considered the submissions of the Petitioner and MPPMCL. APTEL in its judgment dated 14.9.2019 in Appeal No.74 of 2017 observed that the Commission for the purpose of prudence check may restrict the Initial Spares to the cost of individual assets and later at the time of truing up allow the Initial Spares as per the ceiling limits on the overall project cost. The relevant portion of the said judgment is extracted here under:

"18.13. ........ We do not agree with this methodology of restricting initial spares asset/ element wise as adopted by the Central Commission. The Central Commission to have a prudence check on the initial spares, being restricted based on the individual asset wise cost initially, but subsequently ought to have allowed as per the ceiling limits on the overall project cost basis during the true- up."

22. The transmission assets were put into commercial operation during the 2014-19 tariff period and accordingly, the norms specified for the Initial Spares in the 2014 Tariff Regulations are applicable for computation of the allowable Initial Spares. As per APTEL's judgement, the Initial Spares are to be allowed as a percentage of the overall project cost at the time of truing up. In the present case, though the transmission assets were put into commercial operation during the 2014-19 tariff period, the overall project cost of the assets is arrived at only when all the transmission assets are combined while claiming the tariff for the 2019-24 tariff period. Therefore, the Initial Spares are allowed on the basis of the cost of the individual assets in the 2014-19 tariff period and the Initial Spares are allowed on the basis of the overall project cost in the 2019-24 tariff period when the transmission assets are combined and the overall project cost is arrived at. Accordingly, the details of Initial Spares allowed for the 2014-19 tariff period are as under:



| Assets  | Plant & Machinery<br>cost up<br>to the cut-off date<br>(excluding IDC and<br>IEDC)<br>(₹ in lakh) | Initial Spares<br>claimed<br>(₹ in lakh) | Norms as<br>per the<br>2014 Tariff<br>Regulations<br>(in %) | Initial<br>Spares<br>as per the<br>norms of<br>2014 Tariff<br>Regulations<br>(₹ in lakh) | Initial<br>Spares<br>allowed<br>(₹ in lakh) |
|---------|---|--|---|--|---|
| Asset-1 | 4730.90   | 254.18                                   | 6%  | 285.75   | 254.18                                      |
| Asset-2 | 3022.06   | 180.00                                   | 6%  | 181.41   | 180.00                                      |
| Asset-3 | 4620.40   | 293.30                                   | 6%  | 276.20   | 276.20                                      |
| Asset-4 | 4896.38   | 284.11                                   | 6%  | 294.40   | 284.11                                      |

## Capital cost as on COD

23. Accordingly, the capital cost allowed as on COD is summarized as under:

|         |                                  |                                  |                    |                          | (₹ in lakh)          |  |
|---------|----------------------------------|----------------------------------|--------------------|--------------------------|----------------------|--|
|         | Capital cost<br>as on COD        |                                  | s on COD due<br>to | Less:                    | Capital cost         |  |
| Assets  | as per<br>Auditor<br>Certificate | Computa-<br>tional<br>difference | Un-<br>discharged  | Excess Initial<br>Spares | considered as on COD |  |
|         | 1                                | 2                                | 3                  | 4                        | 5=1-2-3-4            |  |
| Asset-1 | 3598.50                          | 0.00                             | 5.44               | 0.00                     | 3593.05              |  |
| Asset-2 | 2390.73                          | 0.00                             | 10.83              | 0.00                     | 2379.90              |  |
| Asset-3 | 4858.55                          | 0.00                             | 3.02               | 17.10                    | 4838.43              |  |
| Asset-4 | 4515.61                          | 0.00                             | 1.33               | 0.00                     | 4514.28              |  |

## Additional Capital Expenditure (ACE)

24. The Petitioner has claimed the following ACE for the transmission assets during the 2014-15:

| · · · · · · · · · · · · · · · · · · · |                   |         |           |              |           |         |  |  |  |  |
|---------------------------------------|-------------------|---------|-----------|--------------|-----------|---------|--|--|--|--|
| Assets                                | Claimed           |         | Additiona | I Capital Ex | penditure |         | Total  |  |  |  |
|                                       | Cost as<br>on COD | 2014-15 | 2015-16   | 2016-17      | 2017-18   | 2018-19 | completion<br>cost as on<br>31.3.2019<br>(claimed) |  |  |  |
| Asset-1                               | 3598.50           | 435.64  | 276.57    | 520.87       | 496.63    | 175.67  | 5503.88  |  |  |  |
| Asset-2                               | 2390.73           | 117.30  | 237.47    | 80.63        | 207.5     | 192.83  | 3226.46  |  |  |  |
| Asset-3                               | 4858.55           | 0.00    | 117.54    | 463.34       | 159.6     | 438.12  | 6037.15  |  |  |  |
| Asset-4                               | 4515.61           | 0.00    | 115.12    | 305.63       | 316.29    | 440.74  | 5693.39  |  |  |  |
| Total                                 | 15363.39          | 552.94  | 746.70    | 1370.47      | 1180.02   | 1247.36 | 20460.88   |  |  |  |

25. The Petitioner has submitted that Asset-1 and Asset-2 were put into commercial operation in 2014-15. Accordingly, cut-off date in their case is 31.3.2017

A. Order in Petition No.20/TT/2020 and ACE incurred during 2014-15, 2015-16 and 2016-17 is within the cut-off date whereas ACE incurred during 2018-19 is beyond the cut-off date. Further, Asset-3 and Asset-4 were put into commercial operation in 2015-16. Accordingly, the cut-off date for them is 31.3.2018 and ACE incurred during 2015-16, 2016-17 and 2017-18 is within the cut-off date whereas ACE incurred during 2018-19 is beyond the cut-off date.

26. The Petitioner has submitted that ACE incurred in the assets has been incurred after COD and before cut-off date towards un-discharged liabilities recognized to be payable at a future date and the works deferred for execution and towards liability for works executed prior to the cut-off date comprising of balance and retention payments. The ACE has been claimed under Regulations 14(1)(i) (Undischarged liabilities), 14(1)(ii) (Works deferred for execution), 14(2)(iv) (liability for works executed prior to the cut-off date) of the 2014 Tariff Regulations.

27. The Petitioner *vide* Auditor's certificates dated 2.8.2019, 20.8.2019, 9.9.2019 has also submitted that ACE upto 31.3.2019 has been considered in the Auditor's certificate as per actuals, whereas the ACE claimed for the period from 1.4.2019 to 31.3.2020 is on estimated basis and may vary due to final claim/ reconciliation at the time of contract closing. The details of party-wise expenditure for the transmission assets after cut-off date as submitted by the Petitioner is as follows:

|                                  |                                  |         |         |         | (₹ ir   | n lakh) |
|----------------------------------|----------------------------------|---------|---------|---------|---------|---------|
| Name of Vendor                   | Name of Package                  | Year    | Asset 1 | Asset 2 | Asset 3 | Asset 4 |
| GE T&D India Ltd.                | Sub-station extension<br>package | 004740  | 58.50   | 0.00    | 0.00    | 0.00    |
| TBEA Energy<br>(INDIA) Pvt. Ltd. | Transformer package              | 2017-18 | 438.13  | 207.49  | 0.00    | 0.00    |
| GE T&D India Ltd.                | Sub-station extension<br>package | 004040  | 158.14  | 0.00    | 0.00    | 0.00    |
| TBEA Energy<br>(INDIA) Pvt. Ltd. | Transformer package              | 2018-19 | 17.52   | 192.83  | 413.35  | 430.19  |

| ABB India Ltd.                   | Sub-station extension<br>package- CSD for CB |         | 0.00 | 0.00 | 13.08 | 0.00  |
|----------------------------------|--|---------|------|------|-------|-------|
| L&T                              | Sub-station extension<br>package             |         | 0.00 | 0.00 | 11.69 | 10.55 |
| TBEA Energy<br>(INDIA) Pvt. Ltd. | Transformer package                          | 2019-20 | 0.00 | 0.00 | 0.00  | 13.00 |

28. The Petitioner has claimed ACE including the accrual IDC discharged from 2014-15 to 2018-19 period. It is observed that total estimated completion cost including ACE for the 2014-19 tariff period is within apportioned approved cost.

29. MPPMCL has submitted that PLCC/ communication system does not qualify under the definition of asset and is installed for communication. Therefore, the expenditure of PLCC/ communication system may be disallowed while computing the capital cost as on 31.3.2019. In response, the Petitioner has submitted that the PLCC/ communication system provided under this project has been used for telemetry and protection purpose only and not meant for optical fire communication. The Commission has addressed the submissions of the Petitioner and MPPMCL in subsequent paragraphs.

30. The cut-off date in case of Assets-1 and 2 is 31.3.2017 and in case of Assets-3 and 4 is 31.3.2018. The actual audited ACE claimed by the Petitioner within the cut-off date is towards un-discharged liabilities recognized to be payable at a future date and works deferred for execution and ACE claimed after the cut-off date is towards liability for works executed prior to the cut-off date. The same has been considered for computation of total capital cost as on 31.3.2019. The ACE claimed for 2014-15 to 2018-19 tariff period is allowed under Regulation 14(1)(i) & (ii) and Regulation 14(2)(iv) of the 2014 Tariff Regulations. The details of ACE allowed is as follows:-



(₹ in lakh)

|                                 |   |  |  |   |   |   | (* 111 lakii)   |
|---------------------------------|---|--|--|---|---|---|---|
| Revised                         | Capital   | A  | dditional (  | Capital E   | xpenditu  | re  | Total capital   |
| apportioned<br>approved<br>cost | cost as<br>on<br>COD                                  | 2014-<br>15  | 2015-<br>16  | 2016-<br>17   | 2017-<br>18   | 2018-<br>19   | cost as on<br>31.3.2019   |
| 5869.28                         | 3593.06   | 436.65   | 1119.59  | 376.00  | 0.00  | 0.00  | 5525.30   |
| 5869.28                         | 3598.50   | 435.64   | 276.57   | 520.87  | 496.63  | 175.67  | 5503.88   |
| 5869.28                         | 3593.05   | 436.65   | 281.00   | 520.87  | 496.63  | 175.67  | 5503.88   |
|                                 | apportioned<br>approved<br>cost<br>5869.28<br>5869.28 | apportioned<br>approved         cost as<br>on<br>COD           5869.28         3593.06           5869.28         3598.50 | apportioned<br>approved<br>cost         cost as<br>on<br>COD         2014-<br>15           5869.28         3593.06         436.65           5869.28         3598.50         435.64 | apportioned<br>approved<br>cost         cost as<br>on<br>COD         2014-<br>15         2015-<br>16           5869.28         3593.06         436.65         1119.59           5869.28         3598.50         435.64         276.57 | apportioned<br>approved<br>cost         cost as<br>on<br>COD         2014-<br>15         2015-<br>16         2016-<br>17           5869.28         3593.06         436.65         1119.59         376.00           5869.28         3598.50         435.64         276.57         520.87 | apportioned<br>approved<br>cost         cost as<br>on<br>COD         2014-<br>15         2015-<br>16         2016-<br>17         2017-<br>18           5869.28         3593.06         436.65         1119.59         376.00         0.00           5869.28         3598.50         435.64         276.57         520.87         496.63 | apportioned<br>approved<br>cost       cost as<br>on<br>COD       2014-<br>15       2015-<br>16       2016-<br>17       2017-<br>18       2018-<br>19         5869.28       3593.06       436.65       1119.59       376.00       0.00       0.00         5869.28       3598.50       435.64       276.57       520.87       496.63       175.67 |

|  |                        |                   |                                |             |             |             |             | (₹ in lakh)             |
|--|------------------------|-------------------|--------------------------------|-------------|-------------|-------------|-------------|-------------------------|
|  | Revised<br>apportioned | Capital           | Additional Capital Expenditure |             |             |             |             | Total<br>capital        |
| Asset-2  | approved<br>cost       | cost as<br>on COD | 2014-<br>15                    | 2015-<br>16 | 2016-<br>17 | 2017-<br>18 | 2018-<br>19 | cost as on<br>31.3.2019 |
| Allowed vide<br>order dated<br>27.5.2016 in<br>Petition No.<br>261/TT/2015 | 3555.27                | 2379.90           | 121.69                         | 673.32      | 171.91      | 0.00        | 0.00        | 3346.82                 |
| Claimed by the<br>Petitioner in the<br>instant petition                    | 3555.27                | 2390.73           | 117.30                         | 237.47      | 80.63       | 207.50      | 192.83      | 3226.46                 |
| Allowed after<br>true-up in this<br>order                                  | 3555.27                | 2379.90           | 121.69                         | 243.91      | 80.63       | 207.50      | 192.83      | 3226.46                 |

#### (₹ in lakh)

|  |  |         | A           | Additional Capital Expenditure Total |             |             | Total       |                                    |
|--|--|---------|-------------|--------------------------------------|-------------|-------------|-------------|------------------------------------|
| Asset-3  | Revised<br>apportioned<br>approved<br>cost | on COD  | 2014-<br>15 | 2015-<br>16                          | 2016-<br>17 | 2017-<br>18 | 2018-<br>19 | capital<br>cost as on<br>31.3.2019 |
| Allowed vide order<br>dated 27.5.2016 in<br>Petition<br>No.261/TT/2015 | 7444.40                                    | 4855.52 | 0.00        | 717.20                               | 982.43      | 95.32       | 0.00        | 6650.47                            |
| Claimed by the<br>Petitioner in the<br>instant petition                | 7444.40                                    | 4858.55 | 0.00        | 117.54                               | 463.34      | 159.60      | 438.12      | 6037.15                            |
| Allowed after true-<br>up in this order                                | 7444.40                                    | 4838.43 | 0.00        | 120.56                               | 463.34      | 159.60      | 438.12      | 6020.05                            |

|   |  |                              | Additional Capital Expenditure |             |             | <b>`</b>    |             |   |
|---|--|------------------------------|--------------------------------|-------------|-------------|-------------|-------------|---|
| Asset-4   | Revised<br>apportioned<br>approved<br>cost | Capital<br>cost as<br>on COD | 2014-<br>15                    | 2015-<br>16 | 2016-<br>17 | 2017-<br>18 | 2018-<br>19 | Total<br>capital<br>cost as on<br>31.3.2019 |
| Allowed <i>vide</i> order<br>dated 27.5.2016 in<br>Petition<br>No.261/TT/2015 | 7472.21                                    | 4515.61                      | 0.00                           | 623.54      | 881.83      | 95.32       | 0.00        | 6116.30                                     |

| Claimed by the<br>Petitioner in the<br>instant petition | 7472.21 | 4515.61 | 0.00 | 115.12 | 305.63 | 316.29 | 440.74 | 5693.39 |
|---|---------|---------|------|--------|--------|--------|--------|---------|
| Allowed after true-<br>up in this order                 | 7472.21 | 4514.28 | 0.00 | 116.45 | 305.63 | 316.29 | 440.74 | 5693.39 |

### **Debt-Equity Ratio**

31. The Petitioner has considered debt-equity ratio of 70:30 as on COD and for ACE post-COD. The debt-equity ratio of 70:30 has been considered for capital cost as on COD and ACE during the 2014-19 tariff period as provided under Regulation 19 of the 2014 Tariff Regulations. The same has been summarised as under:

|         | Capital Co<br>COI     |        | Capital Cost as on 31.3.2019 |        |  |
|---------|-----------------------|--------|------------------------------|--------|--|
|         | Amount<br>(₹ in lakh) | (%)    | Amount<br>(₹ in lakh)        | (%)    |  |
| Asset-1 |                       |        |                              |        |  |
| Debt    | 2515.14               | 70.00  | 3852.72                      | 70.00  |  |
| Equity  | 1077.92               | 30.00  | 1651.16                      | 30.00  |  |
| Total   | 3593.05               | 100.00 | 5503.88                      | 100.00 |  |
|         |                       |        |                              |        |  |
| Asset-2 |                       |        |                              |        |  |
| Debt    | 1665.93               | 70.00  | 2258.54                      | 70.00  |  |
| Equity  | 713.96                | 30.00  | 967.91                       | 30.00  |  |
| Total   | 2379.90               | 100.00 | 3226.46                      | 100.00 |  |
|         |                       |        |                              |        |  |
| Asset-3 |                       |        |                              |        |  |
| Debt    | 3386.90               | 70.00  | 4214.04                      | 70.00  |  |
| Equity  | 1451.53               | 30.00  | 1806.01                      | 30.00  |  |
| Total   | 4838.43               | 100.00 | 6020.05                      | 100.00 |  |
|         |                       |        |                              |        |  |
| Asset-4 |                       |        |                              |        |  |
| Debt    | 3160.00               | 70.00  | 3985.39                      | 70.00  |  |
| Equity  | 1354.28               | 30.00  | 1708.00                      | 30.00  |  |
| Total   | 4514.28               | 100.00 | 5693.39                      | 100.00 |  |

## Interest on Loan (IoL)

32. The Petitioner has claimed IoL based on actual interest rates for each year during the 2014-19 tariff period. The Petitioner has prayed for change in interest rates prevailing as on 1.4.2019 for respective loans. We have considered the submissions of the Petitioner and accordingly IoL allowed based on actual interest rate, in

accordance with Regulation 26 of the 2014 Tariff Regulations. IoL has been allowed as detailed below:

(i) Gross amount of loan, repayment of instalments and weighted average rate

of interest on actual average loan have been considered as per the petition.

(ii) The repayment for the 2014-19 tariff period has been considered to be equal to the depreciation allowed for that period.

33. The details of IoL allowed for Asset-1 is as follows:

|   |  |         |         |         | (₹ in la |  |  |  |  |
|---|--|---------|---------|---------|----------|--|--|--|--|
| Asset-1                                       |  |         |         |         |          |  |  |  |  |
| Particulars                                   | 2014-15<br>(Pro-rata<br>for 178<br>days) | 2015-16 | 2016-17 | 2017-18 | 2018-19  |  |  |  |  |
| Gross normative loan opening                  | 2515.14                                  | 2820.79 | 3017.49 | 3382.11 | 3729.75  |  |  |  |  |
| Cumulative repayments up to previous year     | 0.00                                     | 97.57   | 315.81  | 550.49  | 808.10   |  |  |  |  |
| Net loan-Opening                              | 2515.14                                  | 2723.22 | 2701.68 | 2831.61 | 2921.64  |  |  |  |  |
| Additions due to Additional Capitalization    | 305.66                                   | 196.70  | 364.61  | 347.64  | 122.97   |  |  |  |  |
| Repayment during the year                     | 97.57                                    | 218.24  | 234.69  | 257.61  | 275.36   |  |  |  |  |
| Net loan-Closing                              | 2723.22                                  | 2701.68 | 2831.61 | 2921.64 | 2769.26  |  |  |  |  |
| Average Loan                                  | 2619.18                                  | 2712.45 | 2766.65 | 2876.63 | 2845.45  |  |  |  |  |
| Weighted Average Rate of Interest on Loan (%) | 9.610                                    | 9.405   | 9.182   | 8.745   | 8.599    |  |  |  |  |
| Interest on Loan                              | 122.75                                   | 255.11  | 254.04  | 251.55  | 244.68   |  |  |  |  |

34. IoL allowed *vide* order dated 27.5.2016 in Petition No.261/TT/2015, IoL claimed by the Petitioner in the instant petition and trued-up IoL allowed vide this order in respect of Asset-1 is shown in the table below:

|  |         |         |         |         | (       |  |  |  |
|--|---------|---------|---------|---------|---------|--|--|--|
| Asset-1  |         |         |         |         |         |  |  |  |
| Particulars  | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |  |  |
| Allowed <i>vide</i> order dated<br>27.5.2016 in Petition<br>No.261/TT/2015 | 122.10  | 285.70  | 311.46  | 297.95  | 271.55  |  |  |  |
| Claimed by the Petitioner in the instant petition                          | 122.66  | 254.93  | 252.62  | 249.37  | 241.74  |  |  |  |
| Allowed after true-up in this order  | 122.75  | 255.11  | 254.04  | 251.55  | 244.68  |  |  |  |



|  |  |         |         |         | (₹ in lakh) |  |  |  |
|--|--|---------|---------|---------|-------------|--|--|--|
| Asset-2  |  |         |         |         |             |  |  |  |
| Particulars                                      | 2014-15<br>(Pro-rata<br>for 139<br>days) | 2015-16 | 2016-17 | 2017-18 | 2018-19     |  |  |  |
| Gross normative loan opening                     | 1665.93                                  | 1751.12 | 1921.87 | 1978.31 | 2123.56     |  |  |  |
| Cumulative repayments up to previous year        | 0.00                                     | 49.00   | 187.44  | 334.57  | 489.33      |  |  |  |
| Net loan-Opening                                 | 1665.93                                  | 1702.11 | 1734.43 | 1643.74 | 1634.23     |  |  |  |
| Additions due to Additional<br>Capitalization    | 85.18                                    | 170.75  | 56.44   | 145.25  | 134.98      |  |  |  |
| Repayment during the year                        | 49.00                                    | 138.43  | 147.13  | 154.76  | 165.33      |  |  |  |
| Net loan-Closing                                 | 1702.11                                  | 1734.43 | 1643.74 | 1634.23 | 1603.88     |  |  |  |
| Average Loan                                     | 1684.02                                  | 1718.27 | 1689.09 | 1638.99 | 1619.06     |  |  |  |
| Weighted Average Rate of<br>Interest on Loan (%) | 10.015                                   | 9.603   | 9.293   | 8.519   | 8.290       |  |  |  |
| Interest on Loan                                 | 64.23                                    | 165.01  | 156.96  | 139.62  | 134.21      |  |  |  |

36. IoL allowed *vide* order dated 27.5.2016 in Petition No.261/TT/2015, IoL claimed by the Petitioner in the instant petition and trued-up IoL allowed vide this order in respect of Asset-2 is shown in the table below:

|   |         |         |         |         | (₹ in lakh) |  |  |  |
|---|---------|---------|---------|---------|-------------|--|--|--|
| Asset-2   |         |         |         |         |             |  |  |  |
| Particulars   | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19     |  |  |  |
| Allowed vide order dated<br>27.5.2016 in Petition<br>No.261/TT/2015 | 63.48   | 184.00  | 197.42  | 186.28  | 169.01      |  |  |  |
| Claimed by the Petitioner in the instant petition                   | 64.21   | 165.63  | 156.67  | 139.08  | 133.46      |  |  |  |
| Allowed after true-up in this order                                 | 64.23   | 165.01  | 156.96  | 139.62  | 134.21      |  |  |  |

37. The details of IoL allowed for Asset-3 is as follows:

|                             |                                       |         |         | (₹ in lakh) |  |  |  |  |  |
|-----------------------------|---------------------------------------|---------|---------|-------------|--|--|--|--|--|
| Asset-3                     |                                       |         |         |             |  |  |  |  |  |
| Particulars                 | 2015-16<br>(Pro-rata for 200<br>days) | 2016-17 | 2017-18 | 2018-19     |  |  |  |  |  |
| Gross Normative Loan        | 3386.90                               | 3471.29 | 3795.63 | 3907.35     |  |  |  |  |  |
| Cumulative Repayments up to |                                       |         |         |             |  |  |  |  |  |
| Previous Year               | 0.00                                  | 139.63  | 410.48  | 697.54      |  |  |  |  |  |
| Net Loan-Opening            | 3386.90                               | 3331.66 | 3385.15 | 3209.82     |  |  |  |  |  |
| Additions due to Additional |                                       |         |         |             |  |  |  |  |  |
| Capitalization              | 84.39                                 | 324.34  | 111.72  | 306.68      |  |  |  |  |  |
| Repayment during the year   | 139.63                                | 270.85  | 287.05  | 302.59      |  |  |  |  |  |



| Net Loan-Closing         | 3331.66 | 3385.15 | 3209.82 | 3213.91 |
|--------------------------|---------|---------|---------|---------|
| Average Loan             | 3359.28 | 3358.40 | 3297.48 | 3211.86 |
| Weighted Average Rate of |         |         |         |         |
| Interest on Loan (%)     | 9.504   | 9.270   | 8.694   | 8.534   |
| Interest on Loan         | 174.46  | 311.32  | 286.67  | 274.11  |

38. IoL allowed *vide* order dated 27.5.2016 in Petition No.261/TT/2015, IoL claimed by the Petitioner in the instant petition and trued-up IoL allowed vide this order in respect of Asset-3 is shown in the table below:

(₹ in lakh)

| Asset-3  |         |         |         |         |  |  |  |  |  |
|--|---------|---------|---------|---------|--|--|--|--|--|
| Particulars  | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |  |  |  |  |
| Allowed <i>vide</i> order dated 27.5.2016 in Petition No.261/TT/2015 | 192.19  | 386.39  | 391.24  | 360.97  |  |  |  |  |  |
| Claimed by the Petitioner in the instant petition                    | 175.03  | 312.16  | 287.00  | 273.93  |  |  |  |  |  |
| Allowed after true-up in this order                                  | 174.46  | 311.32  | 286.67  | 274.11  |  |  |  |  |  |

39. The details of IoL allowed for Asset-4 is as follows:

|   |   |         |         | (₹ in lakh) |  |  |  |  |
|---|---|---------|---------|-------------|--|--|--|--|
| Asset-4                                       |   |         |         |             |  |  |  |  |
| Particulars                                   | 2015-16<br>Pro-rata<br>for 199<br>days) | 2016-17 | 2017-18 | 2018-19     |  |  |  |  |
| Gross normative loan opening                  | 3160.00                                 | 3241.52 | 3455.47 | 3676.87     |  |  |  |  |
| Cumulative repayments up to<br>previous year  | 0.00                                    | 129.47  | 378.46  | 643.59      |  |  |  |  |
| Net loan-Opening                              | 3160.00                                 | 3112.05 | 3077.01 | 3033.28     |  |  |  |  |
| Additions                                     | 81.52                                   | 213.95  | 221.40  | 308.52      |  |  |  |  |
| Repayment during the year                     | 129.47                                  | 248.98  | 265.14  | 284.94      |  |  |  |  |
| Net loan-Closing                              | 3112.05                                 | 3077.01 | 3033.28 | 3056.86     |  |  |  |  |
| Average Loan                                  | 3136.02                                 | 3094.53 | 3055.15 | 3045.07     |  |  |  |  |
| Weighted Average Rate of Interest on Loan (%) | 9.542                                   | 9.286   | 8.573   | 8.364       |  |  |  |  |
| Interest on Loan                              | 162.70                                  | 287.36  | 261.92  | 254.70      |  |  |  |  |

40. IoL allowed *vide* order dated 27.5.2016 in Petition No.261/TT/2015, IoL claimed by the Petitioner in the instant petition and trued-up IoL allowed vide this order in respect of Asset-4 is shown in the table below:



|  |        |        |        | (₹ in lakh) |  |  |
|--|--------|--------|--------|-------------|--|--|
| Asset-4  |        |        |        |             |  |  |
| Particulars 2015-16 2016-17 2017-18 20                               |        |        |        |             |  |  |
| Allowed <i>vide</i> order dated 27.5.2016 in Petition No.261/TT/2015 | 178.90 | 359.23 | 363.24 | 335.33      |  |  |
| Claimed by the Petitioner in the instant petition                    | 162.66 | 287.20 | 261.37 | 253.86      |  |  |
| Allowed after true-up in this order                                  | 162.70 | 287.36 | 261.92 | 254.70      |  |  |

### **Return on Equity (RoE)**

41. The Petitioner is entitled to RoE for the transmission assets in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at MAT rates and has claimed following effective tax rates for the 2014-19 tariff period:

| Year    | Claimed effective tax<br>(%) | Grossed up ROE<br>[Base Rate/(1-t)]<br>(%) |
|---------|------------------------------|--|
| 2014-15 | 21.018                       | 19.625                                     |
| 2015-16 | 21.382                       | 19.716                                     |
| 2016-17 | 21.338                       | 19.705                                     |
| 2017-18 | 21.337                       | 19.704                                     |
| 2018-19 | 21.549                       | 19.758                                     |

42. With regard to calculation of effective tax rate, MPPMCL has submitted that the Petitioner has not placed on record the Assessment Order for the period 2014-15, 2015-16, 2016-17 and 2017-18 and the grossed-up RoE has not been claimed on the basis of actual taxes paid for the year 2018-19. MPPMCL has further pointed out that the audited accounts in respect of actual taxes paid for 2016-17 and 2017-18 has also not been enclosed with the current petition. In response, the Petitioner in its rejoinder has submitted that the Income Tax assessment has been completed and Assessment Orders has been issued by the Income Tax Department for 2014-15 and 2015-16 and the Income Tax returns have been filed with the Income Tax Department for the years 2016-17, 2017-18, 2018-19. The Petitioner has further submitted that effective rate of tax considered for 2014-15 and 2015-16 are based on Assessment



Orders issued by Income-Tax authorities, for grossing up of RoE rate and that the effective rate of tax considered for 2016-17 and 2017-18 are based on the Income-tax returns filed, for the purpose of grossing up of RoE rate of respective years. Further, for 2018-19, effective tax rate is based the applicable MAT rate (i.e. MAT 18.50% + Surcharge 12.00% + Cess 4%) for the purpose of grossing up of RoE rate.

43. The Petitioner has also submitted the details (Section-wise of Income Tax Act) of 'Total Tax & Interest Paid', 'Assessed MAT Income' and 'Refund of Tax and interest recovered thereon or additional payment of tax and penalty for short deposited tax' duly certified by the Auditor on affidavit along with its rejoinder.

44. Accordingly, the effective tax rate for the purpose of grossing up RoE considered for 2014-15 and 2015-16 are based on Assessment orders issued by the Income-Tax Authorities; for 2016-17 and 2017-18, they are based on the Income Tax Returns filed; and for 2018-19, pending filing of the Income Tax Return, is based on the applicable MAT rate for the purpose of grossing up of RoE.

45. We have considered the submissions of the Petitioner and MPPMCL. The Commission in order dated 27.4.2020 in Petition No.274/TT/2019 has arrived at the effective tax rate based on the notified MAT rates for the Petitioner. The relevant extracts of the order dated 27.4.2020 in Petition No.274/TT/2019 is as under:

"26. We are conscious that the entities covered under MAT regime are paying Income Tax as per MAT rate notified for respective financial year under IT Act, 1961, which is levied on the book profit of the entity computed as per the Section 115JB of the IT Act, 1961. The Section 115JB(2) defines book profit as net profit in the statement of Profit & Loss prepared in accordance with Schedule-III of the Companies Act, 2013, subject to some additions and deductions as mentioned in the IT Act, 1961. Since the Petitioner has been paying income tax on income computed under Section 115JB of the IT Act, 1961 as per the MAT rates of the respective financial year, the notified MAT rate for respective financial year shall be considered as effective tax rate for the purpose of grossing up of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. Interest imposed on any additional income tax demand as per the Assessment Order of the Income Tax



authorities shall be considered on actual payment. However, penalty (for default on the part of the Assessee) if any imposed shall not be taken into account for the purpose of grossing up of rate of return on equity. Any under-recovery or overrecovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term transmission customers/ DICs as the case may be on year to year basis.

27. Accordingly, following effective tax rates based on notified MAT rates are considered for the purpose of grossing up of rate of return on equity:

| Year    | Notified MAT rates (inclusive of<br>surcharge & cess) | Effective tax (in %) |
|---------|---|----------------------|
| 2014-15 | 20.961  | 20.961               |
| 2015-16 | 21.342  | 21.342               |
| 2016-17 | 21.342  | 21.342               |
| 2017-18 | 21.342  | 21.342               |
| 2018-19 | 21.549  | 21.549               |

46. The same MAT rates as considered in order dated 27.4.2020 in Petition No. 274/TT/2019 are considered for the purpose of grossing up of rate of RoE for truingup of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. Accordingly, the grossed up RoE rate is as follows:

| Year    | Notified MAT rates<br>(inclusive of<br>surcharge & cess)<br>(In %) | Base rate of<br>RoE<br>(In %) | Grossed up RoE<br>[Base Rate/(1-t)]<br>(In %) |
|---------|--|-------------------------------|---|
| 2014-15 | 20.961   | 15.50                         | 19.610  |
| 2015-16 | 21.342   | 15.50                         | 19.705  |
| 2016-17 | 21.342   | 15.50                         | 19.705  |
| 2017-18 | 21.342   | 15.50                         | 19.705  |
| 2018-19 | 21.549   | 15.50                         | 19.758  |

47. RoE allowed for Asset-1 is as follows:

,,

(₹ in lakh)

| Asset-1   |  |         |         |         |         |  |
|---|--|---------|---------|---------|---------|--|
| Particulars   | 2014-15<br>(Pro-rata<br>for 178<br>days) | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |
| Net Opening Equity                                    | 1077.92                                  | 1208.91 | 1293.21 | 1449.47 | 1598.46 |  |
| Increase in Equity due to<br>addition during the year | 131.00                                   | 84.30   | 156.26  | 148.99  | 52.70   |  |
| Closing Equity  | 1208.91                                  | 1293.21 | 1449.47 | 1598.46 | 1651.16 |  |

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| Average Equity                      | 1143.41 | 1251.06 | 1371.34 | 1523.97 | 1624.81 |
|-------------------------------------|---------|---------|---------|---------|---------|
| Return on Equity (Base Rate)<br>(%) | 15.500  | 15.500  | 15.500  | 15.500  | 15.500  |
| Tax Rate applicable (%)             | 20.961  | 21.342  | 21.342  | 21.342  | 21.549  |
| Applicable ROE Rate (%)             | 19.610  | 19.705  | 19.705  | 19.705  | 19.758  |
| Return on Equity for the year       | 109.35  | 246.52  | 270.22  | 300.30  | 321.03  |

48. RoE allowed *vide* order dated 27.5.2016 in Petition No. 261/TT/2015, RoE claimed by the Petitioner in the instant petition and trued-up RoE allowed vide this order in respect of Asset-1 is shown in the table below:

|   |        |        |        |        | (₹ in lakh) |
|---|--------|--------|--------|--------|-------------|
| Asset-1   |        |        |        |        |             |
| Particulars 2014-15 2015-16 2016-17 2017-18                         |        |        |        |        | 2018-19     |
| Allowed vide order dated<br>27.5.2016 in Petition<br>No.261/TT/2015 | 109.35 | 270.01 | 314.00 | 325.06 | 325.06      |
| Claimed by the Petitioner in the instant petition                   | 109.43 | 246.65 | 270.22 | 300.30 | 321.03      |
| Allowed after true-up in this order                                 | 109.35 | 246.52 | 270.22 | 300.30 | 321.03      |

49. RoE allowed for Asset-2 is as follows:

|   |  |         |         |         | (< m lakn) |
|---|--|---------|---------|---------|------------|
|   | Ass                                      | et-2    |         |         | -          |
| Particulars   | 2014-15<br>(Pro-rata<br>for 139<br>days) | 2015-16 | 2016-17 | 2017-18 | 2018-19    |
| Net Opening Equity                                    | 713.96                                   | 750.47  | 823.63  | 847.81  | 910.06     |
| Increase in Equity due to<br>addition during the year | 36.51                                    | 73.15   | 24.19   | 62.25   | 57.85      |
| Closing Equity  | 750.47                                   | 823.63  | 847.81  | 910.06  | 967.91     |
| Average Equity  | 732.22                                   | 787.05  | 835.72  | 878.94  | 938.99     |
| Return on Equity (Base Rate)<br>(%)                   | 15.500                                   | 15.500  | 15.500  | 15.500  | 15.500     |
| Tax Rate applicable (%)                               | 20.961                                   | 21.342  | 21.342  | 21.342  | 21.549     |
| Applicable ROE Rate (%)                               | 19.610                                   | 19.705  | 19.705  | 19.705  | 19.758     |
| Return on Equity for the year                         | 54.68                                    | 155.09  | 164.68  | 173.19  | 185.53     |

50. RoE allowed *vide* order dated 27.5.2016 in Petition No.261/TT/2015, RoE claimed by the Petitioner in the instant petition and trued-up RoE allowed vide this order in respect of Asset-2 is shown in the table below:



(₹ in lakh)

| Asset-2  |         |         |         |         |         |  |
|--|---------|---------|---------|---------|---------|--|
| Particulars  | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |
| Allowed <i>vide</i> order dated<br>27.5.2016 in Petition<br>No.261/TT/2015 | 54.68   | 166.98  | 191.84  | 196.90  | 196.90  |  |
| Claimed by the Petitioner in the instant petition                          | 54.72   | 155.17  | 164.68  | 173.20  | 185.53  |  |
| Allowed after true-up in this order  | 54.68   | 155.09  | 164.68  | 173.19  | 185.53  |  |

51. RoE allowed for Asset-3 is as follows:

(₹ in lakh)

| Asset-3   |                                       |         |         |         |  |  |  |
|---|---------------------------------------|---------|---------|---------|--|--|--|
| Particular  | 2015-16<br>(Pro-rata for<br>200 days) | 2016-17 | 2017-18 | 2018-19 |  |  |  |
| Net Opening Equity                                    | 1451.53                               | 1487.70 | 1626.70 | 1674.58 |  |  |  |
| Increase in Equity due to addition<br>during the year | 36.17                                 | 139.00  | 47.88   | 131.44  |  |  |  |
| Closing Equity  | 1487.70                               | 1626.70 | 1674.58 | 1806.01 |  |  |  |
| Average Equity  | 1469.61                               | 1557.20 | 1650.64 | 1740.29 |  |  |  |
| Return on Equity (Base Rate) (%)                      | 15.500                                | 15.500  | 15.500  | 15.500  |  |  |  |
| Tax Rate applicable (%)                               | 21.342                                | 21.342  | 21.342  | 21.549  |  |  |  |
| Applicable ROE Rate (%)                               | 19.705                                | 19.705  | 19.705  | 19.758  |  |  |  |
| Return on Equity for the year                         | 158.24                                | 306.85  | 325.26  | 343.85  |  |  |  |

52. RoE allowed *vide* order dated 27.5.2016 in Petition No.261/TT/2015, RoE claimed by the Petitioner in the instant petition and trued-up RoE allowed vide this order in respect of Asset-3 is shown in the table below:

(₹ in lakh)

| Asset-3  |         |         |         |         |  |
|--|---------|---------|---------|---------|--|
| Particulars  | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |
| Allowed <i>vide</i> order dated 27.5.2016 in Petition No.261/TT/2015 | 168.08  | 356.75  | 388.45  | 391.26  |  |
| Claimed by the Petitioner in the instant petition                    | 158.88  | 307.86  | 326.27  | 344.86  |  |
| Allowed after true-up in this order                                  | 158.24  | 306.85  | 325.26  | 343.85  |  |

53. RoE allowed for Asset-4 is as follows:



(₹ in lakh)

|                                    | Asset-4             |         |         |         |
|------------------------------------|---------------------|---------|---------|---------|
| Particulars                        | 2015-16             | 2016-17 | 2017-18 | 2018-19 |
|                                    | Pro-rata<br>for 199 |         |         |         |
|                                    | days)               |         |         |         |
| Net Opening Equity                 | 1354.28             | 1389.22 | 1480.89 | 1575.78 |
| Increase in Equity due to addition | 34.93               | 91.68   | 94.89   | 132.22  |
| during the year                    | 34.93               | 91.00   | 94.09   | 132.22  |
| Closing Equity                     | 1389.21             | 1480.89 | 1575.78 | 1708.00 |
| Average Equity                     | 1371.75             | 1435.05 | 1528.33 | 1641.89 |
| Return on Equity (Base Rate) (%)   | 15.500              | 15.500  | 15.500  | 15.500  |
| Tax Rate applicable (%)            | 20.961              | 21.342  | 21.342  | 21.342  |
| Applicable ROE Rate (%)            | 19.610              | 19.705  | 19.705  | 19.705  |
| Return on Equity for the year      | 146.97              | 282.78  | 301.16  | 324.40  |

54. RoE allowed *vide* order dated 27.5.2016 in Petition No.261/TT/2015, RoE claimed by the Petitioner in the instant petition and trued-up RoE allowed vide this order in respect of Asset-4 is shown in the table below:

|  |         |         | (₹      | in lakh) |  |
|--|---------|---------|---------|----------|--|
| Asset-4  |         |         |         |          |  |
| Particulars  | 2015-16 | 2016-17 | 2017-18 | 2018-19  |  |
| Allowed <i>vide</i> order dated 27.5.2016 in Petition No.261/TT/2015 | 154.84  | 328.28  | 357.03  | 359.83   |  |
| Claimed by the Petitioner in the instant petition                    | 147.04  | 282.78  | 301.16  | 324.40   |  |
| Allowed after true-up in this order                                  | 146.97  | 282.78  | 301.16  | 324.40   |  |

# **Depreciation**

55. The transmission assets were put into commercial operation during the 2014-19 tariff period and the tariff from COD to 31.3.2019 was determined *vide* order dated 27.5.2016 in Petition No. 261/TT/2015. It is observed that the Petitioner did not claim any capital expenditure towards "IT Equipment" in the earlier petition where tariff for the transmission assets for the 2014-19 tariff period was determined even though there was a clear provision in the 2014 Tariff Regulations providing depreciation at the rate of 15% for IT Equipment. It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" at the rate of 15% at the time of truing up of the tariff for the 2014-19 tariff period. The Petitioner has at the time of truing up of the tariff allowed for the 2014-19 tariff period has apportioned a part of the capital expenditure to "IT Equipment". Similar issue had come up in Petition No.19/TT/2020 wherein the Commission *vide* order dated 9.5.2020 decided as under:

"31. We have considered the submissions of the Petitioner. The instant assets were put into commercial operation during the 2009-14 period and the tariff from the respective CODs to 31.3.2014 was allowed vide orders dated 30.8.2012and 9.5.2013in Petition No.343/2010 and Petition No. 147/TT/2011 respectively. Further, the tariff of the 2009-14 period was trued up and tariff for the 2014-19 period was allowed vide order dated 25.2.2016 in Petition No.10/TT/2015. The Petitioner did not claim any capital expenditure towards "IT Equipment" in the above said three petitions where tariff for the instant assets for the 2009-14 period was allowed, tariff of the 2009-14 period was trued up and tariff for 2014- 19 period was allowed even though there was a clear provision in the 2009 Tariff Regulations and 2014 Tariff Regulations providing depreciation @15% for IT Equipment. Having failed to make a claim as per the 2009 Tariff Regulations(the period during which COD of assets was achieved), the Petitioner has now, at the time of truing up of the tariff allowed for the 2014-19 period has apportioned a part of the capital expenditure to "IT Equipment". The Petitioner has adopted similar methodology not only in this but in some of the other petitions listed along with the instant petition on 26.2.2020. It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @15% at the time of truing up of the tariff of 2014-19 period. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the additional capital expenditure, incurred upto 31.3.2019, admitted by the Commission after prudence check. We are of the view that scope of truing up exercise is restricted to truing up of the capital expenditure already admitted and apportionment or reapportionment of the capital expenditure cannot be allowed at the time of truing up. Therefore, we are not inclined to consider the Petitioner's prayer for apportionment of capital expenditure towards IT Equipment and allowing depreciation @ 15% from 1.4.2014 onwards. Accordingly, the depreciation @ 5.28% has been considered for IT Equipment as part of the substation upto 31.3.2019 while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @ 15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations."

56. In line with the above order dated 9.5.2020, depreciation has been considered @5.28% for IT Equipment as part of the sub-station upto 31.3.2019 while truing-up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @15% for the balance depreciable value of IT Equipment in accordance with

Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations.

57. The Gross Block during the tariff period 2014-19 has been depreciated at weighted average rate of depreciation (WAROD) and working of WAROD is given in Annexure-1. The Weighted Average of Depreciation (WAROD) has been worked out after taking into account the depreciation rate as prescribed in the 2014 Tariff Regulations.

The trued-up depreciation allowed for Asset-1 is as under:

|   |  |         |         |         | (₹ in lakh) |  |
|---|--|---------|---------|---------|-------------|--|
| Asset-1   |  |         |         |         |             |  |
| Particulars   | 2014-15<br>(Pro-rata<br>for 178<br>days) | 2015-16 | 2016-17 | 2017-18 | 2018-19     |  |
| Opening Gross Block   | 3593.05                                  | 4029.71 | 4310.71 | 4831.58 | 5328.21     |  |
| Additional Capitalisation   | 436.65                                   | 281     | 520.87  | 496.63  | 175.67      |  |
| Closing Gross Block   | 4029.71                                  | 4310.71 | 4831.58 | 5328.21 | 5503.88     |  |
| Average Gross Block   | 3811.38                                  | 4170.21 | 4571.14 | 5079.89 | 5416.04     |  |
| Weighted average rate of Depreciation (WAROD) (%)                     | 5.25                                     | 5.23    | 5.13    | 5.07    | 5.08        |  |
| Balance useful life of the asset at the beginning of the year (years) | 25                                       | 24      | 23      | 22      | 21          |  |
| Aggregate Depreciable Value   | 3430.24                                  | 3753.19 | 4114.03 | 4571.91 | 4874.44     |  |
| Depreciation during the<br>year                                       | 97.57                                    | 218.24  | 234.69  | 257.61  | 275.36      |  |
| Remaining Aggregate<br>Depreciable Value at the end<br>of year        | 3332.67                                  | 3437.38 | 3563.53 | 3763.8  | 3790.98     |  |

58.

59. Depreciation allowed vide order dated 27.5.2016 in Petition No.261/TT/2015,

depreciation claimed by the Petitioner in the instant petition and trued-up depreciation

vide this order in respect of Asset-1 is shown in the table below:



| <b>(</b> ₹ i | in la | akh) |
|--------------|-------|------|
|--------------|-------|------|

| Asset-1   |         |         |         |         |         |
|---|---------|---------|---------|---------|---------|
| Particulars   | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Allowed vide order dated<br>27.5.2016 in Petition<br>No.261/TT/2015 | 97.57   | 236.77  | 269.56  | 277.17  | 277.17  |
| Claimed by the Petitioner in the instant petition                   | 101.13  | 226.48  | 243.37  | 266.74  | 284.49  |
| Allowed after true-up in this order                                 | 97.57   | 218.24  | 234.69  | 257.61  | 275.36  |

60. The trued-up depreciation allowed for Asset-2 is as under:

(₹ in lakh)

|   |  |         |         | (       |         |
|---|--|---------|---------|---------|---------|
|   | As                                       | set-2   |         |         |         |
| Particulars   | 2014-15<br>(Pro-rata<br>for 139<br>days) | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Opening Gross Block   | 2379.90                                  | 2501.59 | 2745.50 | 2826.13 | 3033.63 |
| Additional Capitalisation   | 121.69                                   | 243.91  | 80.63   | 207.50  | 192.83  |
| Closing Gross Block   | 2501.59                                  | 2745.50 | 2826.13 | 3033.63 | 3226.46 |
| Average Gross Block   | 2440.74                                  | 2623.54 | 2785.81 | 2929.88 | 3130.04 |
| Weighted average rate of Depreciation (WAROD) (%)                     | 5.27                                     | 5.28    | 5.28    | 5.28    | 5.28    |
| Balance useful life of the asset at the beginning of the year (years) | 25                                       | 24      | 23      | 22      | 21      |
| Aggregate Depreciable Value   | 2196.67                                  | 2361.19 | 2507.23 | 2636.89 | 2817.04 |
| Depreciation during the year  | 49.00                                    | 138.43  | 147.13  | 154.76  | 165.33  |
| Remaining Aggregate<br>Depreciable Value at the end<br>of year        | 2147.66                                  | 2173.75 | 2172.66 | 2147.56 | 2162.37 |

61. Depreciation allowed vide order dated 27.5.2016 in Petition No.261/TT/2015,

depreciation claimed by the Petitioner in the instant petition and trued-up depreciation

allowed in this order in respect of Asset-2 is shown in the table below:

| Asset-2  |         |         |         |         |         |
|--|---------|---------|---------|---------|---------|
| Particulars  | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Allowed <i>vide</i> order dated<br>27.5.2016 in Petition<br>No.261/TT/2015 | 49.00   | 149.19  | 170.80  | 175.12  | 175.12  |
| Claimed by the Petitioner in the instant petition                          | 49.71   | 140.70  | 149.57  | 157.20  | 167.77  |
| Allowed after true-up in this order  | 49.00   | 138.43  | 147.13  | 154.76  | 165.33  |

62. The trued-up depreciation allowed for Asset-3 is as under:

|   |                                       |         |         | (₹ in lakh) |
|---|---------------------------------------|---------|---------|-------------|
|   | Asset-3                               |         |         |             |
| Particular  | 2015-16<br>(Pro-rata for<br>200 days) | 2016-17 | 2017-18 | 2018-19     |
| Opening Gross Block   | 4838.43                               | 4958.99 | 5422.33 | 5581.93     |
| Additional Capitalisation   | 120.56                                | 463.34  | 159.6   | 438.12      |
| Closing Gross Block   | 4958.99                               | 5422.33 | 5581.93 | 6020.05     |
| Average Gross Block   | 4898.71                               | 5190.66 | 5502.13 | 5800.99     |
| Weighted average rate of<br>Depreciation (WAROD) (%)                  | 5.22                                  | 5.22    | 5.22    | 5.22        |
| Balance useful life of the asset at the beginning of the year (Years) | 25                                    | 24      | 23      | 22          |
| Aggregate Depreciable Value   | 4408.84                               | 4671.59 | 4951.92 | 5220.89     |
| Depreciation during the year  | 139.63                                | 270.85  | 287.05  | 302.59      |
| Remaining Aggregate Depreciable Value at the end of the year          | 4269.21                               | 400.74  | 4664.87 | 4918.3      |

63. Depreciation allowed vide order dated 27.5.2016 in Petition No. 261/TT/2015,

depreciation claimed by the Petitioner in the instant petition and trued-up depreciation

allowed in this order in respect of Asset-3 is shown in the table below:

|  |         |         | (₹ ir   | n lakh) |  |  |
|--|---------|---------|---------|---------|--|--|
| Asset-3  |         |         |         |         |  |  |
| Particulars  | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |  |
| Allowed <i>vide</i> order dated 27.5.2016 in Petition No.261/TT/2015 | 148.74  | 314.21  | 341.21  | 343.66  |  |  |
| Claimed by the Petitioner in the instant petition                    | 141.92  | 275.05  | 291.24  | 306.79  |  |  |
| Allowed after true-up in this order                                  | 139.63  | 270.85  | 287.05  | 302.59  |  |  |

64. The trued-up depreciation allowed for Asset-4 is as under:

|   |  |         |         | (₹ in lakh) |
|---|--|---------|---------|-------------|
|   | Asset-4                                  |         |         |             |
| Particulars                                       | 2015-16<br>(Pro-rata<br>for 199<br>days) | 2016-17 | 2017-18 | 2018-19     |
| Opening Gross Block                               | 4514.28                                  | 4630.73 | 4936.36 | 5252.65     |
| Additional Capitalisation                         | 116.45                                   | 305.63  | 316.29  | 440.74      |
| Closing Gross Block                               | 4630.73                                  | 4936.36 | 5252.65 | 5693.39     |
| Average Gross Block                               | 4572.51                                  | 4783.55 | 5094.51 | 5473.02     |
| Weighted average rate of Depreciation (WAROD) (%) | 5.21                                     | 5.21    | 5.20    | 5.21        |



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| Balance useful life of the asset at the beginning of the year (years) | 25      | 24      | 23      | 22      |
|---|---------|---------|---------|---------|
| Depreciable Value   | 4115.25 | 4305.19 | 4585.05 | 4925.72 |
| Depreciation during the year  | 129.47  | 248.98  | 265.14  | 284.94  |
| Remaining depreciable Value at the end of year                        | 3985.78 | 3926.73 | 3941.46 | 3997.19 |

65. Depreciation allowed *vide* order dated 27.5.2016 in Petition No.261/TT/2015, depreciation claimed by the Petitioner in the instant petition and trued-up depreciation allowed in this order in respect of Asset-4 is shown in the table below:

|  |         |         |         | (₹ in lakh) |
|--|---------|---------|---------|-------------|
|  | Asset-4 |         |         |             |
| Particulars  | 2015-16 | 2016-17 | 2017-18 | 2018-19     |
| Allowed <i>vide</i> order dated 27.5.2016 in Petition No.261/TT/2015 | 136.94  | 289.27  | 313.97  | 316.42      |
| Claimed by the Petitioner in the instant petition                    | 131.26  | 252.27  | 268.42  | 288.23      |
| Allowed after true-up in this order                                  | 129.47  | 248.98  | 265.14  | 284.94      |

### **Operation & Maintenance Expenses (O&M Expenses)**

66. The details of the O&M Expenses claimed by the Petitioner in respect of transmission assets covered in the instant petition and allowed under Regulation 29(3) of the 2014 Tariff Regulations for purpose of tariff are as under:

(₹ in lakh)

| Asset-1                                      |  |         |         |         |         |  |  |
|--|--|---------|---------|---------|---------|--|--|
| Particulars                                  | 2014-15<br>(Pro-rata<br>for 178<br>days) | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |  |
| 765 kV Bays at Jabalpur Pooling Sub-station: |  |         |         |         |         |  |  |
| No. of Bays                                  | 2  | 2       | 2       | 2       | 2       |  |  |
| Norms (₹ lakh/Bay)                           | 84.42                                    | 87.22   | 90.12   | 93.11   | 96.20   |  |  |
| Total O&M Expenses (Claimed)                 | 82.34                                    | 174.44  | 180.24  | 186.22  | 192.40  |  |  |
| Total O&M Expenses (Approved)                | 82.34                                    | 174.44  | 180.24  | 186.22  | 192.40  |  |  |

| Asset-2     |  |         |         |         |         |
|-------------|--|---------|---------|---------|---------|
| Particulars | 2014-15<br>(Pro-rata<br>for 139<br>days) | 2015-16 | 2016-17 | 2017-18 | 2018-19 |

| Asset-2                          |  |         |         |         |         |  |  |
|----------------------------------|--|---------|---------|---------|---------|--|--|
| Particulars                      | 2014-15<br>(Pro-rata<br>for 139<br>days) | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |  |
| 765 kV Bays at Bina Su           | 765 kV Bays at Bina Sub-station:         |         |         |         |         |  |  |
| No. of Bays                      | 1  | 1       | 1       | 1       | 1       |  |  |
| Norms (₹ lakh/Bay)               | 84.42                                    | 87.22   | 90.12   | 93.11   | 96.20   |  |  |
| Total O&M Expenses<br>(Claimed)  | 32.15                                    | 87.22   | 90.12   | 93.11   | 96.20   |  |  |
| Total O&M Expenses<br>(Approved) | 32.15                                    | 87.22   | 90.12   | 93.11   | 96.20   |  |  |

#### (₹ in lakh)

| Asset-3                             |  |         |         |         |  |  |
|-------------------------------------|--|---------|---------|---------|--|--|
| Particulars                         | 2015-16<br>(Pro-rata<br>for 200<br>days) | 2016-17 | 2017-18 | 2018-19 |  |  |
| 765 kV Bays at Jabalpur Pooling Sub | o-station:                               |         |         |         |  |  |
| No. of Bays                         | 3  | 3       | 3       | 3       |  |  |
| Norms (₹ lakh/Bay)                  | 87.22                                    | 90.12   | 93.11   | 96.20   |  |  |
| Total O&M Expenses (Claimed)        | 142.98                                   | 270.36  | 279.33  | 288.60  |  |  |
| Total O&M Expenses (Approved)       | 142.98                                   | 270.36  | 279.33  | 288.60  |  |  |

(₹ in lakh)

| Asset-4                             |  |              |              |         |  |  |
|-------------------------------------|--|--------------|--------------|---------|--|--|
| Particulars                         | 2015-16<br>(Pro-rata<br>for 199<br>days) | 2016-17      | 2017-18      | 2018-19 |  |  |
| 765 kV Bays at Jabalpur Pooling Sub | o-station and I                          | Dharamjaygar | h Sub-statio | on:     |  |  |
| No. of Bays                         | 3  | 3            | 3            | 3       |  |  |
| Norms (₹ lakh/Bay)                  | 87.22                                    | 90.12        | 93.11        | 96.20   |  |  |
| Total O&M Expenses (Claimed)        | 142.27                                   | 270.36       | 279.33       | 288.60  |  |  |
| Total O&M Expenses (Approved)       | 142.27                                   | 270.36       | 279.33       | 288.60  |  |  |

## Interest on Working Capital (IWC)

67. The Petitioner is entitled to claim IWC as per Regulation 28 of the 2014 Tariff

Regulations as under:

### i. Maintenance spares:

Maintenance spares have been worked out based on 15% of O&M Expenses specified in Regulation 28.

### ii. O&M Expenses:

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

## iii. Receivables:

The receivables have been worked out on the basis of 2 months of annual transmission charges as worked out above.

## iv. Rate of Interest on Working Capital:

Rate of Interest on Working Capital is considered on normative basis in accordance with Regulation 28(3) of the 2014 Tariff Regulations.

## 68. IWC allowed for Asset-1 is shown as under:

|                             |  |         |         |         | (₹ in lak |
|-----------------------------|--|---------|---------|---------|-----------|
|                             | As                                       | set-1   |         |         |           |
| Particulars                 | 2014-15<br>(Pro-rata<br>for 178<br>days) | 2015-16 | 2016-17 | 2017-18 | 2018-19   |
| O & M Expenses              | 14.07                                    | 14.54   | 15.02   | 15.52   | 16.03     |
| Maintenance Spares          | 25.33                                    | 26.17   | 27.04   | 27.93   | 28.86     |
| Receivables                 | 144.95                                   | 153.42  | 161.10  | 170.77  | 177.24    |
| Total Working Capital       | 184.35                                   | 194.12  | 203.16  | 214.22  | 222.14    |
| Rate of Interest (%)        | 13.50                                    | 13.50   | 13.50   | 13.50   | 13.50     |
| Interest on Working Capital | 12.14                                    | 26.21   | 27.43   | 28.92   | 29.99     |

69. IWC allowed *vide* order dated 27.5.2016 in Petition No.261/TT/2015, IWC claimed by the Petitioner in the instant petition and trued-up IWC allowed in this order in respect of Asset-1 is shown in the table below:

(₹ in lakh)

| Asset-1  |         |         |         |         |         |  |
|--|---------|---------|---------|---------|---------|--|
| Particulars  | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |
| Allowed <i>vide</i> order dated<br>27.5.2016 in Petition<br>No.261/TT/2015 | 12.12   | 27.88   | 30.56   | 31.01   | 30.74   |  |
| Claimed by the Petitioner in the instant petition                          | 12.22   | 26.40   | 27.59   | 29.08   | 30.13   |  |
| Allowed after true-up in this order  | 12.14   | 26.21   | 27.43   | 28.92   | 29.99   |  |

70. IWC allowed for Asset-2 is shown as under:

| Asset-2     |  |         |         |         |         |  |
|-------------|--|---------|---------|---------|---------|--|
| Particulars | 2014-15<br>(Pro-rata<br>for 139<br>days) | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |

| Asset-2                     |  |         |         |         |         |  |
|-----------------------------|--|---------|---------|---------|---------|--|
| Particulars                 | 2014-15<br>(Pro-rata<br>for 139<br>days) | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |
| O & M Expenses              | 7.04                                     | 7.27    | 7.51    | 7.76    | 8.02    |  |
| Maintenance Spares          | 12.66                                    | 13.08   | 13.52   | 13.97   | 14.43   |  |
| Receivables                 | 90.03                                    | 93.52   | 95.78   | 96.10   | 99.62   |  |
| Total Working Capital       | 109.72                                   | 113.87  | 116.80  | 117.83  | 122.07  |  |
| Rate of Interest (%)        | 13.50                                    | 13.50   | 13.50   | 13.50   | 13.50   |  |
| Interest on Working Capital | 5.64                                     | 15.37   | 15.77   | 15.91   | 16.48   |  |

71. IWC allowed *vide* order dated 27.5.2016 in Petition No.261/TT/2015, IWC claimed by the Petitioner in the instant petition and trued-up IWC allowed in this order in respect of Asset-2 is shown in the table below:

|  |         |         |         |         | (₹ in lakh) |
|--|---------|---------|---------|---------|-------------|
|  | As      | set-2   |         |         |             |
| Particulars  | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19     |
| Allowed <i>vide</i> order dated<br>27.5.2016 in Petition<br>No.261/TT/2015 | 5.62    | 16.33   | 17.87   | 17.99   | 17.77       |
| Claimed by the Petitioner in the instant petition                          | 5.66    | 15.44   | 15.82   | 15.95   | 16.52       |
| Allowed after true-up in this order  | 5.64    | 15.37   | 15.77   | 15.91   | 16.48       |

72. IWC allowed for Asset-3 is shown as under:

|                             |                                       |         |         | (₹ in lakh) |
|-----------------------------|---------------------------------------|---------|---------|-------------|
|                             | Asset-3                               |         |         |             |
| Particular                  | 2015-16<br>(Pro-rata for<br>200 days) | 2016-17 | 2017-18 | 2018-19     |
| O & M Expenses              | 21.81                                 | 22.53   | 23.28   | 24.05       |
| Maintenance Spares          | 39.25                                 | 40.55   | 41.90   | 43.29       |
| Receivables                 | 193.40                                | 199.13  | 202.41  | 207.71      |
| Total Working Capital       | 254.45                                | 262.21  | 267.58  | 275.05      |
| Rate of Interest (%)        | 13.50                                 | 13.50   | 13.50   | 13.50       |
| Interest on working capital | 18.77                                 | 35.40   | 36.12   | 37.13       |

73. IWC allowed *vide* order dated 27.5.2016 in Petition No.261/TT/2015, IWC claimed by the Petitioner in the instant petition and trued-up IWC in this order in respect of Asset-3 is shown in the table below:



| (₹ | in | lakh)  |
|----|----|--------|
| 12 |    | ianii) |

| Asset-3  |         |         |         |         |
|--|---------|---------|---------|---------|
| Particulars  | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Allowed <i>vide</i> order dated 27.5.2016 in Petition No.261/TT/2015 | 19.64   | 39.27   | 41.23   | 41.17   |
| Claimed by the Petitioner in the instant petition                    | 18.85   | 35.54   | 36.25   | 37.25   |
| Allowed after true-up in this order                                  | 18.77   | 35.40   | 36.12   | 37.13   |

74. IWC allowed for Asset-4 is shown as under:

|                             |   |         | (₹ in lakh) |         |
|-----------------------------|---|---------|-------------|---------|
| Asset-4                     |   |         |             |         |
| Particulars                 | 2015-16<br>Pro-rata<br>for 199<br>days) | 2016-17 | 2017-18     | 2018-19 |
| O & M Expenses              | 21.81                                   | 22.53   | 23.28       | 24.05   |
| Maintenance Spares          | 39.25                                   | 40.55   | 41.90       | 43.29   |
| Receivables                 | 183.73                                  | 187.21  | 190.34      | 198.08  |
| Total Working Capital       | 244.78                                  | 250.30  | 255.52      | 265.42  |
| Rate of Interest (%)        | 13.50                                   | 13.50   | 13.50       | 13.50   |
| Interest on Working Capital | 17.97                                   | 33.79   | 34.49       | 35.83   |

75. IWC allowed vide order dated 27.5.2016 in Petition No.261/TT/2015, IWC

claimed by the Petitioner in the instant petition and trued-up IWC in respect of Asset-4

is shown in the table below:

(₹ in lakh)

| Asset-4  |         |         |         |         |
|--|---------|---------|---------|---------|
| Particulars  | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Allowed <i>vide</i> order dated 27.5.2016 in Petition No.261/TT/2015 | 18.71   | 37.42   | 39.24   | 39.23   |
| Claimed by the Petitioner in the instant petition                    | 18.01   | 33.86   | 34.56   | 35.89   |
| Allowed after true-up in this order                                  | 17.97   | 33.79   | 34.50   | 35.83   |

# Approved Annual Fixed Charges for the 2014-19 Tariff Period

The trued up Annual Fixed Charges for Asset-1 for the 2014-19 tariff period is 76.

as under:

|         | (₹ in lakh) |
|---------|-------------|
| Asset-1 |             |
|         |             |
|         |             |



| Particulars                 | 2014-15<br>(Pro-rata<br>for 178<br>days) | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|--|---------|---------|---------|---------|
| Depreciation                | 97.57                                    | 218.24  | 234.69  | 257.61  | 275.36  |
| Interest on Loan            | 122.75                                   | 255.11  | 254.04  | 251.55  | 244.68  |
| Return on Equity            | 109.35                                   | 246.52  | 270.22  | 300.30  | 321.03  |
| Interest on Working Capital | 12.14                                    | 26.21   | 27.43   | 28.92   | 29.99   |
| O & M Expenses              | 82.34                                    | 174.44  | 180.24  | 186.22  | 192.40  |
| Total                       | 424.14                                   | 920.51  | 966.61  | 1024.60 | 1063.46 |

77. Annual transmission charges approved *vide* order dated 27.5.2016 in Petition No.261/TT/2015, claimed by the Petitioner in the instant petition and trued up vide this order in respect of Asset-1 is shown in the table below:

|   |         |         |         |         | (₹ in la |  |  |  |
|---|---------|---------|---------|---------|----------|--|--|--|
|   | Asset-1 |         |         |         |          |  |  |  |
| Particulars   | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19  |  |  |  |
| Allowed vide order dated<br>27.5.2016 in Petition<br>No.261/TT/2015 | 423.48  | 994.80  | 1105.82 | 1117.41 | 1096.92  |  |  |  |
| Claimed by the Petitioner in the instant petition                   | 427.78  | 928.90  | 974.04  | 1031.71 | 1069.79  |  |  |  |
| Allowed after true-up in this order                                 | 424.14  | 920.51  | 966.61  | 1024.60 | 1063.45  |  |  |  |

78. The trued up Annual Fixed Charges for Asset-2 for the 2014-19 tariff period is as under:

(₹ in lakh)

|                             |  |         |         |         | - /     |  |  |
|-----------------------------|--|---------|---------|---------|---------|--|--|
| Asset-2                     |  |         |         |         |         |  |  |
| Particulars                 | 2014-15<br>(Pro-rata<br>for 139<br>days) | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |  |
| Depreciation                | 49.00                                    | 138.43  | 147.13  | 154.76  | 165.33  |  |  |
| Interest on Loan            | 64.23                                    | 165.01  | 156.96  | 139.62  | 134.21  |  |  |
| Return on Equity            | 54.68                                    | 155.09  | 164.68  | 173.19  | 185.53  |  |  |
| Interest on Working Capital | 5.64                                     | 15.37   | 15.77   | 15.91   | 16.48   |  |  |
| O & M Expenses              | 32.15                                    | 87.22   | 90.12   | 93.11   | 96.20   |  |  |
| Total                       | 205.70                                   | 561.12  | 574.66  | 576.60  | 597.75  |  |  |

79. Annual transmission charges approved *vide* order dated 27.5.2016 in Petition No.261/TT/2015, claimed by the Petitioner in the instant petition and trued up in this order in respect of Asset- 2 is shown in the table below:



| Asset-2  |         |         |         |         |         |  |
|--|---------|---------|---------|---------|---------|--|
| Particulars  | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |
| Allowed <i>vide</i> order dated<br>27.5.2016 in Petition<br>No.261/TT/2015 | 204.93  | 603.72  | 668.05  | 669.40  | 655.00  |  |
| As claimed by the Petitioner in the instant petition                       | 206.45  | 564.16  | 576.86  | 578.54  | 599.48  |  |
| Approved in this order   | 205.70  | 561.12  | 574.66  | 576.60  | 597.75  |  |

80. The trued up Annual Fixed Charges for Asset-3 for the 2014-19 tariff period is as under:

|                         |  |         |         | (₹ in lakh) |  |  |  |  |
|-------------------------|--|---------|---------|-------------|--|--|--|--|
| Asset-3                 |  |         |         |             |  |  |  |  |
| Particulars             | 2015-16<br>(Pro-rata<br>for 200<br>days) | 2016-17 | 2017-18 | 2018-19     |  |  |  |  |
| Depreciation            | 139.63                                   | 270.85  | 287.05  | 302.59      |  |  |  |  |
| Interest on Loan        | 174.46                                   | 311.32  | 286.67  | 274.11      |  |  |  |  |
| Return on Equity        | 158.24                                   | 306.85  | 325.26  | 343.85      |  |  |  |  |
| Int. on Working Capital | 18.77                                    | 35.40   | 36.12   | 37.13       |  |  |  |  |
| O & M Expenses          | 142.98                                   | 270.36  | 279.33  | 288.60      |  |  |  |  |
| Total                   | 634.09                                   | 1194.78 | 1214.44 | 1246.28     |  |  |  |  |

81. Annual transmission charges approved *vide* order dated 27.5.2016 in Petition No.261/TT/2015, claimed by the Petitioner in the instant petition and trued up in this order in respect of Asset-3 is shown in the table below:

| (₹ in | lakh) |
|-------|-------|
|-------|-------|

| Asset-3  |         |         |         |         |  |  |
|--|---------|---------|---------|---------|--|--|
| Particulars  | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |  |
| Allowed <i>vide</i> order dated 27.5.2016 in Petition No.261/TT/2015 | 672.03  | 1366.98 | 1441.46 | 1425.66 |  |  |
| Claimed by the Petitioner in the instant petition                    | 637.66  | 1200.97 | 1220.09 | 1251.43 |  |  |
| Allowed after true-up in this order                                  | 634.09  | 1194.78 | 1214.44 | 1246.28 |  |  |

82. The trued up Annual Fixed Charges for Asset-4 for the 2014-19 tariff period is

as under:

(₹ in lakh)



| Asset-4                     |  |         |         |         |  |  |  |  |
|-----------------------------|--|---------|---------|---------|--|--|--|--|
| Particulars                 | 2015-16<br>(Pro-rata<br>for 199<br>days) | 2016-17 | 2017-18 | 2018-19 |  |  |  |  |
| Depreciation                | 129.47                                   | 248.98  | 265.14  | 284.94  |  |  |  |  |
| Interest on Loan            | 162.70                                   | 287.36  | 261.92  | 254.70  |  |  |  |  |
| Return on Equity            | 146.97                                   | 282.78  | 301.16  | 324.40  |  |  |  |  |
| Interest on Working Capital | 17.97                                    | 33.79   | 34.49   | 35.83   |  |  |  |  |
| O & M Expenses              | 142.27                                   | 270.36  | 279.33  | 288.60  |  |  |  |  |
| Total                       | 599.38                                   | 1123.27 | 1142.04 | 1188.47 |  |  |  |  |

83. Annual transmission charges approved *vide* order dated 27.5.2016 in Petition No.261/TT/2015, claimed by the Petitioner in the instant petition and trued up in respect of Asset-4 is shown in the table below:

| Asset-4  |         |         |         |         |  |  |  |
|--|---------|---------|---------|---------|--|--|--|
| Particulars  | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |  |  |
| Allowed <i>vide</i> order dated 27.5.2016 in Petition No.261/TT/2015 | 632.05  | 1284.56 | 1352.81 | 1339.41 |  |  |  |
| Claimed by the Petitioner in the instant petition                    | 601.24  | 1126.47 | 1144.84 | 1190.98 |  |  |  |
| Allowed after true-up in this order                                  | 599.38  | 1123.27 | 1142.04 | 1188.47 |  |  |  |

# Determination of Annual Fixed Charges for the 2019-24 Tariff Period

84. The Petitioner has submitted the tariff forms combining Asset-1, Asset-2, Asset-3 and Asset-4 which have been put into commercial operation prior to 1.4.2019 and has claimed single tariff as per proviso (i) of Regulation 8(1) of the 2019 Tariff Regulations. Accordingly, single tariff for the Combined Asset has been allowed for the 2019-24 tariff period.

85. The Petitioner has claimed the following transmission charges for the Combined Asset for the 2019-24 tariff period:

(₹ in lakh)

(₹ in lakh)

| Particulars      | 2019-20 | 2020-21 | 201-22  | 2022-23 | 2023-24 |
|------------------|---------|---------|---------|---------|---------|
| Depreciation     | 1080.46 | 1080.80 | 1071.86 | 1052.81 | 1052.81 |
| Interest on Loan | 856.93  | 763.20  | 673.49  | 584.76  | 496.11  |
| Return on Equity | 1153.26 | 1153.62 | 1153.62 | 1153.62 | 1153.62 |



| Interest on Working Capital | 64.13   | 63.50   | 62.65   | 61.69   | 60.91   |
|-----------------------------|---------|---------|---------|---------|---------|
| O & M Expenses              | 405.09  | 419.40  | 434.07  | 449.37  | 465.12  |
| Total                       | 3559.87 | 3480.52 | 3395.69 | 3302.25 | 3228.57 |

86. The Petitioner has claimed the following IWC for the Combined Asset for the 2019-24 tariff period:

|                             |         |         |         | (₹      | t in lakh) |
|-----------------------------|---------|---------|---------|---------|------------|
| Particulars                 | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24    |
| O&M expenses                | 33.76   | 34.95   | 36.17   | 37.45   | 38.76      |
| Maintenance Spares          | 60.76   | 62.91   | 65.11   | 67.41   | 69.77      |
| Receivables                 | 437.69  | 429.11  | 418.65  | 407.13  | 396.96     |
| Total                       | 532.21  | 526.97  | 519.93  | 511.99  | 505.49     |
| Rate of Interest            | 12.05   | 12.05   | 12.05   | 12.05   | 12.05      |
| Interest on Working Capital | 64.13   | 63.50   | 62.65   | 61.69   | 60.91      |

# Effective Date of Commercial Operation (E-COD)

87. The Petitioner in the instant Petition has submitted that E-COD of the Combined Asset works out to be 27.4.2015. Based on the trued up admitted capital cost and actual COD of all the assets, the E-COD has been worked out as follows:

| Asset | Actual<br>COD | Admitted<br>Capital<br>Cost as<br>on<br>31.3.2019<br>(₹ in lakh) | Weight of<br>cost of<br>asset (%) | No. of<br>days<br>last<br>COD | Weighted<br>days | Effective COD<br>(latest COD –<br>total weighted<br>days) |
|-------|---------------|--|-----------------------------------|-------------------------------|------------------|---|
| 1     | 5.10.2014     | 5503.88  | 26.92                             | 345                           | 92.88            |   |
| 2     | 13.11.2014    | 3226.46  | 15.78                             | 306                           | 48.29            |   |
| 3     | 14.9.2015     | 6020.05  | 29.45                             | 1                             | 0.29             | 27.4.2015   |
| 4     | 15.9.2015     | 5693.39  | 27.85                             | 0                             | 0                |   |
|       | Total         | 20443.8  | 100                               |                               | 141.47           |   |

88. The E-COD is used to determine the lapsed life of the project as a whole, which works out as three (3) years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD).

# Weighted Average Life (WAL) of the Combined Asset

89. The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of WAL.



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90. The Combined Asset may have multiple elements such as land, building, transmission line, Sub-station and PLCC and each element may have different span of life. Therefore, the concept of WAL has been used as the useful life of the project as a whole.

91. The WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as stipulated in the 2019 Tariff Regulations. The element-wise life as defined in the 2014 Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. The life as defined in the 2019 Tariff Regulations has been considered for determination of WAL. Accordingly, WAL of the Combined Asset has been worked out as 25 years as shown below:

| Particulars                     | Combined<br>Cost<br>(₹ in lakh) | Life as per 2019<br>Regulation (Years) | Weighted<br>Cost | (₹ in lakh)<br>Weighted Avg.<br>Life of Asset<br>(in years) |
|---------------------------------|---------------------------------|--|------------------|---|
| (1)                             | (2)                             | (3)                                    | (4)=(2)x(3)      | (5)=(4)/(2)   |
| Freehold Land                   | 0.00                            | 0                                      | 0.00             |   |
| Building & Other<br>Civil Works | 1089.47                         | 25                                     | 27236.63         |   |
| Transmission<br>Line            | 0.00                            | 35                                     | 0.00             |   |
| Sub-Station<br>Equipment        | 18902.91                        | 25                                     | 472572.86        |   |
| PLCC                            | 264.78                          | 15                                     | 3971.68          |   |
| Leasehold Land                  | 0.00                            | 25                                     | 0.00             |   |
| IT Equipment<br>and Software    | 186.61                          | 7                                      | 1244.10          |   |
| Total                           | 20443.77                        |  | 505025.27        | 24.70 (rounded<br>to 25 years)                              |

92. The WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed above, the Effective COD of the assets is 27.4.2015 and the lapsed life of the project as a whole, works out as 3

(three) years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from

Effective COD). Accordingly, WAL has been used to determine the remaining useful

life as on 31.3.2019 to be 22 years.

#### Capital Cost as on 1.4.2019

93. Regulation 19(3) and (5) of the 2019 Tariff Regulations provide as follows:

"19 Capital Cost:

(3) The Capital cost of an existing project shall include the following:

(a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;

(b) Additional Capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;

(c) Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;

(d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and

(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

(5) The following shall be excluded from the capital cost of the existing and new projects:

- (a) The assets forming part of the project, but not in use, as declared in the tariff petition;
- (b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be decapitalised only after its redeployment;

Provided further that unless shifting of an asset from one project to another is of permanent nature, there shall be no de-capitalization of the concerned assets.

(c) In case of hydro generating stations, 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 transparent process;



- (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and
- (e) 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."

94. The Petitioner has claimed the capital cost of individual assets which has been added to arrive at the capital cost claimed during the 2019-24 tariff period for Combined Asset as per the following details:

|       |                                       |  |  |  | (₹ in lakh)                     |
|-------|---------------------------------------|--|--|--|---------------------------------|
| Asset | FR<br>Apportioned<br>Approved<br>Cost | RCE<br>Apportioned<br>Approved<br>Cost | Capital Cost<br>claimed as<br>on 31.3.2019 | Additional<br>Capitalisation<br>claimed<br>2019-20 | Estimated<br>Completion<br>Cost |
| 1     | 4132.56                               | 5869.28                                | 5503.88                                    | 0.00   | 5503.88                         |
| 2     | 3629.54                               | 3555.27                                | 3226.46                                    | 0.00   | 3226.46                         |
| 3     | 7114.96                               | 7444.40                                | 6037.15                                    | 0.00   | 6037.15                         |
| 4     | 6500.52                               | 7472.21                                | 5693.39                                    | 13.00  | 5706.39                         |
| Total | 21377.58                              | 24341.16                               | 20460.88                                   | 13.00  | 20473.88                        |

95. Against the overall RCE approved capital cost of ₹24341.16 lakh, the estimated completion cost including ACE is ₹20473.88 lakh. The individual capital cost of the each transmission assets is also within the RCE approved apportioned capital cost. Therefore, there is no cost over-run in respect of the transmission assets.

96. The capital cost has been dealt in line with Regulation 19(3) of the 2019 Tariff Regulations. The element-wise capital cost (i.e. land, building, transmission line, substation and PLCC) as admitted by the Commission as on 31.3.2019 for the transmission assets are clubbed together and the combined capital cost has been considered as capital cost for Combined Asset as per following details:

|                |         |         |         |         | (₹ in lakh)                              |
|----------------|---------|---------|---------|---------|--|
| Element        | Asset-1 | Asset-2 | Asset-3 | Asset-4 | Capital Cost<br>for<br>combined<br>asset |
| Free hold Land | 0.00    | 0.00    | 0.00    | 0.00    | 0.00                                     |
| Leasehold Land | 0.00    | 0.00    | 0.00    | 0.00    | 0.00                                     |

| Element                      | Asset-1 | Asset-2 | Asset-3 | Asset-4 | Capital Cost<br>for<br>combined<br>asset |
|------------------------------|---------|---------|---------|---------|--|
| Building & Other Civil Works | 566.95  | 22.18   | 243.21  | 257.12  | 1089.46                                  |
| Transmission Line            | 0.00    | 0.00    | 0.00    | 0.00    | 0.00                                     |
| Sub-Station Equipment        | 4806.03 | 3132.00 | 5652.89 | 5312.00 | 18920.02                                 |
| PLCC                         | 37.06   | 47.12   | 90.14   | 90.46   | 264.78                                   |
| IT Equipment and Software    | 93.84   | 25.16   | 33.81   | 33.81   | 186.62                                   |
| Total                        | 5503.88 | 3226.46 | 6020.05 | 5693.39 | 20443.77                                 |

### **Initial Spares**

97. As stated earlier in this order, Initial Spares are allowed for the 2014-19 tariff period on the basis of the cost of individual assets. The assets covered in the transmission scheme are combined and the overall project cost is arrived at in the 2019-24 tariff period and, therefore, Initial Spares are allowed during the 2019-24 tariff period on the basis of the overall project cost as per the APTEL's judgement dated 14.9.2019 in Appeal No.74 of 2017.

98. Accordingly, Initial Spares allowed in the 2019-24 tariff period are as under:

| Assets  | Plant &<br>Machinery<br>cost up to<br>the cut-off<br>date<br>(excluding<br>IDC and<br>IEDC) (A) (₹<br>in lakh) | Initial<br>Spares<br>claimed (B)<br>(₹ in lakh) | Norms as<br>per<br>2014Tariff<br>Regulations<br>(in %) | Initial<br>Spares<br>allowable<br>as per<br>norms and<br>APTEL<br>judgement<br>dated<br>14.9.2019<br>(₹ in lakh) | Initial<br>Spares<br>allowed in<br>2014-19<br>(₹ in lakh) |
|---------|--|---|--|--|---|
| Asset-1 | 4730.9   | 254.18  | 6%   | 1037.75  | 994.49  |
| Asset-2 | 3022.06  | 180   |  |  |   |
| Asset-3 | 4620.4   | 293.3   |  |  |   |
| Asset-4 | 4896.38  | 284.11  |  |  |   |
| Total   | 17269.74   | 1011.59   | 6%   | 1037.75  | 994.49  |

99. Accordingly, additional Initial Spares of ₹17.10 lakh are being allowed as part of the combined capital cost as on 1.4.2019 in line with APTEL's judgement dated 14.9.2019 in Appeal No.74 of 2017. 100. The capital cost as on 1.4.2019 is considered as under:

|  |  | (₹ in lakh)                             |
|--|--|---|
| Combined Capital Cost<br>as on 31.3.2019 | Additional Initial Spares allowed as<br>per APTEL judgement dated<br>14.9.2019 | Combined Capital<br>Cost as on 1.4.2019 |
| 20443.77                                 | 17.10  | 20460.87                                |

101. The trued-up capital cost of ₹20460.87 lakh for the Combined Asset is

considered as admitted capital cost as on 1.4.2019 for working out tariff for the 2019-

24 tariff period.

# Additional Capital Expenditure (ACE)

102. Regulation 24 of the 2019 Tariff Regulations provides as under:-

"24. Additional Capitalization within the original scope and upto the cut-off date

(1) The Additional Capital Expenditure in respect of a 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:

- (a) Undischarged liabilities recognized to be payable at a future date;
- (b) Works deferred for execution;

(c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;

(d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;

- (e) Change in law or compliance of any existing law; and
- (f) Force Majeure events:

Provided that in case of any replacement of the assets, the additional capitalization shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of de-capitalization.

(2) The generating company or the transmission licensee, as the case may be shall submit 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."

103. The Petitioner has claimed projected ACE for the 2019-24 tariff period and

submitted Auditor's certificates in support of the same. The details of projected ACE

in respect of the transmission assets are shown as under:

(₹ in lakh) Assets Projected ACE 2019-24

Order in Petition No.20/TT/2020

|         | 2019-20 |
|---------|---------|
| Asset-1 | 0.00    |
| Asset-2 | 0.00    |
| Asset-3 | 0.00    |
| Asset-4 | 13.00   |
| Total   | 13.00   |

104. The Petitioner has submitted that ACE claimed for the period 1.4.2019 to 31.3.2020 is on account of un-discharged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date claimed under Regulation 25(1) (f) of the 2019 Tariff Regulations. The Petitioner *vide* affidavit dated 25.2.2020 has submitted that the payments were released after reconciliation during contract closing in line to the provisions of the contract. The contract wise details for balance retention payments as submitted by Petitioner is detailed below:

| Asset   | Name                                   | Package                | Revised                         | Expenditure        | Projected   | (₹ in lakh)<br>Capital  |
|---------|--|------------------------|---------------------------------|--------------------|---|-------------------------|
|         | of<br>Vendor                           | 5                      | Apportioned<br>approved<br>cost | as on<br>31.3.2019 | Additional<br>Capitalization<br>2019-24 (19-<br>20) | Cost as on<br>31.3.2024 |
| Asset-4 | TBEA<br>Energy<br>(India)<br>Pvt. Ltd. | Transformer<br>Package | 7472.21                         | 5693.39            | 13.00   | 5706.39                 |

105. The capital cost of all the assets as on 31.3.2024 are within the revised apportioned approved cost. The cut-off date of the Asset-4 is 31.3.2019. Hence, projected ACE falls post cut-off date of the assets under instant petition. The Petitioner is directed to submit details of contract, scope, original liability and un-discharged liability as on 31.3.2019 with Regulations under which such ACE is claimed at the time of true up of the 2019-24 tariff period. The ACE allowed is summarized below which is subject to true up:

|   |  | (₹ in lakh)       |
|---|--|-------------------|
| Particulars   | Regulation   | Combined<br>Asset |
|   |  | 2019-20           |
| ACE to the extent of Balance & Retention<br>Payments & work deferred for execution<br>before cut-off date | Regulation 25(1)(d) of the 2019 Tariff Regulations | 13.00             |

# Capital Cost for the 2019-24 Tariff Period

106. Accordingly, the capital cost of the Combined Asset considered for the 2019-

24 tariff period, subject to truing up, is as follows:

|  |                                     | (₹ in lakh)   |
|--|-------------------------------------|---|
| Capital Cost allowed as<br>on 1.4.2019 | ACE allowed for the year<br>2019-20 | Total Estimated<br>Completion Cost up<br>to 31.3.2024 |
| 20460.87                               | 13.00                               | 20473.87  |

### Debt-Equity Ratio

107. Regulation 18(3) of the 2019 Tariff Regulations provides as under:

"18. Debt-Equity Ratio:

(3). In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

Provided that in case of a generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30%shall not be taken into account for tariff computation;

Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

(4). In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5). Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as Additional Capital Expenditure for determination of tariff,



and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation."

108. The details of the debt-equity considered for the purpose of calculation of tariff

for the 2019-24 tariff period for the Combined Asset is as follows:

|                    |   |        | (さ   | in lakh) |
|--------------------|---|--------|--|----------|
| Combined<br>Assets | Capital Cost as<br>on 1.4.2019<br>(₹ in lakh) | (%)    | Total Capital Cost<br>as on 31.3.2024<br>(₹ in lakh) | (%)      |
| Debt               | 14322.66                                      | 70.00  | 14331.76   | 70.00    |
| Equity             | 6138.22                                       | 30.00  | 6142.12  | 30.00    |
| Total              | 20460.88                                      | 100.00 | 20473.88   | 100.00   |

# Return on Equity (RoE)

109. Regulation 30 and 31 of the 2019 Tariff Regulations provide as under:

*"30. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.* 

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-ofriver hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of-river generating station with pondage:

Provided that return on equity in respect of Additional Capitalization after cutoff date beyond the original scope excluding Additional Capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

#### Provided further that:

*i.* In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;

*ii.in* case of existing generating station, as and when any of the requirements under (*i*) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;

iii. in case of a thermal generating station, with effect from 1.4.2020:

- a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
- b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp



rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.

31. Tax on Return on Equity:(1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.

(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.

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year 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 income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any underrecovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis."

110. The Petitioner has submitted that MAT rate is applicable on it. Accordingly, the

MAT rate applicable during the 2019-20 period has been considered for the purpose

of RoE, which shall be trued up with actual tax rate in accordance with Regulation 31

(3) of the 2019 Tariff Regulations. However, in the instant petition, the Petitioner has

claimed the RoE on the basis of MAT rate of 21.55% whereas the Petitioner in

Petition No.244/TT/2019 has claimed the RoE based on the MAT rate of 17.472% on



account of taxation laws (Amendment) ordinance 2019 published in the Gazette dated 20.9.2019. Accordingly, based on the submissions made by the Petitioner in Petition No.244/TT/2019, the RoE has been allowed for the transmission assets considering the applicable MAT rate of 17.472% as under:

(₹ in lakh)

|  | Combin  | ed Asset |         |         |         |
|--|---------|----------|---------|---------|---------|
| Particulars                                  | 2019-20 | 2020-21  | 2021-22 | 2022-23 | 2023-24 |
| Opening Equity                               | 6138.22 | 6142.12  | 6142.12 | 6142.12 | 6142.12 |
| Addition due to Additional<br>Capitalization | 3.90    | 0.00     | 0.00    | 0.00    | 0.00    |
| Closing Equity                               | 6142.12 | 6142.12  | 6142.12 | 6142.12 | 6142.12 |
| Average Equity                               | 6140.17 | 6142.12  | 6142.12 | 6142.12 | 6142.12 |
| Return on Equity (Base Rate)<br>(%)          | 15.500  | 15.500   | 15.500  | 15.500  | 15.500  |
| Tax Rate applicable (%)                      | 17.472  | 17.472   | 17.472  | 17.472  | 17.472  |
| Rate of Return on Equity (Pre-<br>tax)       | 18.782  | 18.782   | 18.782  | 18.782  | 18.782  |
| Return on Equity (Pre-tax)                   | 1153.25 | 1153.61  | 1153.61 | 1153.61 | 1153.61 |

#### Interest on Loan (IoL)

111. Regulation 32 of the 2019 Tariff Regulations provides as under:-

"32. Interest on loan capital: (1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.

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

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

112. The weighted average rate of IoL has been considered on the basis of the rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. In view of above, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the Combined Asset is as follows:

(₹ in lakh)

|                            | Combined Asset |          |          |          |          |  |  |  |  |  |  |  |
|----------------------------|----------------|----------|----------|----------|----------|--|--|--|--|--|--|--|
| Particular                 | 2019-20        | 2020-21  | 201-22   | 2022-23  | 2023-24  |  |  |  |  |  |  |  |
| Gross Normative Loan       | 14322.66       | 14331.76 | 14331.76 | 14331.76 | 14331.76 |  |  |  |  |  |  |  |
| Cumulative Repayments      | 3666.78        | 4747.24  | 5828.05  | 6908.85  | 7989.65  |  |  |  |  |  |  |  |
| upto Previous Year         |                |          |          |          |          |  |  |  |  |  |  |  |
| Net Loan-Opening           | 10655.88       | 9584.52  | 8503.71  | 7422.91  | 6342.10  |  |  |  |  |  |  |  |
| Addition due to Additional | 9.10           | 0.00     | 0.00     | 0.00     | 0.00     |  |  |  |  |  |  |  |
| Capitalization             |                |          |          |          |          |  |  |  |  |  |  |  |
| Repayment during the       | 1080.46        | 1080.80  | 1080.80  | 1080.80  | 1080.80  |  |  |  |  |  |  |  |
| year                       |                |          |          |          |          |  |  |  |  |  |  |  |
| Net Loan-Closing           | 9584.52        | 8503.71  | 7422.91  | 6342.10  | 5261.30  |  |  |  |  |  |  |  |
| Average Loan               | 10120.20       | 9044.11  | 7963.31  | 6882.51  | 5801.70  |  |  |  |  |  |  |  |
| Weighted Average Rate of   | 8.531          | 8.510    | 8.534    | 8.562    | 8.588    |  |  |  |  |  |  |  |
| Interest on Loan (%)       |                |          |          |          |          |  |  |  |  |  |  |  |
| Interest on Loan           | 863.37         | 769.63   | 679.56   | 589.26   | 498.22   |  |  |  |  |  |  |  |

# **Depreciation**

113. Regulation 33(1), (2) and (5) of the 2019 Tariff Regulations provide as under:

*"33. Depreciation:* 

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:



Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(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 a 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-I 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."

114. It is observed that the cumulative depreciation claimed for IT equipment for the 2019-24 is ₹194.17 lakh whereas the gross block for the same amounts to ₹186.62 lakh. The Commission *vide* its Technical Validation letter dated 18.2.2020 directed the Petitioner to furnish justification in this regard. The Petitioner has submitted that while computing tariff for the 2019-24 tariff period, opening depreciation on IT Equipment and Software was inadvertently claimed as ₹104.04 lakh and revised the same to ₹111.59 lakh. Accordingly, the Petitioner also made revised submissions for depreciation, IoL, IWC and AFC for the 2019-24 tariff period. Therefore, we have considered the revised submissions made by the Petitioner.

115. The IT equipment has been considered as a part of the gross block and depreciated using WAROD. The salvage value of IT equipment has been considered NIL, i.e. IT asset has been considered as 100% depreciable. The depreciation has been allowed considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The gross block during the 2019-24 tariff period has been depreciated at WAROD. WAROD has been allowed (refer Annexure-

Order in Petition No.20/TT/2020

2 to this order) after taking into account the depreciation rates of assets as prescribed in 2019 Tariff Regulations. The depreciation allowed for the transmission assets is as follows:

|  | Со       | mbined Ass | et       |          |          |
|--|----------|------------|----------|----------|----------|
| Particulars  | 2019-20  | 2020-21    | 2021-22  | 2022-23  | 2023-24  |
| Opening Gross Block  | 20460.87 | 20473.87   | 20473.87 | 20473.87 | 20473.87 |
| Addition during 2019-24<br>due to Projected<br>Additional Capitalisation | 13.00    | 0.00       | 0.00     | 0.00     | 0.00     |
| Closing Gross Block  | 20473.87 | 20473.87   | 20473.87 | 20473.87 | 20473.87 |
| Average Gross Block  | 20467.37 | 20473.87   | 20473.87 | 20473.87 | 20473.87 |
| Weighted average rate<br>of Depreciation<br>(WAROD) (%)                  | 5.28     | 5.28       | 5.28     | 5.28     | 5.28     |
| Balance useful life at the beginning of the year                         | 22       | 21         | 20       | 19       | 18       |
| Aggregated Depreciable Value   | 18439.30 | 18445.15   | 18445.15 | 18445.15 | 18445.15 |
| Combined<br>Depreciation during<br>the year                              | 1080.46  | 1080.80    | 1080.80  | 1080.80  | 1080.80  |
| Aggregate Cumulative<br>Depreciation                                     | 4747.24  | 5828.05    | 6908.85  | 7989.65  | 9070.46  |
| Remaining Aggregate<br>Depreciable Value at the<br>end of the year       | 13692.05 | 12617.10   | 11536.30 | 10455.49 | 9374.69  |

# **Operation & Maintenance Expenses (O&M Expenses)**

116. Regulation 35(3)(a) and (4) of the 2019 Tariff Regulations provide as under:

*"35. (3) Transmission system: (a) The following normative operation and maintenance expenses shall be admissible for the transmission system:* 

| Particulars                                 | 2019-<br>20 | 2020-<br>21 | 2021-<br>22 | 2022-<br>23 | 2023-<br>24 |
|---|-------------|-------------|-------------|-------------|-------------|
| Norms for sub-station Bays (₹ Lakh per bay) |             | •           | •           |             |             |
| 765 kV                                      | 45.01       | 46.60       | 48.23       | 49.93       | 51.68       |
| 400 kV                                      | 32.15       | 33.28       | 34.45       | 35.66       | 36.91       |
| 220 kV                                      | 22.51       | 23.30       | 24.12       | 24.96       | 25.84       |
| 132 kV and below                            | 16.08       | 16.64       | 17.23       | 17.83       | 18.46       |
| Norms for Transformers (₹ Lakh per MVA)     |             |             |             |             |             |
| 765 kV                                      | 0.491       | 0.508       | 0.526       | 0.545       | 0.564       |
| 400 kV                                      | 0.358       | 0.371       | 0.384       | 0.398       | 0.411       |
| 220 kV                                      | 0.245       | 0.254       | 0.263       | 0.272       | 0.282       |
| 132 kV and below                            | 0.245       | 0.254       | 0.263       | 0.272       | 0.282       |



(₹ in lakh)

| Norms for AC and HVDC lines (₹ Lakh per km)                           |       |       |       |       |       |
|---|-------|-------|-------|-------|-------|
| Single Circuit (Bundled Conductor with six or more sub-conductors)    | 0.881 | 0.912 | 0.944 | 0.977 | 1.011 |
| Single Circuit (Bundled conductor with four sub-conductors)           | 0.755 | 0.781 | 0.809 | 0.837 | 0.867 |
| Single Circuit (Twin & Triple<br>Conductor)                           | 0.503 | 0.521 | 0.539 | 0.558 | 0.578 |
| Single Circuit (Single Conductor)                                     | 0.252 | 0.260 | 0.270 | 0.279 | 0.289 |
| Double Circuit (Bundled conductor with four or more sub-conductors)   | 1.322 | 1.368 | 1.416 | 1.466 | 1.517 |
| Double Circuit (Twin & Triple<br>Conductor)                           | 0.881 | 0.912 | 0.944 | 0.977 | 1.011 |
| Double Circuit (Single Conductor)                                     | 0.377 | 0.391 | 0.404 | 0.419 | 0.433 |
| Multi Circuit (Bundled Conductor with four or more sub-conductor)     | 2.319 | 2.401 | 2.485 | 2.572 | 2.662 |
| Multi Circuit (Twin & Triple<br>Conductor)                            | 1.544 | 1.598 | 1.654 | 1.713 | 1.773 |
| Norms for HVDC stations   |       |       |       |       |       |
| HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB) | 834   | 864   | 894   | 925   | 958   |
| Gazuwaka HVDC Back-to-Back station (₹<br>Lakh per 500 MW)             | 1,666 | 1,725 | 1,785 | 1,848 | 1,913 |
| 500 kV Rihand-Dadri HVDC bipole<br>scheme (Rs Lakh) (1500 MW)         | 2,252 | 2,331 | 2,413 | 2,498 | 2,586 |
| ±500 kV Talcher- Kolar HVDC bipole<br>scheme (Rs Lakh) (2000 MW)      | 2,468 | 2,555 | 2,645 | 2,738 | 2,834 |
| ±500 kV Bhiwadi-Balia HVDC bipole<br>scheme (Rs Lakh) (2500 MW)       | 1,696 | 1,756 | 1,817 | 1,881 | 1,947 |
| ±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)       | 2,563 | 2,653 | 2,746 | 2,842 | 2,942 |

Provided that the O&M expenses for the GIS bays shall be allowed as worked out by multiplying 0.70 of the O&M expenses of the normative O&M expenses for bays;

Provided further that:

- *i.* the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;
- *ii.* the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;
- iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);
- iv. the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;
- v. the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M



expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and

vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.

(b) The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of sub-station bays, transformer capacity of the transformer (in MVA) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.

(c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:

Provided that the transmission licensee shall submit the assessment of the security requirement and estimated security expenses, the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification.

(4) Communication system: The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up."

117. The O&M Expenses claimed by the Petitioner for the Combined Asset are as

follows:

|                    |         |         | (₹ in lakh) |         |         |  |  |  |  |  |
|--------------------|---------|---------|-------------|---------|---------|--|--|--|--|--|
| Particulars        | 2019-20 | 2020-21 | 201-22      | 2022-23 | 2023-24 |  |  |  |  |  |
| No. of Bays        | 9.00    | 9.00    | 9.00        | 9.00    | 9.00    |  |  |  |  |  |
| Norms (₹ Lakh/Bay) | 45.01   | 46.60   | 48.23       | 49.93   | 51.68   |  |  |  |  |  |
| Total O&M Expenses | 405.09  | 419.40  | 434.07      | 449.37  | 465.12  |  |  |  |  |  |

118. The O&M Expenses claimed by the Petitioner are in accordance with

Regulation 35(3) of the 2019 Tariff Regulations. Hence, they are allowed as claimed.

### Interest on Working Capital (IWC)

119. Regulation 34(1)(c), Regulation 34(3), (4) and Regulation 3(7) of the 2019

Tariff Regulations respectively specify as follows:

*"34. Interest on Working Capital: (1) The working capital shall cover: (c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:* 

(i) Receivables equivalent to 45 days of annual fixed cost;



(ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and

*(iii)* Operation and maintenance expenses, including security expenses for one month.

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

Provided that in case of truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.

(4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency."

"3. Definition - In these regulations, unless the context otherwise requires:-

(7) '**Bank Rate**' means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;"

120. The Petitioner has submitted that it has computed IWC for the 2019-24 tariff period considering the bank rate as on 1.4.2019.

121. IWC is allowed in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05%. The components of working capital and interest allowed for the Combined Asset for the 2019-24 tariff period are as follows:

|                             |         |         |         | (₹      | t in lakh) |
|-----------------------------|---------|---------|---------|---------|------------|
| Particulars                 | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24    |
| O & M Expenses              | 33.76   | 34.95   | 36.17   | 37.45   | 38.76      |
| Maintenance Spares          | 60.76   | 62.91   | 65.11   | 67.41   | 69.77      |
| Receivables                 | 438.49  | 429.38  | 420.00  | 410.68  | 400.20     |
| Total Working Capital       | 533.01  | 527.24  | 521.29  | 515.53  | 508.73     |
| Rate of Interest (%)        | 12.05   | 11.25   | 11.25   | 11.25   | 11.25      |
| Interest on Working Capital | 64.23   | 59.31   | 58.64   | 58.00   | 57.23      |

# Annual Fixed Charges for the 2019-24 Tariff Period



122. The transmission charges allowed for the Combined Asset for the 2019-24 tariff period are as under:

|                             |         |         |         |         | (₹ in lakł |
|-----------------------------|---------|---------|---------|---------|------------|
| Particulars                 | 2019-20 | 2020-21 | 201-22  | 2022-23 | 2023-24    |
| Depreciation                | 1080.46 | 1080.80 | 1080.80 | 1080.80 | 1080.80    |
| Interest on Loan            | 863.37  | 769.63  | 679.56  | 589.26  | 498.22     |
| Return on Equity            | 1153.25 | 1153.61 | 1153.61 | 1153.61 | 1153.61    |
| Interest on Working Capital | 64.23   | 59.31   | 58.64   | 58.00   | 57.23      |
| O&M Expenses                | 405.09  | 419.40  | 434.07  | 449.37  | 465.12     |
| Total                       | 3566.40 | 3482.76 | 3406.69 | 3331.04 | 3254.99    |

#### Filing Fee and the Publication Expenses

123. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on *pro rata* basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

### Licence Fee and RLDC Fees and Charges

124. The Petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for the 2019-24 tariff period. The Petitioner shall also be entitled for recovery of RLDC fee and charges in accordance with Regulations 70(3) of the 2019Tariff Regulations for the 2019-24 tariff period.

### **Goods and Services Tax**

125. The Petitioner has sought to recover GST on transmission charges separately from the Respondents, if at any time GST on transmission is withdrawn from negative list in future. We have considered the submission of the Petitioner. GST is not levied on transmission service at present and we are of the view that Petitioner's prayer is premature.

#### Security Expenses

126. The Petitioner has submitted that security expenses for the transmission assets are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential IWC. The Petitioner has requested to consider the actual security expenses incurred during 2018-19 period for claiming estimated security expenses for 2019-20 which shall be subject to true up at the end of the year based on the actuals. The Petitioner has submitted that similar petition for security expenses for 2020-21, 2021-22, 2022-23 and 2023-24 shall be filed on a yearly basis on the basis of the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security expenses as per the audited accounts may be allowed to be recovered from the beneficiaries on yearly basis.

127. We have considered the submissions of the Petitioner. We are of the view that the Petitioner should claim security expenses for all the transmission assets in one petition. It is observed that the Petitioner has already filed Petition No.260/MP/2020 claiming consolidated security expenses on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19. Therefore, security expenses will be dealt with in Petition No.260/MP/2020 in accordance with the applicable provisions of the 2019 Tariff Regulations.

### **Capital Spares**

128. The Petitioner has sought reimbursement of capital spares at the end of tariff block. The Petitioner's claim, if any, shall be dealt with in accordance with the provisions of the 2019 Tariff Regulations.



# Sharing of Transmission Charges

129. The Commission *vide* order dated 27.5.2016 in Petition No. 261/TT/2015 observed that the transmission charges for the assets covered in the instant petition shall be borne by the Long Term Transmission Customer (LTTC) of the Transmission Service Agreement (TSA) executed by Jabalpur Transmission Company Ltd. (JTCL) under Tariff Based Competitive Bidding route, till the COD of the transmission lines.

The relevant portion of the said order is reproduced hereunder:

"53. The transmission charges for the instant assets shall be borne by Long Term Transmission Customer (LTTC) of the Transmission Service Agreement (TSA) executed by Jabalpur Transmission Company Ltd. (JTCL) under Tariff Based Competitive Bidding line, till the commissioning of the transmission lines. Once the associated system is commissioned, 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."

130. MB Power (Madhya Pradesh) Ltd filed Review Petition No.35/RP/2018 against

order dated 27.5.2016 in Petition No.261/TT/2015. The Commission disposed of the

said review petition vide order dated 28.1.2020 wherein it was held that the issue of

sharing of transmission charges shall be reopened in Petition No.261/TT/2015. The

relevant portion of the order dated 28.1.2020 is as under:-

"18. We are of the view that all LTTCs including MBPL are necessary parties to the proceedings in Petition No. 261/TT/2015 as civil liability in the form of payment of transmission charges for the period of mismatch was created against them. However, the LTTCs including MBPMPL were not impleaded as parties in Petition No.261/TT/2015 by PGCIL. Making MBPMPL liable for payment of the transmission charges for the period of mismatch in COD of transmission assets of PGCIL and JTCL without an opportunity to MBPMPL to place its views/objections on record is an apparent error. Further, PGCIL did not implead the other LTTCs of the transmissions assets in Petition No.261/TT/2015.It is further observed that MBPMPL has not impleaded JTCL, which as per MBPMPL is liable to bear the transmission charges, as a party to the present proceedings in Petition Nos.232/MP/2018 and 35/RP/2018. Without going into the merits of the issues raised by MBPMPL in the instant petitions, we are of the view that the issue of sharing of the transmission charges needs to be decided after hearing all the necessary parties. Accordingly, we allow the review to the limited extent of reconsideration of the sharing of transmission charges of the instant transmission assets and set down the main petition for hearing on the aspect of sharing of transmission charges. PGCIL is directed to file an amended "Memo of Parties" in Petition No.261/TT/2016 making all the LTTCs including MBPMPL as respondents and



131. Accordingly, the issue of sharing of transmission charges of the transmission assets from their COD to the COD of the associated transmission lines was heard in Petition No.261/TT/2015 on 16.6.2020 and the matter is further listed for arguments. The trued up tariff allowed in the instant order is subject to the findings on the issue of sharing of transmission charges of the transmission assets in Petition No. 261/TT/2015.

132. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, as applicable, as provided in Regulation 43 of the 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

133. To summarise, the trued up AFC allowed for the transmission assets for the 2014-19 tariff period are as under:

|                         |         |         |         |         |         | (₹ in lakh) |
|-------------------------|---------|---------|---------|---------|---------|-------------|
| Assets                  | Assets  | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19     |
| Annual Fixed<br>Charges | Asset-1 | 424.14  | 920.51  | 966.61  | 1024.60 | 1063.46     |
|                         | Asset-2 | 205.70  | 561.12  | 574.66  | 576.60  | 597.75      |
|                         | Asset-3 | 0.00    | 634.09  | 1194.78 | 1214.44 | 1246.28     |
|                         | Asset-4 | 0.00    | 599.38  | 1123.27 | 1142.04 | 1188.47     |

The AFC allowed for the Combined Asset for the 2019-24 tariff period in this order are as under:



| Combined Asset       | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |  |  |  |  |
|----------------------|---------|---------|---------|---------|---------|--|--|--|--|
| Annual Fixed Charges | 3566.40 | 3482.76 | 3406.69 | 3331.04 | 3254.99 |  |  |  |  |

134. This order disposes of Petition No.20/TT/2020.

Sd/ (I. S. Jha) Member Sd/ (P. K. Pujari) Chairperson



### Annexure-1

|                           |                                 |                         |                           |                         |                         | Asset                   | -1                                     | -            | _                    |                      |                         |                         |                         |
|---------------------------|---------------------------------|-------------------------|---------------------------|-------------------------|-------------------------|-------------------------|--|--------------|----------------------|----------------------|-------------------------|-------------------------|-------------------------|
|                           | Capital<br>Expendit             |                         | Additional Capitalization |                         |                         | Admitted<br>Capital     | Rate of<br>Depreci                     | Annu         | al Deprecia          | ation as p           | er Regulati             | ions                    |                         |
|                           | ure as on<br>COD (₹ in<br>Iakh) | 14-15<br>(₹ in<br>lakh) | 15-16<br>(₹ in<br>lakh)   | 16-17<br>(₹ in<br>lakh) | 17-18<br>(₹ in<br>lakh) | 18-19<br>(₹ in<br>lakh) | Cost as on<br>31.3.2019<br>(₹ in lakh) | ation<br>(%) | 14-15<br>(₹ in lakh) | 15-16<br>(₹ in lakh) | 16-17<br>(₹ in<br>lakh) | 17-18<br>(₹ in<br>lakh) | 18-19<br>(₹ in<br>lakh) |
| Land                      | 0.00                            | -                       | -                         | -                       | -                       | -                       | 0.00                                   | 0.00         | 0.00                 | 0.00                 | 0.00                    | 0.00                    | 0.00                    |
| Building                  | 72.16                           | 0.02                    | 84.86                     | 409.91                  | -                       | -                       | 566.95                                 | 3.34         | 1.18                 | 3.83                 | 12.09                   | 18.94                   | 18.94                   |
| Transmission<br>Line      | 0.00                            | -                       | -                         | -                       | -                       | -                       | 0.00                                   | 5.28         | 0.00                 | 0.00                 | 0.00                    | 0.00                    | 0.00                    |
| Sub Station               | 3433.13                         | 417.35                  | 188.47                    | 94.79                   | 496.63                  | 175.67                  | 4806.03                                | 5.28         | 93.77                | 208.28               | 215.76                  | 231.37                  | 249.12                  |
| PLCC                      | 22.35                           | 0.01                    | 7.59                      | 7.11                    | -                       | -                       | 37.06                                  | 6.33         | 0.69                 | 1.66                 | 2.12                    | 2.35                    | 2.35                    |
| Leasehold Land            | 0.00                            | -                       | -                         | -                       | -                       | -                       | 0.00                                   | 3.34         | 0.00                 | 0.00                 | 0.00                    | 0.00                    | 0.00                    |
| IT Equipment and software | 65.42                           | 19.28                   | 0.08                      | 9.06                    | -                       | -                       | 93.84                                  | 5.28         | 1.93                 | 4.47                 | 4.72                    | 4.95                    | 4.95                    |
| Total                     | 3593.05                         | 436.65                  | 281.00                    | 520.87                  | 496.63                  | 175.67                  | 5503.88                                |              | 97.57                | 218.24               | 234.69                  | 257.61                  | 275.36                  |
|                           |                                 |                         |                           |                         |                         |                         | Average Gro<br>(₹ in la                |              | 3811.38              | 4170.21              | 4571.14                 | 5079.89                 | 5416.04                 |
|                           |                                 |                         |                           |                         |                         |                         | Weighted A<br>Rate of Dep<br>(%)       | reciation    | 5.25                 | 5.23                 | 5.13                    | 5.07                    | 5.08                    |

|                           |                                 |        |                         |                                  |                         | Asset                   | -2                      |                      |                      |                         |                         |                         |         |
|---------------------------|---------------------------------|--------|-------------------------|----------------------------------|-------------------------|-------------------------|-------------------------|----------------------|----------------------|-------------------------|-------------------------|-------------------------|---------|
|                           | Capital<br>Expendit             |        |                         |                                  |                         |                         | Canitai                 | Rate of<br>Depreci   | Annu                 | al Deprecia             | ation as p              | er Regulat              | ions    |
|                           | ure as on<br>COD (₹ in<br>Iakh) | •      | 15-16<br>(₹ in<br>lakh) | 16-17<br>(₹ in<br>lakh)          | 17-18<br>(₹ in<br>lakh) | 18-19<br>(₹ in<br>lakh) | ((()))                  | 14-15<br>(₹ in lakh) | 15-16<br>(₹ in lakh) | 16-17<br>(₹ in<br>lakh) | 17-18<br>(₹ in<br>lakh) | 18-19<br>(₹ in<br>lakh) |         |
| Land                      | 0.00                            | 0.00   | 0.00                    | 0.00                             | 0.00                    | 0.00                    | 0.00                    | 0.00                 | 0.00                 | 0.00                    | 0.00                    | 0.00                    | 0.00    |
| Building                  | 22.08                           | 0.04   | 0.06                    | 0.00                             | 0.00                    | 0.00                    | 22.18                   | 3.34                 | 0.28                 | 0.74                    | 0.74                    | 0.74                    | 0.74    |
| Transmission<br>Line      | 0.00                            | 0.00   | 0.00                    | 0.00                             | 0.00                    | 0.00                    | 0.00                    | 5.28                 | 0.00                 | 0.00                    | 0.00                    | 0.00                    | 0.00    |
| Sub Station               | 2318.70                         | 116.62 | 220.58                  | 75.76                            | 207.50                  | 192.83                  | 3,132.00                | 5.28                 | 47.80                | 134.41                  | 142.23                  | 149.71                  | 160.28  |
| PLCC                      | 22.78                           | 0.04   | 19.43                   | 4.87                             | 0.00                    | 0.00                    | 47.12                   | 6.33                 | 0.55                 | 2.06                    | 2.83                    | 2.98                    | 2.98    |
| Leasehold Land            | 0.00                            | 0.00   | 0.00                    | 0.00                             | 0.00                    | 0.00                    | 0.00                    | 3.34                 | 0.00                 | 0.00                    | 0.00                    | 0.00                    | 0.00    |
| IT Equipment and software | 16.34                           | 4.99   | 3.83                    | 0.00                             | 0.00                    | 0.00                    | 25.16                   | 5.28                 | 0.38                 | 1.23                    | 1.33                    | 1.33                    | 1.33    |
| Total                     | 2,379.90                        | 121.69 | 243.91                  | 80.63                            | 207.50                  | 192.83                  | 3,226.46                |                      | 49.00                | 138.43                  | 147.13                  | 154.76                  | 165.33  |
|                           |                                 |        |                         |                                  |                         |                         | Average Gro<br>(₹ in la |                      | 2440.74              | 2623.54                 | 2785.81                 | 2929.88                 | 3130.04 |
|                           |                                 |        |                         | Weighted A<br>Rate of Dep<br>(%) | reciation               | 5.27                    | 5.28                    | 5.28                 | 5.28                 | 5.28                    |                         |                         |         |



| Asset-3                      |  |                           |                         |                         |                         |   |                         |  |                      |                      |                     |  |
|------------------------------|--|---------------------------|-------------------------|-------------------------|-------------------------|---|-------------------------|--|----------------------|----------------------|---------------------|--|
|                              | Capital<br>Expendit<br>ure as on<br>COD (₹ in<br>lakh) | Additional Capitalization |                         |                         |                         | Admitted  | Rate of                 | Annual Depreciation as per Regulations |                      |                      |                     |  |
|                              |  | 15-16<br>(₹ in<br>lakh)   | 16-17<br>(₹ in<br>Iakh) | 17-18<br>(₹ in<br>lakh) | 18-19<br>(₹ in<br>lakh) | Capital<br>Cost as on<br>31.3.2019<br>(₹ in lakh) | Depreci<br>ation<br>(%) | 15-16<br>(₹ in lakh)                   | 16-17<br>(₹ in lakh) | 17-18<br>(₹ in lakh) | 18-19<br>(₹ in lakh |  |
| Land                         | 0.00   | 0.00                      | 0.00                    | 0.00                    | 0.00                    | 0.00  | 0.00                    | 0.00                                   | 0.00                 | 0.00                 | 0.00                |  |
| Building                     | 206.09   | 0.13                      | 12.46                   | 17.10                   | 7.43                    | 243.21  | 3.34                    | 3.76                                   | 7.10                 | 7.59                 | 8.00                |  |
| Transmission<br>Line         | 0.00   | 0.00                      | 0.00                    | 0.00                    | 0.00                    | 0.00  | 5.28                    | 0.00                                   | 0.00                 | 0.00                 | 0.00                |  |
| Sub Station                  | 4515.59  | 120.36                    | 443.75                  | 142.50                  | 430.69                  | 5652.89   | 5.28                    | 132.02                                 | 256.49               | 271.97               | 287.10              |  |
| PLCC                         | 82.96  | 0.05                      | 7.13                    | 0.00                    | 0.00                    | 90.14   | 6.33                    | 2.87                                   | 5.48                 | 5.71                 | 5.71                |  |
| Leasehold Land               | 0.00   | 0.00                      | 0.00                    | 0.00                    | 0.00                    | 0.00  | 3.34                    | 0.00                                   | 0.00                 | 0.00                 | 0.00                |  |
| IT Equipment<br>and software | 33.79  | 0.02                      | 0.00                    | 0.00                    | 0.00                    | 33.81   | 5.28                    | 0.98                                   | 1.79                 | 1.79                 | 1.79                |  |
| Total                        | 4,838.43   | 120.56                    | 463.34                  | 159.60                  | 438.12                  | 6020.05   |                         | 139.63                                 | 270.85               | 287.05               | 302.59              |  |
|                              |  |                           |                         |                         |                         | Average Gross Block<br>(₹ in lakh)                |                         | 4898.71                                | 5190.66              | 5502.13              | 5800.99             |  |
|                              |  |                           |                         |                         |                         | Weighted Average<br>Rate of Depreciation<br>(%)   |                         | 5.22                                   | 5.22                 | 5.22                 | 5.22                |  |



| Asset-4                      |  |                           |                         |                         |                         |   |                         |  |                      |                      |                      |  |
|------------------------------|--|---------------------------|-------------------------|-------------------------|-------------------------|---|-------------------------|--|----------------------|----------------------|----------------------|--|
|                              | Capital<br>Expendit<br>ure as on<br>COD (₹ in<br>lakh) | Additional Capitalization |                         |                         |                         | Admitted  | Rate of                 | Annual Depreciation as per Regulations |                      |                      |                      |  |
|                              |  | 15-16<br>(₹ in<br>lakh)   | 16-17<br>(₹ in<br>Iakh) | 17-18<br>(₹ in<br>lakh) | 18-19<br>(₹ in<br>lakh) | Capital<br>Cost as on<br>31.3.2019<br>(₹ in lakh) | Depreci<br>ation<br>(%) | 15-16<br>(₹ in lakh)                   | 16-17<br>(₹ in lakh) | 17-18<br>(₹ in lakh) | 18-19<br>(₹ in lakh) |  |
| Land                         | 0.00   | 0.00                      | 0.00                    | 0.00                    | 0.00                    | 0.00  | 0.00                    | 0.00                                   | 0.00                 | 0.00                 | 0.00                 |  |
| Building                     | 204.73   | 21.40                     | 11.63                   | 19.36                   | 0.00                    | 257.12  | 3.34                    | 3.91                                   | 7.75                 | 8.26                 | 8.59                 |  |
| Transmission<br>Line         | 0.00   | 0.00                      | 0.00                    | 0.00                    | 0.00                    | 0.00  | 5.28                    | 0.00                                   | 0.00                 | 0.00                 | 0.00                 |  |
| Sub Station                  | 4192.44  | 95.02                     | 286.87                  | 296.93                  | 440.74                  | 5,312.00  | 5.28                    | 121.72                                 | 233.95               | 249.36               | 268.84               |  |
| PLCC                         | 83.31  | 0.02                      | 7.13                    | 0.00                    | 0.00                    | 90.46   | 6.33                    | 2.87                                   | 5.50                 | 5.73                 | 5.73                 |  |
| Leasehold Land               | 0.00   | 0.00                      | 0.00                    | 0.00                    | 0.00                    | 0.00  | 3.34                    | 0.00                                   | 0.00                 | 0.00                 | 0.00                 |  |
| IT Equipment<br>and software | 33.80  | 0.01                      | 0.00                    | 0.00                    | 0.00                    | 33.81   | 5.28                    | 0.97                                   | 1.79                 | 1.79                 | 1.79                 |  |
| Total                        | 4,514.28   | 116.45                    | 305.63                  | 316.29                  | 440.74                  | 5,693.39  |                         | 129.47                                 | 248.98               | 265.14               | 284.94               |  |
|                              |  |                           |                         |                         |                         | Average Gross Block<br>(₹ in lakh)                |                         | 4572.51                                | 4783.55              | 5094.51              | 5473.02              |  |
|                              |  |                           |                         |                         |                         | Weighted Average<br>Rate of Depreciation<br>(%)   |                         | 5.21                                   | 5.21                 | 5.21                 | 5.21                 |  |



# Annexure-2

| 2019-24                   | Combine<br>d<br>Admitted<br>Capital                     | n Ca<br>(₹ in lakh) Cos<br>31.3<br>2019-20 (₹ | Admitted<br>Capital<br>Cost as     | Capital Rate of<br>Cost as Depreciat<br>on ion as per | Annual Depreciation as per Regulations |                        |                        |                        |                           |  |
|---------------------------|---|---|------------------------------------|---|--|------------------------|------------------------|------------------------|---------------------------|--|
|                           | Cost as<br>on<br>1.4.2019<br>(₹ in<br>lakh)             |   | 31.3.2024<br>(₹ in                 |   | 2019-20<br>(₹ in lakh)                 | 2020-21<br>(≹ in lakh) | 2021-22<br>(≹ in lakh) | 2022-23<br>(≹ in lakh) | 2023-24<br>(₹ in<br>lakh) |  |
| Land                      | 0.00  | 0.00  | 0.00                               | 0.00%   | 0.00                                   | 0.00                   | 0.00                   | 0.00                   | 0.00                      |  |
| Building                  | 1089.46   | 0.00  | 1089.46                            | 3.34%   | 36.39                                  | 36.39                  | 36.39                  | 36.39                  | 36.39                     |  |
| Transmission Line         | 0.00  | 0.00  | 0.00                               | 5.28%   | 0.00                                   | 0.00                   | 0.00                   | 0.00                   | 0.00                      |  |
| Sub Station               | 18920.02  | 13.00   | 18933.02                           | 5.28%   | 999.32                                 | 999.66                 | 999.66                 | 999.66                 | 999.66                    |  |
| PLCC                      | 264.78  | 0.00  | 264.78                             | 6.33%   | 16.76                                  | 16.76                  | 16.76                  | 16.76                  | 16.76                     |  |
| Leasehold Land            | 0.00  | 0.00  | 0.00                               | 3.34%   | 0.00                                   | 0.00                   | 0.00                   | 0.00                   | 0.00                      |  |
| IT Equipment and Software | 186.62  | 0.00  | 186.62                             | 15.00%  | 27.99                                  | 27.99                  | 27.99                  | 27.99                  | 27.99                     |  |
| TOTAL                     | 20460.88  | 13.00   | 20473.88                           |   | 1080.46                                | 1080.80                | 1080.80                | 1080.80                | 1080.80                   |  |
|                           |   |   | Average Gross Block<br>(₹ in lakh) |   | 20467.37                               | 20473.87               | 20473.87               | 20473.87               | 20473.87                  |  |
|                           | Weighted Average<br>Rate of Depreciation<br>(₹ in lakh) |   | 5.28                               | 5.28  | 5.28                                   | 5.28                   | 5.28                   |                        |                           |  |