

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. No. 472/TT/2020

Coram:

**Shri I. S. Jha, Member
Shri Arun Goyal, Member
Shri P. K. Singh, Member**

Date of Order : 18.07.2022

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 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of **Combined Asset-A: (A1)** Associated bays of 765 kV S/C Lucknow-Bareilly transmission line including 3x80 MVAR switchable line reactor at Lucknow (New) and line reactor at Bareilly (New) Sub-station, **(A2):** 2nd Circuit of 400 kV D/C (Quad) Bareilly (New)-Bareilly (Old) transmission line with associated bays and **(A3) :** 765/400 kV 1500 MVA ICT-I at Bareilly (New) Sub-station along with associated bays, **Asset-B:** 765 kV, 3x80 MVAR Bus reactors at Bareilly (New) Sub-station, **Asset-C:** Associated bays of 1st circuit of 400 kV D/C (Quad) Bareilly (New)- Bareilly (Old) Transmission Line, **Asset-D:** 765/400 kV 1500 MVA ICT-II at Bareilly (New) Sub-station along with associated bays, **Asset-E:** 1st circuit of 400 kV D/C (Quad) Bareilly (New)-Kashipur (PTCUL) Transmission Line and associated bays, **Asset-F:** 2nd circuit of 400 kV D/C (Quad) Bareilly (New)-Kashipur (PTCUL) Transmission Line and associated bays, **Asset-G:** 400 kV D/C Kashipur-Roorkee line along with associated bays, **Asset-H:** 400 kV D/C Roorkee-Saharanpur line along with associated bays, **Asset-I:** 125 MVAR Bus Reactor at Roorkee Sub-station, **Asset-J:** 765 kV S/C Bareilly-Lucknow Transmission Line at 400 kV level, **Asset-K:** One circuit of 400 kV D/C Bareilly (New)-Bareilly (Existing) Transmission Line under “**Northern Region System Strengthening Scheme - XXI**” in the Northern Region.

And in the matter of:

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

.....Petitioner

Versus

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Vidyut Marg, Jaipur-302005 (Rajasthan).



2. Ajmer Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-Station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
3. Jaipur Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-Station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
4. Jodhpur Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-Station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan,
Kumar House Complex Building II,
Shimla-171004 (Himachal Pradesh).
6. Punjab State Electricity Board,
Thermal Shed Tia,
Near 22 Phatak, Patiala-147001 (Punjab).
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula-134109 (Haryana).
8. Power Development Department,
Government of Jammu & Kashmir,
Mini Secretariat, Jammu.
9. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board),
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226001 (Uttar Pradesh).
10. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110002.
11. BSES Yamuna Power Limited,
B-Block, Shakti Kiran Building (Near Karkadooma Court),
Karkadooma 2nd Floor,
New Delhi-110092.
12. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi-110019.
13. Tata Power Delhi Distribution Limited,
NDPL House, Hudson Lines,



Kingsway Camp, North Delhi-110009.

14. Chandigarh Administration,
Sector -9, Chandigarh.
15. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road,
Dehradun (Uttarakhand).
16. North Central Railway,
Allahabad (Uttar Pradesh).
17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002.

...Respondent(s)

For Petitioner: Shri S. S. Raju, PGCIL
Shri D. K. Biswal, PGCIL
Shri Ved Prakash Rastogi, PGCIL
Shri Amit Yadav, PGCIL

For Respondent: Shri Brijesh Kumar Saxena, UPPCL

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited, a deemed transmission licensee, for truing up of transmission tariff based on capital expenditure of 2014-19 tariff period 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 transmission tariff for 2019-24 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 under “Northern Region System Strengthening Scheme - XXI” in the Northern Region (hereinafter referred to as “the transmission project”):

Combined Asset-A: (A1) Associated bays of 765 kV S/C Lucknow-Barielly transmission line including 3x80 MVAR switchable line reactor at Lucknow (New) and line reactor at Bareilly (New) Sub-station, **(A2):** 2nd Circuit of 400 kV D/C



(Quad) Bareilly (New)-Bareilly (Old) transmission line with associated bays, and
(A3): 765/400 kV 1500 MVA ICT-I at Bareilly (New) Sub-station along with associated bays;

Asset-B: 765 kV, 3x80 MVAR Bus reactors at Bareilly (New) Sub-station;

Asset-C: Associated bays of 1st circuit of 400 kV D/C (Quad) Bareilly (New)-Bareilly (Old) Transmission Line;

Asset-D: 765/400 kV 1500 MVA ICT-II at Bareilly (New) Sub-station along with associated bays;

Asset-E: 1st circuit of 400 kV D/C (Quad) Bareilly (New)-Kashipur (PTCUL) Transmission Line and associated bays;

Asset-F: 2nd circuit of 400 kV D/C (Quad) Bareilly (New)-Kashipur (PTCUL) Transmission Line and associated bays;

Asset-G: 400 kV D/C Kashipur-Roorkee line along with associated bays;

Asset-H: 400 kV D/C Roorkee-Saharanpur line along with associated bays;

Asset-I: 125 MVAR Bus Reactor at Roorkee Sub-station;

Asset-J: 765 kV S/C Bareilly-Lucknow Transmission Line at 400 kV level;

Asset-K: One circuit of 400 kV D/C Bareilly (New)-Bareilly (Existing) Transmission Line.

For 2014-19 tariff period, the assets are termed as 'transmission assets'. The transmission assets are combined during 2019-24 period and are termed as 'Combined Asset' for 2019-24 tariff period.

2. The Petitioner has made the following prayers in the instant Petition:

"1) Allow the Add Cap for 2014-19 and 2019-24 tariff block as claimed as per Para 5.9 and 7.2 above.



2) 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 6.2 and 7.4 above.

3) 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 Regulations, 2014 and Tariff Regulations, 2019 as per para 6.2 and 7.4 above for respective block.

4) 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.

5) 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.

6) 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.

7) 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 7.10 above.

8) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.

9) 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 follows:

- a. The Investment Approval (IA) of the transmission project was accorded by the Board of Directors of the Petitioner's Company in its 238th meeting held on 6.8.2010 vide Memorandum No. C/CP/NRSS-XXI in NR for NRSS-XXI,



dated 26.8.2010 with an estimated cost of ₹167757 lakh including IDC of ₹12198 lakh, based on 1st Quarter, 2010 price level. RCE of the transmission project has been approved by the Board of Directors in its 336th meeting held on 6.12.2016 vide Memorandum No. C/CP/RCE/NRSS-21, dated 20.1.2017 with an estimated cost of ₹185811 lakh including IDC of ₹14819 lakh, based on April, 2016 price level.

b. The scope of work under the transmission project is as follows:

Transmission Lines:

- i. Lucknow-Bareilly 765 kV S/C line
- ii. Bareilly 765/400 kV (New)- Bareilly 400 kV (Existing) 400 kV D/C (QUAD)
- iii. Bareilly-Kashipur 400 kV D/C (QUAD)
- iv. Kashipur- Roorkee 400 kV D/C (QUAD)
- v. Roorkee- Saharanpur 400 kV D/C (QUAD)

Sub-station Works:

- i. New 2x1500 MVA, 765/400 kV Sub-station at Bareilly.
- ii. Extension of 765/400 kV Sub-station at Lucknow (Powergrid)
- iii. Extension of 765/400 kV Sub-station at Bareilly (Powergrid)
- iv. Extension of 765/400 kV Sub-station at Kashipur (PTCUL)
- v. Extension of 765/400 kV Sub-station at Roorkee (Powergrid)
- vi. Extension of 765/400 kV Sub-station at Saharanpur (Powergrid)

Reactive Compensation:

Line Reactors-

- i. Lucknow- Bareilly 765 kV S/C Line (270 km) 1X 240 MVAR (Switchable) - 1X240 MVAR

Bus Reactors

- ii. Bareilly 765 kV: 1X240 MVAR
- iii. Roorkee-1X125 MVAR

c. The complete scope of the transmission project as per IA is covered in the instant petition. The details of scheduled date of commercial operation (SCOD), date of commercial operation (COD) and time over-run in respect of the transmission assets covered in the instant petition are as follows:



| Asset Nomenclature in previous orders | Asset Nomenclature in current petition | COD | SCOD | Time over-run | Time over-run condoned |
|--|--|------------|-----------|-------------------|--------------------------------------|
| Order dated 30.5.2016 in Petition No. 263/TT/2015 | | | | | |
| Asset-A1 | Asset-A | 1.4.2015 | 25.4.2013 | 22 months 7 days | 22 months 7 days |
| Asset-A2 | | | | | |
| Asset-A3 | | | | | |
| Asset-B | Asset-B | 5.7.2015 | 25.4.2013 | 25 months 10 days | 25 months 10 days |
| Asset-C | Asset-C | 25.4.2015 | 25.4.2013 | 24 months | 24 months |
| Asset-D | Asset-D | 31.8.2015 | 25.4.2013 | 28 months 6 days | 28 months 6 days |
| Asset-E | Asset-E | 23.4.2015 | 25.4.2013 | 23 months 29 days | 23 months 29 days |
| Asset-F | Asset-F | 24.4.2015 | 25.4.2013 | 24 months | 24 months |
| Asset-G | Asset-G | 25.12.2015 | 25.4.2013 | 32 months | 32 months |
| Asset-H | Asset-H | 16.6.2016 | 25.4.2013 | 37 months 22 days | To be discussed in the instant order |
| Order dated 19.2.2016 in Petition No. 489/TT/2014 | | | | | |
| Asset-A | Asset-I | 1.2.2013 | 1.5.2013 | NA | NA |
| Order dated 25.4.2016 in Petition No. 107/TT/2014 | | | | | |
| Asset-A | Asset-J | 1.4.2014 | 26.4.2013 | 11 months 4 days | 11 months 4 days |
| Asset-B | Asset-K | 1.4.2014 | 26.4.2013 | 11 months 4 days | 11 months 4 days |

- d. The Commission vide order dated 30.5.2016 in Petition No. 263/TT/2015 in the absence of Revised Cost Estimate (RCE) restricted the claimed capital cost of Asset-B, Asset-C, Asset-G and Asset-H to FR apportioned cost for the



purpose of tariff determination. The relevant portion of the order dated 30.5.2016 is as follows:

“18. It is observed that the completion cost of Asset-B, Asset-C, Asset-G and Asset-H is exceeding the approved apportioned FR cost.....In the absence of RCE, we have restricted the completion cost to the approved apportioned cost of the said assets as discussed in the subsequent paragraphs.....”

- e. Further, the Commission vide order dated 30.5.2016 in Petition No. 263/TT/2015 computed the tariff for Asset-H on the basis of anticipated COD.

The relevant portion of the order dated 30.5.2016 is as follows:

“9. The petitioner vide affidavit dated 24.5.2016 has submitted that RLDC certificate in case of Asset-H, anticipated to be commissioned on 15.6.2016, shall be submitted after actual COD. Accordingly, the tariff for all the assets, except Asset-H, is worked out from their actual COD to 31.3.2019. In case of Asset-H, it is allowed from the anticipated COD and the tariff allowed in this order shall be applicable from the date of actual COD on pro-rata basis.”

- f. Further, time over-run in case of Asset-H was also not considered vide order dated 30.5.2016 in Petition No. 263/TT/2015 as tariff was approved on the basis of the anticipated COD. The Petitioner was directed to submit the complete details of time over-run along with documentary evidence, Interest During Construction (IDC)/ Incidental Expense During Construction (IEDC) till SCOD and from SCOD to actual COD, on cash basis at the time of truing up of the petition. Tariff with respect to Asset-H was determined considering IDC and IEDC as nil and the total capital cost was limited to the approved apportioned cost.

4. The Respondents are the transmission utilities, distribution licensees and power departments which are procuring transmission service from the Petitioner, mainly beneficiaries of the Northern Region.



5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notice published in the newspapers by the Petitioner. Uttar Pradesh Power Corporation Limited (UPPCL), Respondent No. 9, has filed its reply vide affidavit dated 30.12.2020 and has raised issues of delay in execution of assets, apportionment of capital cost, cost over-run, grossing up rate of Return on Equity (RoE), adoption of Indian Accounting Standards and Interest on Loan (IoL). In response, the Petitioner has filed its rejoinder vide affidavit dated 8.7.2021. The issues raised by UPPCL and the clarifications given by the Petitioner are considered in the relevant portions of this order.

6. This order is issued considering the submissions made by the Petitioner in the petition vide affidavits dated 29.1.2020, 30.3.2021 and 23.7.2021, UPPCL's reply filed vide affidavit dated 30.12.2020 and Petitioner's rejoinder affidavit dated 8.7.2021.

7. Hearing in this matter was held on 9.7.2021 through video conference and order was reserved.

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

9. UPPCL has submitted that the Petitioner has adopted "First Time Adoption of Indian Accounting Standards". UPPCL has further submitted that from the submissions of the Petitioner it is difficult to understand the reasons as to why Indian Accounting Standards has been adopted. The Petitioner has not submitted the impact of adoption of the said standards on calculation of opening balance of the capital cost and



depreciation thereon. Therefore, the Petitioner may be directed to show the opening balances in the old system vis-à-vis in Indian Accounting Standards during 2014-19 tariff period.

10. In response, the Petitioner has submitted that details are provided in various tariff Forms with respect to capital cost as per books /Gross Block amount as per books. The Petitioner has opted for deemed cost exemption as per Para D7 AA of Ind AS 101 'First-time Adoption of Indian Accounting Standards'. Accordingly carrying value i.e. Gross Block less accumulated depreciation is considered as deemed cost as on the date of transition i.e. 1.4.2015. As such, in case of assets executed before 1.4.2015, the accumulated depreciation as on 1.4.2015 is added back to the deemed capital cost as per books Gross Block amount as per books for arriving at the figures to be provided in various tariff Forms. The Ministry of Corporate Affairs in 2015, notified the Companies (Indian Accounting Standards (IND AS) Rules 2015, which stipulated mandatory adoption and applicability of IND AS beginning from the accounting period 2016-17 for companies having net worth more than ₹500 crore. Accordingly, the Petitioner adopted IND AS w.e.f. 2015-16. The Petitioner has further submitted that there has been no change in the capital cost or ACE considered for claiming transmission tariff on account of adoption of IND AS. For the purpose of computation of tariff, actual capital cost and ACE have been claimed /considered. Thus, there is no impact in tariff at all on account of adoption of IND AS at any point of time. The said treatment only relates to the "Gross Block amount as per Books" which is required to be reported in certain Tariff Forms (e.g. Form 4A, Form 5) as per the formats prescribed by the Commission. The Petitioner has submitted that original Gross Block amount as per books is required to be disclosed in the tariff Forms. However, there is no impact on the tariff being claimed.



11. We have considered the submissions of the Petitioner and UPPCL. As the tariff is determined on the basis of the Tariff Regulations, we are of the view that the adoption of the new accounting standards by the Petitioner would not have any impact on the tariff that is determined purely on the basis of the applicable Tariff Regulations.

Truing up of Annual Fixed Charges of 2014-19 Period

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

Asset-A

| | (₹ in lakh) | | | |
|-----------------------------|----------------|----------------|----------------|----------------|
| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | 856.81 | 933.60 | 986.93 | 1043.87 |
| Interest on Loan | 641.29 | 678.92 | 663.39 | 655.23 |
| Return on Equity | 1054.70 | 1147.45 | 1207.00 | 1274.02 |
| Interest on Working Capital | 88.41 | 94.16 | 97.42 | 101.14 |
| O&M Expenses | 536.72 | 554.56 | 572.97 | 591.97 |
| Total | 3177.93 | 3408.69 | 3527.71 | 3666.23 |

Asset-B

| | (₹ in lakh) | | | |
|-----------------------------|----------------|----------------|----------------|----------------|
| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | 150.30 | 209.87 | 221.10 | 230.15 |
| Interest on Loan | 172.44 | 222.44 | 210.76 | 199.10 |
| Return on Equity | 166.34 | 232.17 | 244.68 | 255.50 |
| Interest on Working Capital | 14.82 | 20.27 | 20.72 | 21.08 |
| O&M Expenses | 64.58 | 90.12 | 93.11 | 96.20 |
| Total | 568.48 | 774.87 | 790.37 | 802.03 |

Asset-C

| | (₹ in lakh) | | | |
|-----------------------------|----------------|----------------|----------------|----------------|
| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | 69.59 | 86.26 | 97.34 | 106.44 |
| Interest on Loan | 76.75 | 88.21 | 90.72 | 91.09 |
| Return on Equity | 75.46 | 93.84 | 106.17 | 116.61 |
| Interest on Working Capital | 11.54 | 13.29 | 14.12 | 14.82 |
| O&M Expenses | 116.43 | 128.74 | 133.02 | 137.42 |
| Total | 349.77 | 410.34 | 441.37 | 466.38 |



Asset-D

(₹ in lakh)

| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|---------------|----------------|----------------|----------------|
| Depreciation | 173.36 | 320.98 | 365.14 | 412.90 |
| Interest on Loan | 199.85 | 343.48 | 344.13 | 356.84 |
| Return on Equity | 192.09 | 355.63 | 404.95 | 459.66 |
| Interest on Working Capital | 17.84 | 32.01 | 34.46 | 37.41 |
| O&M Expenses | 87.43 | 154.49 | 159.62 | 164.91 |
| Total | 670.57 | 1206.59 | 1308.30 | 1431.72 |

Asset-E

(₹ in lakh)

| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|----------------|----------------|----------------|----------------|
| Depreciation | 914.02 | 1075.37 | 1102.24 | 1116.70 |
| Interest on Loan | 1010.82 | 1095.06 | 1004.36 | 918.95 |
| Return on Equity | 1026.41 | 1206.66 | 1236.70 | 1256.22 |
| Interest on Working Capital | 77.79 | 88.57 | 88.16 | 87.34 |
| O&M Expenses | 178.56 | 196.20 | 202.77 | 209.46 |
| Total | 3207.60 | 3661.86 | 3634.23 | 3588.67 |

Asset-F

(₹ in lakh)

| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|----------------|----------------|----------------|----------------|
| Depreciation | 317.62 | 384.12 | 398.60 | 407.48 |
| Interest on Loan | 372.40 | 414.21 | 381.28 | 351.86 |
| Return on Equity | 358.32 | 432.72 | 448.89 | 460.01 |
| Interest on Working Capital | 33.96 | 39.17 | 39.49 | 39.64 |
| O&M Expenses | 178.02 | 196.20 | 202.77 | 209.46 |
| Total | 1260.32 | 1466.42 | 1471.03 | 1468.45 |

Asset-G

(₹ in lakh)

| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|----------------|----------------|----------------|----------------|
| Depreciation | 603.31 | 2266.82 | 2285.80 | 2300.72 |
| Interest on Loan | 630.81 | 2247.96 | 2066.09 | 1889.49 |
| Return on Equity | 675.35 | 2536.12 | 2557.21 | 2580.72 |
| Interest on Working Capital | 50.08 | 185.96 | 183.49 | 181.12 |
| O&M Expenses | 111.02 | 428.37 | 442.66 | 457.35 |
| Total | 2070.57 | 7665.23 | 7535.25 | 7409.40 |

Asset-H

(₹ in lakh)

| Particulars | 2016-17 | 2017-18 | 2018-19 |
|------------------|---------|---------|---------|
| Depreciation | 847.97 | 1095.27 | 1112.00 |
| Interest on Loan | 900.22 | 1055.66 | 974.35 |
| Return on Equity | 946.27 | 1222.30 | 1244.37 |



| Particulars | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|----------------|----------------|----------------|
| Interest on Working Capital | 71.11 | 89.69 | 89.29 |
| O&M Expenses | 236.60 | 308.78 | 319.01 |
| Total | 3002.17 | 3771.70 | 3739.02 |

Asset-I

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|---------------|---------------|---------------|---------------|---------------|
| Depreciation | 39.85 | 41.84 | 43.59 | 44.85 | 44.85 |
| Interest on Loan | 43.83 | 42.18 | 40.10 | 37.26 | 33.10 |
| Return on Equity | 44.69 | 47.13 | 49.06 | 50.48 | 50.61 |
| Interest on Working Capital | 6.29 | 6.46 | 6.61 | 6.73 | 6.76 |
| O&M Expenses | 60.30 | 62.30 | 64.37 | 66.51 | 68.71 |
| Total | 194.96 | 199.91 | 203.73 | 205.83 | 204.03 |

Asset-J

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|
| Depreciation | 2023.23 | 2147.72 | 2165.56 | 2203.86 | 2226.59 |
| Interest on Loan | 1988.77 | 1961.04 | 1799.65 | 1647.40 | 1487.77 |
| Return on Equity | 2256.01 | 2405.81 | 2424.57 | 2467.45 | 2499.60 |
| Interest on Working Capital | 152.70 | 158.67 | 156.07 | 154.74 | 152.64 |
| O&M Expenses | 152.48 | 157.76 | 162.79 | 168.33 | 173.86 |
| Total | 6573.19 | 6831.00 | 6708.64 | 6641.78 | 6540.46 |

Asset-K

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|--------------|--------------|--------------|--------------|--------------|
| Depreciation | 29.15 | 31.44 | 31.44 | 31.44 | 31.44 |
| Interest on Loan | 29.18 | 29.38 | 26.53 | 23.40 | 20.70 |
| Return on Equity | 32.51 | 35.22 | 35.20 | 35.20 | 35.29 |
| Interest on Working Capital | 2.14 | 2.26 | 2.20 | 2.13 | 2.07 |
| O&M Expenses | 0.93 | 0.96 | 0.99 | 1.02 | 1.06 |
| Total | 93.91 | 99.26 | 96.36 | 93.19 | 90.56 |

13. The details of the Interest on Working Capital (IWC) claimed by the Petitioner in respect of the transmission assets are as follows:

Asset-A

(₹ in lakh)

| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--------------------|---------|---------|---------|---------|
| O&M Expenses | 44.73 | 46.21 | 47.75 | 49.33 |
| Maintenance Spares | 80.51 | 83.18 | 85.95 | 88.79 |



| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|------------------------------------|--------------|--------------|--------------|---------------|
| Receivables | 529.66 | 568.12 | 587.95 | 611.04 |
| Total Working Capital | 654.90 | 697.51 | 721.65 | 749.17 |
| Rate of Interest (in %) | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 88.41 | 94.16 | 97.42 | 101.14 |

Asset-B

(₹ in lakh)

| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|------------------------------------|--------------|--------------|--------------|--------------|
| O&M Expenses | 7.27 | 7.51 | 7.76 | 8.02 |
| Maintenance Spares | 13.08 | 13.52 | 13.97 | 14.43 |
| Receivables | 127.96 | 129.15 | 131.73 | 133.67 |
| Total Working Capital | 148.31 | 150.18 | 153.46 | 156.12 |
| Rate of Interest (in %) | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 14.82 | 20.27 | 20.72 | 21.08 |

Asset-C

(₹ in lakh)

| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|------------------------------------|--------------|--------------|--------------|--------------|
| O&M Expenses | 10.38 | 10.73 | 11.09 | 11.45 |
| Maintenance Spares | 18.69 | 19.31 | 19.95 | 20.61 |
| Receivables | 62.39 | 68.39 | 73.56 | 77.73 |
| Total Working Capital | 91.46 | 98.43 | 104.60 | 109.79 |
| Rate of Interest (in %) | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 11.54 | 13.29 | 14.12 | 14.82 |

Asset-D

(₹ in lakh)

| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|------------------------------------|--------------|--------------|--------------|--------------|
| O&M Expenses | 12.46 | 12.87 | 13.30 | 13.74 |
| Maintenance Spares | 22.43 | 23.17 | 23.94 | 24.74 |
| Receivables | 191.14 | 201.10 | 218.05 | 238.62 |
| Total Working Capital | 226.03 | 237.14 | 255.29 | 277.10 |
| Rate of Interest (in %) | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 17.84 | 32.01 | 34.46 | 37.41 |

Asset-E

(₹ in lakh)

| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|------------------------------------|--------------|--------------|--------------|--------------|
| O&M Expenses | 15.83 | 16.35 | 16.90 | 17.46 |
| Maintenance Spares | 28.50 | 29.43 | 30.42 | 31.42 |
| Receivables | 568.79 | 610.31 | 605.71 | 598.11 |
| Total Working Capital | 613.12 | 656.09 | 653.03 | 646.99 |
| Rate of Interest (in %) | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 77.79 | 88.57 | 88.16 | 87.34 |



Asset-F

(₹ in lakh)

| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|------------------------------------|--------------|--------------|--------------|--------------|
| O&M Expenses | 15.83 | 16.35 | 16.90 | 17.46 |
| Maintenance Spares | 28.50 | 29.43 | 30.42 | 31.42 |
| Receivables | 224.14 | 244.40 | 245.17 | 244.74 |
| Total Working Capital | 268.47 | 290.18 | 292.49 | 293.62 |
| Rate of Interest (in %) | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 33.96 | 39.17 | 39.49 | 39.64 |

Asset-G

(₹ in lakh)

| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|------------------------------------|--------------|---------------|---------------|---------------|
| O&M Expenses | 34.56 | 35.70 | 36.89 | 38.11 |
| Maintenance Spares | 62.20 | 64.26 | 66.40 | 68.60 |
| Receivables | 1288.83 | 1277.54 | 1255.87 | 1234.90 |
| Total Working Capital | 1385.59 | 1377.50 | 1359.16 | 1341.61 |
| Rate of Interest (in %) | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 50.08 | 185.96 | 183.49 | 181.12 |

Asset-H

(₹ in lakh)

| Particulars | 2016-17 | 2017-18 | 2018-19 |
|------------------------------------|--------------|--------------|--------------|
| O&M Expenses | 24.90 | 25.73 | 26.58 |
| Maintenance Spares | 44.82 | 46.32 | 47.85 |
| Receivables | 631.95 | 628.62 | 623.17 |
| Total Working Capital | 701.67 | 700.67 | 697.60 |
| Rate of Interest (in %) | 12.80 | 12.80 | 12.80 |
| Interest on Working Capital | 71.11 | 89.69 | 89.29 |

Asset-I

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|
| O&M Expenses | 5.03 | 5.19 | 5.36 | 5.54 | 5.73 |
| Maintenance Spares | 9.05 | 9.35 | 9.66 | 9.98 | 10.31 |
| Receivables | 32.49 | 33.32 | 33.96 | 34.31 | 34.01 |
| Total Working Capital | 46.57 | 47.86 | 48.98 | 49.83 | 50.05 |
| Rate of Interest (in %) | 13.50 | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 6.29 | 6.46 | 6.61 | 6.73 | 6.76 |

Asset-J

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--------------------|---------|---------|---------|---------|---------|
| O&M Expenses | 12.71 | 13.15 | 13.57 | 14.03 | 14.49 |
| Maintenance Spares | 22.87 | 23.66 | 24.42 | 25.25 | 26.08 |
| Receivables | 1095.53 | 1138.50 | 1118.11 | 1106.96 | 1090.08 |



| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|------------------------------------|----------------|----------------|----------------|----------------|----------------|
| Total Working Capital | 1131.11 | 1175.31 | 1156.10 | 1146.24 | 1130.65 |
| Rate of Interest (in %) | 13.50 | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 152.70 | 158.67 | 156.07 | 154.74 | 152.64 |

Asset-K

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|------------------------------------|----------------|----------------|----------------|----------------|----------------|
| O&M Expenses | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 |
| Maintenance Spares | 0.14 | 0.14 | 0.15 | 0.15 | 0.16 |
| Receivables | 15.65 | 16.54 | 16.06 | 15.53 | 15.09 |
| Total Working Capital | 15.87 | 16.76 | 16.29 | 15.77 | 15.34 |
| Rate of Interest (in %) | 13.50 | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 2.14 | 2.26 | 2.20 | 2.13 | 2.07 |

COD of Asset-H:

14. The Petitioner has claimed actual COD of Asset-H as 16.6.2016. In support of COD, the Petitioner has submitted CEA energisation certificate dated 28.8.2015, 29.4.2016, 2.5.2016, RLDC charging certificate dated 16.5.2016, 21.6.2016, self-declaration COD letter dated 22.6.2016 and CMD certificate as required under Grid Code.

15. Taking into consideration CEA energisation certificate, RLDC charging certificate, CMD certificate with respect to Asset-H, COD of Asset-H is approved as 16.6.2016.

16. The Commission vide order dated 25.4.2016 in Petition No. 107/TT/2014 had provisionally approved COD of Asset-J and Asset-K as 1.4.2014 and directed the Petitioner to submit RLDC charging certificate at the time of truing up. In compliance of the Commission's direction, the Petitioner in the instant petition has now submitted RLDC charging certificate dated 4.4.2016 certifying that successful trial operation of Asset-J and Asset-K has been completed on 30.3.2014 and 31.3.2014 respectively.



Taking into consideration the RLDC charging certificate, COD of Asset-J and Asset-K is approved as 1.4.2014.

Capital Cost

17. The capital cost of the transmission assets has been calculated in accordance with the Regulation 9(3) of the 2014 Tariff Regulations.

18. The Commission vide order dated 30.5.2016 in Petition No. 263/TT/2015, order dated 19.2.2016 in Petition No. 489/TT/2014 and order dated 25.4.2016 in Petition No. 107/TT/2014, allowed the capital cost as on 1.4.2014 and admitted Additional Capital Expenditure (ACE) for determination of tariff for 2014-19 period in respect of the transmission assets covered in the instant petition. The details of the same are as follows:

| Name of the Assets | Apportioned Approved Cost as per FR | Admitted Cost as on COD/ 31.3.2014 | Admitted ACE | | | Admitted Cost as on 31.3.2019 |
|--------------------|-------------------------------------|------------------------------------|--------------|---------|---------|-------------------------------|
| | | | 2014-15 | 2015-16 | 2016-17 | |
| Asset-A | 22501.79 | 16511.08 | - | 1758.96 | 348.60 | 18618.64 |
| Asset-B | 4788.62 | 3769.15 | - | 1019.47 | - | 4788.62 |
| Asset-C | 1427.13 | 1248.64 | - | 178.49 | - | 1427.13 |
| Asset-D | 6745.90 | 5284.31 | - | 413.59 | 77.61 | 5775.51 |
| Asset-E | 20813.68 | 16906.37 | - | 3764.48 | - | 20670.85 |
| Asset-F | 8280.17 | 5797.19 | - | 1244.07 | - | 7041.26 |
| Asset-G | 40748.56 | 40748.56 | - | - | - | 40748.56 |
| Asset-H | 10389.40 | 10389.40 | - | - | - | 10389.40 |
| Asset-I | 1059.73 | 704.32 | 123.98 | - | - | 828.30 |
| Asset-J | 43782.10 | 36003.97 | 4845.75 | 855.13 | - | 41704.85 |
| Asset-K | 6830.48 | 508.83 | 86.61 | 15.28 | - | 610.72 |

19. UPPCL has submitted that total apportioned approved cost of the transmission assets is ₹167357 lakh against ₹167757 lakh approved by the Board of Directors of the Petitioner. UPPCL has further submitted that in the instant petition, the Petitioner has not stated as to how the cost of each asset was arrived at as on 31.3.2014, ACE during 2014-19 tariff period and finally the capital cost as on 31.3.2019 for each asset. UPPCL



has further submitted that the Petitioner is required to clarify the reason of apportionment of the cost amongst the assets instead of taking actual cost of each asset under the scope of the transmission project.

20. In response, the Petitioner has submitted that there was an inadvertent error in submission of FR apportioned cost of Asset-E. The Petitioner has further submitted that it has inadvertently considered less apportionment of ₹389.00 lakh in case of Asset-E. Accordingly, apportionment of Asset-E is being revised. The details of revised apportionment of the transmission assets are as follows:

(₹ in lakh)

| Name of the Assets | Cost as per FR | Revised Apportionment | Cost as per RCE |
|--------------------|------------------|-----------------------|------------------|
| Asset-A | 22501.79 | 22501.79 | 23876.39 |
| Asset-B | 4788.62 | 4788.62 | 4723.56 |
| Asset-C | 1427.13 | 1427.13 | 2314.48 |
| Asset-D | 6745.90 | 6745.90 | 9603.91 |
| Asset-E | 20813.68 | 21203.12 | 22769.53 |
| Asset-F | 8280.17 | 8280.17 | 8783.23 |
| Asset-G | 40748.56 | 40748.56 | 46137.58 |
| Asset-H | 10389.40 | 10389.40 | 21189.11 |
| Asset-I | 1059.73 | 1059.73 | 1349.06 |
| Asset-J | 43782.10 | 43782.10 | 44364.79 |
| Asset-K | 6830.48 | 6830.48 | 699.36 |
| Total | 167367.56 | 167757.00 | 185811.00 |

21. The Petitioner has prayed to modify the inadvertent error and consider the revised apportionment with respect to Asset E.

22. We have considered the submissions of the Petitioner and UPPCL. The Petitioner has submitted that capital cost as on COD and actual ACE incurred in respect of the transmission assets are as follows:



| Assets | Appor­tioned Approved Cost | Appor­tioned Approved Cost (RCE) | Cost as on COD/ 31.3.2014 | ACE | | | | | Capital cost as on 31.3.2019 |
|---------|----------------------------|----------------------------------|---------------------------|---------|---------|---------|---------|---------|------------------------------|
| | | | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | |
| Asset-A | 22501.79 | 23876.39 | 16598.09 | 0.00 | 2551.87 | 520.82 | 1493.96 | 657.88 | 21822.62 |
| Asset-B | 4788.62 | 4723.56 | 3801.59 | 0.00 | 17.70 | 216.09 | 207.43 | 135.26 | 4378.07 |
| Asset-C | 1427.13 | 2314.48 | 1276.86 | 0.00 | 205.59 | 209.84 | 207.43 | 135.26 | 2034.98 |
| Asset-D | 6745.90 | 9603.91 | 5431.98 | 0.00 | 470.33 | 304.74 | 1286.53 | 522.62 | 8016.20 |
| Asset-E | 21203.12 | 22769.53 | 17181.57 | 0.00 | 2840.01 | 780.89 | 235.43 | 311.00 | 21348.90 |
| Asset-F | 8280.17 | 8783.23 | 5918.64 | 0.00 | 1213.32 | 376.13 | 170.76 | 163.85 | 7842.70 |
| Asset-G | 40748.56 | 46137.58 | 42567.41 | 0.00 | 154.35 | 359.62 | 353.75 | 207.57 | 43642.70 |
| Asset-H | 10389.40 | 21189.11 | 20308.41 | 0.00 | 0.00 | 137.77 | 493.90 | 106.77 | 21046.85 |
| Asset-I | 1059.73 | 1349.06 | 704.32 | 57.21 | 18.32 | 47.85 | 0.00 | 0.00 | 827.70 |
| Asset-J | 43782.10 | 44364.79 | 36003.97 | 4629.45 | 86.18 | 589.70 | 861.00 | 0.00 | 42170.30 |
| Asset-K | 6830.48 | 699.36 | 508.83 | 86.61 | 0.00 | 0.00 | 0.00 | 0.00 | 595.44 |

Cost Over-run

23. The Petitioner has claimed total capital cost of ₹150301.67 lakh in respect of the transmission assets as on COD/ 1.4.2014.

24. UPPCL has submitted that the Petitioner has furnished the overall cost as on 31.3.2019 in respect of the transmission project which is within RCE and as such there is no cost-over-run. According to UPPCL, the plea of the Petitioner cannot be accepted and impact of cost over-run may be examined for each asset separately as was done in case of time-over-run because each of the asset was a sub-project in itself having its own individual cost and scheduled date of execution. For the purpose of cost over-run, the Petitioner is required to put up actual cost of each asset as on 1.4.2014, ACE during 2014-19 as worked out on the basis of original project cost earlier and now on the basis of RCE. UPPCL has further submitted that the overall Annual Fixed Charge (AFC) for 2014-19 under true-up proposal has increased significantly, the cost of each asset might be subject to scrutiny for cost over-run because the project has been delayed by 2 years and 4 months.

25. In response, the Petitioner has submitted that the increase/ decrease in award cost received in competitive bidding with respect to initial estimates (FR cost) is mainly



due to open competitive bidding route which is followed by providing equal opportunity to all eligible firms, lowest possible market prices for required products/services are obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may happen to be lower or higher than the cost estimate depending upon prevailing market conditions. Apart from the above, cost variation is attributable to price variation. The reasons for the same is due to inflationary trends prevalent during execution of project as may be seen from the trend of variation in indices of various major raw materials. The Petitioner has further submitted that RCE of the transmission project has been approved by the Board of Directors vide Memorandum No. C/CP/RCE/NRSS-21, dated 20.1.2017 with an estimated cost of ₹185811 lakh including IDC ₹14819 lakh based on April, 2016 price level. As per the revised cost estimate, net cost of ₹185811 lakh has been approved which is an increase of ₹18054 lakh from the earlier approved FR cost. The major reasons of cost variation are as follows:

a) Land and compensation (net increase of ₹17336 lakh : 10.33%)

- (i) Based on approved cost, there was a provision of ₹1868 lakh under this head. However, based on actual expenditure, an amount of ₹19204 lakh is incurred under this head, resulting in an increase of ₹17336 lakh in project cost. The main reason for increase in the transmission project cost is as follows:

| Description | As per DPR (₹ in lakh) | As per RCE (₹ in lakh) | Remarks |
|--|---------------------------|---------------------------|---|
| i) Land for sub-station and R&R compensation | 872.00 | 1443.00 | Based on actual / anticipated Payment. In DPR, about 39.659 Ha of land was envisaged for Bareilly Sub-station. However, an area of 40.597 Ha (39.373 Ha Private Land+1.224 Ha Govt. Land) was acquired. <ul style="list-style-type: none"> • Payment towards land: ₹1307 lakh • R&R : ₹135 lakh |



| | | | |
|--|----------------|-----------------|--------------------------------------|
| ii) Compensation towards crop and PTCC | 745.00 | 16960.00 | Based on actual/anticipated payment. |
| ii) Compensation towards forest | 250.00 | 80100 | Based on actual/anticipated payment. |
| Total | 1868.00 | 19204.00 | |

b) Price Variation (PV) (Net increase of ₹7545.00 lakh: 4.50 %)

(i) There is an increase in the cost of the transmission project by ₹7545 lakh on this account which works out to 4.50% of the approved cost. The details of the same are as follows:

- It may be seen from the table below that out of a total price variation, a negative variation of (-) ₹3562 lakh has been observed from the time of approval of project to till award of various contracts (DPR to LOA) based on prices received in competitive biddings. However, despite this, a variation of ₹11107 lakh has been incurred/likely to be incurred because of PV based on indices as per provision in respective contracts.
- The reason for the same is attributable to inflationary trends prevalent during execution of project from February, 2009 (first OBD under the project) to March, 2013 (period of major supplies), as may be seen from the trend of variation in indices of various major raw materials, the details of the same are as follows:

| Name of Indices | January,2009 (one month prior to first OBD) | March, 2011 | March, 2012 | March, 2013 | % Increase from first OBD |
|------------------------|--|-------------|-------------|-------------|---------------------------|
| Tower Steel | 50867 | 49037 | 53234 | 53539 | 5.25% |
| HG Zinc | 63400 | 128700 | 120600 | 132900 | 109.62% |
| EC Grade Al | 99767 | 144000 | 142167 | 146700 | 47.04% |
| WPI | 124.4 | 149.5 | 161.0 | 170.1 | 36.74% |
| WPI for Ferrous metals | 127.2 | 140.9 | 154.8 | 154.7 | 21.62% |
| WPI for Fuel & Power | 127.2 | 157.6 | 177.8 | 191.6 | 50.63% |



| | | | | | |
|-----------------|-------|-------|-------|-------|---------------|
| Structural Clay | 130.4 | 146.2 | 160.6 | 167.6 | 28.53% |
| Cement and Lime | 141.9 | 153.7 | 163.1 | 172.3 | 21.42% |
| CPI | 148 | 185 | 201 | 224 | 51.35% |

- Thus, the price variation under the project is attributable to the inflationary trend of indices prevailing during execution of project.

c) Foreign Exchange Rate Variation (Net Increase of ₹5516 lakh: 3.29 %)

- (i) The project involves funding from external commercial borrowings as well as payment under various contracts in the project awarded in foreign currency. The increase in liability on account of FERV due to above is ₹5516 lakh (3.29%). The details of exchange rates considered are as follows:

| Foreign currency (in ₹) | | |
|-------------------------|-------------------------------|----------------------------|
| | Approved DPR (1Q, 2010 PL) | RCE |
| 1 USD | 46.05 | Varied from 46.05 to 61.00 |
| 1 EURO | 63.43 | Varied from 63.43 to 76.00 |

d) Increase in IDC

- (i) Interest during Construction (IDC) in respect of the transmission project as per approved DPR cost was estimated at ₹12198 lakh, whereas based on the actual and anticipated funds flow, IDC of the transmission project in RCE works out to be ₹14819 lakh. Thus, there is an increase of ₹2621 lakh in IDC. The main reasons for increase in IDC are (i) increase in the estimated cost of the transmission project (excluding IDC) from ₹155559 lakh to ₹170992 lakh; (ii) increase in execution period from 32 months to 70 months.

26. The Petitioner has prayed to allow the cost variation in case of all the transmission assets covered in the instant petition.



27. In response to the Commission's query with regard to reasons for variation in capital cost as on 1.4.2014/ COD of the transmission assets, the Petitioner vide affidavit dated 30.3.2021 has submitted as follows:

| Assets | Apportioned Approved Cost submitted in Petition No. 263/TT/2015 | Admitted Cost as on COD/ 31.3.2014 (A) | Cost Claimed as on COD/ 31.3.2014 in the instant truing up Petition (B) | Difference (C=B-A) | Remarks |
|---------|---|--|---|--------------------|---|
| Asset-A | 22501.79 | 16511.08 | 16514.87 | 3.79 | In Petition No. 263/TT/2015 the Commission deducted ₹3.79 lakh with respect to excess Initial Spares. However, in the instant petition no deduction has been done with respect to Initial Spares as Initial Spares are within specified limit on the project level. |
| Asset-B | 4788.62 | 3769.15 | 3777.19 | 8.04 | Cost approved as per Auditor's certificate on anticipated COD cost. However, in the instant petition actual cost is being claimed. |
| Asset-C | 1427.13 | 1248.64 | 1248.64 | 0.00 | No Change |
| Asset-D | 6745.9 | 5284.31 | 5284.30 | 0.00 | No Change |
| Asset-E | 20813.68 | 16906.37 | 16906.37 | 0.00 | No Change |
| Asset-F | 8280.17 | 5797.19 | 5797.18 | 0.00 | No Change |
| Asset-G | 40748.56 | 40748.56 | 42567.41 | 1,818.85 | In Petition No. 263/TT/2015, the approved cost was restricted as per FR cost in the absence of RCE. However, in the instant petition, full cost claimed along with RCE apportionment. |
| Asset-H | 10389.4 | 10389.4 | 20020.35 | 9,630.95 | In Petition No. 263/TT/2015 approved cost was on anticipated COD and restricted as per FR cost in the absence of RCE. However, in the instant petition full cost claimed on actual COD along with RCE apportionment. |



28. We have considered the submissions of the Petitioner and UPPCL. As compared with FR cost, the estimated completion cost of Asset-A, Asset-B, Asset-F, Asset-G, Asset-I, Asset-J and Asset-K is within the FR cost. As compared with FR cost, the estimated completion cost of Asset-C, Asset-D, Asset-E and Asset-H is varied by ₹607.85 lakh, ₹1270.30 lakh, ₹145.78 lakh, ₹10657.45 lakh respectively. The Commission observed that RCE of the transmission project has been approved by the Board of Directors vide Memorandum No. C/CP/RCE/NRSS-21, dated 20.1.2017 with an estimated cost of ₹185811 lakh including IDC ₹14819.00 lakh based on April, 2016 price level. The total completion cost including ACE in respect of the transmission assets is ₹173726.46 lakh and approved cost as per RCE is ₹185811.00 lakh. As compared with RCE cost, the estimated completion cost in respect of all the transmission assets is within RCE cost. Hence, the completion cost in respect of the transmission assets is within the approved cost as per RCE and it is allowed.

Time Over-run

29. As per IA dated 26.8.2010, SCOD of the transmission project was 32 months from the date of IA. However, actual execution of the transmission assets is as follows:

| Assets | Asset Nomenclature in current petition | COD | SCOD | Time over-run | Time over-run condoned |
|---|--|-----------|-----------|----------------------|------------------------|
| CERC Order dated 30.5.2016 in Petition No. 263/TT/2015 | | | | | |
| Asset-A1 | Asset-A | 1.4.2015 | 25.4.2013 | 22 months 7 days | 22 months 7 days |
| Asset-A2 | | | | | |
| Asset-A3 | | | | | |
| Asset-B | Asset-B | 5.7.2015 | 25.4.2013 | 25 months 10 days | 25 months 10 days |
| Asset-C | Asset-C | 25.4.2015 | 25.4.2013 | 24 months | 24 months |
| Asset-D | Asset-D | 31.8.2015 | 25.4.2013 | 28 months 6 days | 28 months 6 days |
| Asset-E | Asset-E | 23.4.2015 | 25.4.2013 | 23 months 29 days | 23 months 29 days |
| Asset-F | Asset-F | 24.4.2015 | 25.4.2013 | 24 months | 24 months |



| Assets | Asset Nomenclature in current petition | COD | SCOD | Time over-run | Time over-run condoned |
|---|--|------------|-----------|----------------------|--------------------------------------|
| Asset-G | Asset-G | 25.12.2015 | 25.4.2013 | 32 months | 32 months |
| Asset-H | Asset-H | 16.6.2016 | 25.4.2013 | 37 months 22 days | To be discussed in the instant order |
| CERC Order dated 19.2.2016 in Petition No. 489/TT/2014 | | | | | |
| Asset-A | Asset-I | 1.2.2013 | 1.5.2013 | NA | NA |
| CERC Order dated 25.4.2016 in Petition No. 107/TT/2014 | | | | | |
| Asset-A | Asset-J | 1.4.2014 | 26.4.2013 | 11 months 4 days | 11 months 4 days |
| Asset-B | Asset-K | 1.4.2014 | 26.4.2013 | 11 months 4 days | 11 months 4 days |

30. The Commission vide order dated 30.5.2016 in Petition No. 263/TT/2015 computed tariff for Asset-H on the basis of anticipated COD and the same is as follows:

“The petitioner vide affidavit dated 24.5.2016 has submitted that RLDC certificate in case of Asset-H, anticipated to be commissioned on 15.6.2016, shall be submitted after actual COD. Accordingly, the tariff for all the assets, except Asset-H, is worked out from their actual COD to 31.3.2019. In case of Asset-H, it is allowed from the anticipated COD and the tariff allowed in this order shall be applicable from the date of actual COD on pro-rata basis.”

31. Further, time over-run in case of Asset-H was not considered in order dated 30.5.2016 in Petition No. 263/TT/2015 as tariff was approved on anticipated COD. The Petitioner was directed to submit the complete details of time over-run alongwith documentary evidence, Interest During Construction (IDC)/ Incidental Expense During Construction (IEDC) till SCOD and from SCOD to actual COD, on cash basis at the time of truing up of the petition. The tariff in respect of Asset-H was determined considering IDC and IEDC as Nil and total capital cost was limited to the approved apportioned cost.

32. The Petitioner has submitted the details regarding time over-run with respect to Asset-H in the instant petition. There is delay of 37 months and 22 days in execution of Asset-H and reasons for the same are as follows:



Reasons for time over-run in respect of Asset-H:

33. The Petitioner has submitted that entire time over-run of 37 months and 22 days in case of Asset-H was mainly due to delay in land acquisition and Right of Way (RoW) problem. The details are as follows:

Land acquisition and Saharanpur Sub-station

- (i) The Petitioner has submitted that land acquisition process at Saharanpur Sub-station was started on 19.1.2009 which was well before placing of LOA i.e. on 23.12.2010. In spite of the formal land allocation, full/ complete physical possession of the land was not available with the Petitioner. The land was acquired on 25.6.2011. The boundary wall and bay extension work started after acquisition of land. The land acquisition delayed the work for about 6-8 months. The relevant documents have been submitted by the Petitioner along with the Petition.

Delay on account of Right of Way (RoW)

- (i) The Petitioner has submitted that construction activities of transmission line Roorkee-Saharanpur started in the month of April, 2011. The work on above transmission line was stopped by the farmers of Roorkee, Saharanpur and Muzaffarnagar districts since April, 2011. The Kisan unions were demanding unreasonable compensation of transmission line which seriously affected the construction work of the said transmission line. The above issue was brought to the notice of District Magistrates of the concerned area, Commissioners from time to time and the officers of the Petitioner had series of meetings with District Authorities as well as Secretary, Energy, Government of UP. The Petitioner released



compensation against damages caused during construction of transmission line based on assessment and valuation by Revenue/ Forest Authorities.

- (ii) The farmers demanded higher compensation and issue of RoW was persuaded with district administration and after resolution of RoW issues, the same was put under commercial operation in the month of June, 2016. The detailed chronology of RoW issues up to October, 2015 alongwith the supporting documents have been submitted by the Petitioner alongwith the petition.

34. UPPCL has submitted that that all the transmission assets covered in the transmission project have been executed with delay and average period of delay is about 2 years and 4 months and as such cost over-run in execution of these assets may be examined by the Commission.

35. In response, the Petitioner has submitted that with regard to delay justification for Asset-A to Asset-H, time over-run of all the assets except for Asset-H has already been condoned by the Commission. The detailed justification of Asset-H along with the supporting documents has been submitted along with the petition. The Petitioner vide affidavit dated 8.7.2021 has submitted additional chronology of events in respect of RoW issues from 17.9.2015 to 15.6.2016.

36. We have considered the submissions of the Petitioner and UPPCL with respect to time over-run. As per Investment Approval dated 6.8.2010, transmission assets covered under the transmission project, including Asset-H were scheduled to be executed within 32 months. Therefore, SCOD of the transmission assets was 26.4.2013



against which Asset-H was put into commercial operation on 16.6.2016. Hence, there is time over-run of 38 months and 10 days (1167 days). The submissions of the Petitioner show that delay was on account of delay in land acquisition and RoW issues and the same are as follows: .

Land Acquisition:

The Petitioner has submitted chronology of events for land acquisition for construction of new 400/200 kV Sub-station at Saharanpur. It is observed that Ministry of Power, Government of India, on 19.1.2009 approved construction of new 400/200 kV Sub-station at Saharanpur. Subsequently, the Petitioner on 28.1.2009 sought help of DM, Saharanpur for identification of land for construction of new sub-station well before I.A i.e. on 6.8.2010. However, after several exercises the possession of land was finally received only on 25.6.2011, causing delay of 28 months and 28 days (878 days) i.e. from 28.1.2009 to 25.6.2011. Considering delay from I.A i.e 6.8.2010, it caused a delay of 10 months and 19 days (323 days) i.e from 6.8.2010 to 25.6.2011. The Petitioner apart from chronology of land acquisition, has submitted relevant supporting letters dated 19.1.2009, 28.1.2009, 6.10.2009, 10.10.2009, 30.10.2009, 10.2.2011, 14.3.2011, 20.4.2011, 6.6.2011 and 25.6.2011. Considering the above, we are of the view, that delay from IA i.e 6.8.2010 to 25.6.2011 (final approval of land acquisition date) i.e a total of 10 months and 19 days (323 days) is beyond the control of the Petitioner and the same has been condoned.

RoW Issues:

The Petitioner has submitted chronology of events for RoW issues along with supporting newspapers cutting and various letters exchanged with different



authorities. It is observed that for the first time, RoW issue occurred on 21.12.2010 and subsequently, the Petitioner coordinated with District Magistrates of the concerned area. The Commissioners from time to time had series of meetings with District Authorities as well as Secretary, Energy, Government of UP for resolving the RoW issues. After persuasion and assurance of review of compensation rates, on 22.4.2016, farmers agreed not to obstruct the work and work was resumed on 23.4.2016 with PAC and construction work of both the circuits completed and finally executed on 16.6.2016. Thus, due to RoW issue, the work was hampered from 21.12.2010 to 22.4.2016 i.e for 64 months and 1 day (1949 days). The delay period from 21.12.2010 to 25.6.2011 i.e 6 months and 4 days (186 days) on account of RoW issue has been subsumed in delay condonation of land acquisition. Further, delay from 26.6.20211 to 22.4.2016 i.e 57 months and 27 days (1762 days) is condoned on account of RoW issue as the same is beyond the control of the Petitioner.

37. In view of the above discussions, we are of the view that total delay on account of land acquisition of 10 months and 19 days (323 days) plus 57 months and 27 days (1762 days) on account of RoW issues combined together comes to total delay of 68 months and 16 days (2086 days) and the same is within time over-run of 38 months and 10 days (1167 days) in respect of Asset-H. Hence, entire delay of 38 months and 10 days in completion of transmission Asset-H is condoned.

Interest During Construction (“IDC”) and Incidental Expenditure During Construction (“IEDC”)

38. The Petitioner has claimed IDC in respect of the transmission assets covered in the instant petition and has submitted statement showing IDC claim, discharge of IDC liability as on date of commercial operation and thereafter which is as follows:



(₹ in lakh)

| Assets | COD | IDC as per Auditor's Certificate | IDC Discharge d upto COD | Accrual IDC Discharged | | | |
|---------|------------|----------------------------------|--------------------------|------------------------|---------|---------|---------|
| | | | | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Asset-A | 1.4.2015 | 1453.90 | 1370.68 | 83.22 | 0.00 | 0.00 | 0.00 |
| Asset-B | 5.7.2015 | 341.50 | 317.10 | 24.40 | 0.00 | 0.00 | 0.00 |
| Asset-C | 25.4.2015 | 107.59 | 79.37 | 28.22 | 0.00 | 0.00 | 0.00 |
| Asset-D | 31.8.2015 | 458.54 | 310.86 | 70.07 | 77.61 | 0.00 | 0.00 |
| Asset-E | 23.4.2015 | 1367.23 | 1092.03 | 275.20 | 0.00 | 0.00 | 0.00 |
| Asset-F | 24.4.2015 | 465.31 | 343.85 | 121.46 | 0.00 | 0.00 | 0.00 |
| Asset-G | 25.12.2015 | 4134.83 | 4134.83 | 0.00 | 0.00 | 0.00 | 0.00 |
| Asset-H | 16.6.2016 | 3013.18 | 2725.12 | 0.00 | 255.02 | 33.04 | 0.00 |
| Asset-I | 1.2.2013 | 28.81 | 28.81 | 0.00 | 0.00 | 0.00 | 0.00 |
| Asset-J | 1.4.2014 | 2446.06 | 2446.06 | 0.00 | 0.00 | 0.00 | 0.00 |
| Asset-K | 1.4.2014 | 32.52 | 32.52 | 0.00 | 0.00 | 0.00 | 0.00 |

39. The Petitioner has submitted IDC computation statement which consists of name of the loan, drawl date, loan amount, interest rate and interest claimed. IDC is worked out based on the details given in IDC statement. Further, loan amount as on COD has been mentioned in Form 6 and Form 9C. While going through these documents, certain discrepancies have been observed such as mismatch in loan amount between IDC statement, Form 6 and Form 9C.

40. In response to the Commission's query with regard to calculation of IDC for foreign loan, the Petitioner vide affidavit dated 23.7.2021 has submitted that the Petitioner avails loans periodically after pooling the fund requirements of all the transmission projects which are under different stages of construction. Fund requirements for all the on-going transmission projects is anticipated for next 2-3 months and accordingly funds are raised through domestic borrowings (Bonds/CP/Bank Loans) or borrowing in foreign currency-ECB (through World Bank, Asian Development Bank etc.). As per the Petitioner's policy, out of total loans taken for the pooled requirements of all the construction transmission projects, loans are earmarked to a particular project/ element based on actual fund outflow for a particular project/ element.



Interest paid on such loan (taken for pooled requirements of transmission projects under construction) is allocated to a particular project/ element in proportion to the loan so earmarked to that project. In addition to interest on loan (IDC), other expenses covered under borrowing cost (i.e. guarantee fee, commitment charges, front end fee etc. in respect of foreign currency loan) are also allocated to individual project/ element in proportion to the loan amount earmarked to a particular project/element.

41. The Petitioner has further submitted that foreign currency loans are also contracted for a basket of projects. Loan (Foreign Currency) Agreement speaks about overall limit of the loan amount, name of foreign currency and projects for which lender (WB, ADB etc.) has agreed to fund. These loans are also availed (drawn) by the Petitioner based on actual outflow of funds during a certain period for all transmission projects under construction covered in loan agreement. Loans get accumulated with every drawl up to the sanctioned limit. Such loans as well as debt service (repayment of loan and interest payment thereon) is also done in the foreign currency. Repayments of loan and payment of interest have to be released to the lender as per schedule of repayment agreed for the loan as a whole consisting of the entire basket of projects. The total foreign currency loan drawn in first stage allocated to different projects based on actual utilization of loan for respective projects. Accordingly, interest and other financial charges against a particular loan is allocated to different projects in proportion to loan utilized by respective projects periodically. These interest and financial charges so allocated get accumulated till COD of the project/ element (part of the project). In case of COD of particular element (part of the project) foreign currency loan drawn for a specific project is apportioned to the individual elements of that project in proportion to the expenses related to that element to the total expenses of the project (related to foreign currency loan part). Foreign currency loans are considered in tariff forms



equivalent to INR value taking exchange rate as on COD date. IDC statement shows INR value of interest paid (in foreign currency) taking amount of actual foreign currency paid multiplied by exchange rate prevailed on the day of payment of interest whereas INR value of undischarged interest (to be paid subsequently after COD date) is shown as actual liability.

42. The necessity of availing loan for pooled-fund requirements of all the on-going project, then earmarking drawn loan amount to a particular project/ element based on the actual cash outflow for that project /element, enforces to allocate the interest (IDC) of the entire loan to that projects/ elements to which loan amount is earmarked. IDC thus allocated to a particular project/ element is shown in the cost certificate. This imperative practice leads to a situation where providing details showing actual calculation of IDC for a particular project/ element is not practical, however the detail of periodical IDC (interest plus other financial charges) is allocated to the transmission assets. Further, the Petitioner with respect to loans has submitted that no hedging for foreign exchange exposure has been undertaken by the Company.

43. The Petitioner has further submitted that all the borrowed funds are allocated to specific projects as a whole and not for each element, over the entire construction period. In the intervening period, if any asset is executed, debt funds and IDC are apportioned to the asset for the claim period from the date of infusion of debt, after taking in to account the prudent phasing of funds up to COD, for the purpose of filing tariff petition before the Commission. IDC booked to the project are not proportionate during the period of construction and the same is calculated based on the actual deployment of funds in the project at the time of COD. Therefore, this imperative practice leads to a situation where providing details showing actual calculation of IDC



for a particular project/ element having particular package-wise, sub-work wise loan allocation and apportionment is not practically possible.

44. The Petitioner has further submitted that total IDC claimed with respect to Asset-A, Asset-B, Asset-C, Asset-D, Asset-E, Asset-F, Asset-G, Asset-H, Asset-J and Asset-K is ₹13820.66 lakh. Further, as per the calculations submitted, total IDC for Asset-A, Asset-B, Asset-C, Asset-D, Asset-E, Asset-F, Asset-G, Asset-H, Asset-J and Asset-K comes to ₹16782.71 lakh. Further, Asset-I was executed during 2009-14 tariff period and its IDC has already been approved by the Commission in the trued up tariff order. The Petitioner has prayed to admit the apportioned IDC as claimed in respect of deployed foreign currency/ domestic loan and allow the total IDC claimed for all the assets in the instant petition.

45. The Petitioner has revised the claim of IDC in respect of the transmission assets covered in the instant petition and has submitted the statement showing IDC claim, discharge of IDC liability as on COD and thereafter and the same are as follows:

(₹ in lakh)

| Assets | COD | IDC as per Auditor's Certificate | IDC Discharged upto COD | Accrued IDC Discharged | | | | |
|---------|------------|----------------------------------|-------------------------|------------------------|---------|---------|---------|---------|
| | | | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Asset-A | 1.4.2015 | 1453.90 | 1302.09 | 0.00 | 151.81 | 0.00 | 0.00 | 0.00 |
| Asset-B | 5.7.2015 | 341.50 | 317.06 | 0.00 | 24.44 | 0.00 | 0.00 | 0.00 |
| Asset-C | 25.4.2015 | 107.59 | 79.47 | 0.00 | 28.12 | 0.00 | 0.00 | 0.00 |
| Asset-D | 31.8.2015 | 458.54 | 454.23 | 0.00 | 4.31 | 0.00 | 0.00 | 0.00 |
| Asset-E | 23.4.2015 | 1367.23 | 1022.09 | 0.00 | 345.14 | 0.00 | 0.00 | 0.00 |
| Asset-F | 24.4.2015 | 465.31 | 346.54 | 0.00 | 118.77 | 0.00 | 0.00 | 0.00 |
| Asset-G | 25.12.2015 | 4134.83 | 2829.20 | 0.00 | 857.58 | 448.04 | 0.00 | 0.00 |
| Asset-H | 16.6.2016 | 3013.18 | 2723.79 | 0.00 | 0.00 | 256.34 | 33.04 | 0.00 |
| Asset-I | 1.2.2013 | 28.81 | 28.81 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Asset-J | 1.4.2014 | 2446.06 | 1747.95 | 698.11 | 0.00 | 0.00 | 0.00 | 0.00 |
| Asset-K | 1.4.2014 | 32.52 | 22.49 | 10.03 | 0.00 | 0.00 | 0.00 | 0.00 |



46. We have considered the submissions of the Petitioner. The allowable IDC has been worked out based on the information available on record and relying on loan amount as per Form 9C. IDC considered in respect of the transmission assets as on COD and summary of discharge of IDC liability up to COD and thereafter for the purpose of tariff determination is as follows:

(₹ in lakh)

| Assets | IDC as per Auditor's Certificate | IDC allowed | IDC discharged upto COD | IDC discharged during 2014-15 | IDC discharged during 2015-16 | IDC discharged during 2016-17 | IDC discharged during 2017-18 |
|---------|----------------------------------|-------------|-------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Asset-A | 1453.90 | 1453.90 | 1302.09 | 0.00 | 151.81 | 0.00 | 0.00 |
| Asset-B | 341.50 | 341.50 | 317.01 | 0.00 | 24.49 | 0.00 | 0.00 |
| Asset-C | 107.59 | 107.59 | 77.47 | 0.00 | 28.12 | 2.00 | 0.00 |
| Asset-D | 458.54 | 458.54 | 445.18 | 0.00 | 13.36 | 0.00 | 0.00 |
| Asset-E | 1367.23 | 1367.23 | 1022.09 | 0.00 | 345.14 | 0.00 | 0.00 |
| Asset-F | 465.31 | 465.31 | 344.47 | 0.00 | 120.84 | 0.00 | 0.00 |
| Asset-G | 4134.83 | 4134.83 | 2829.20 | 0.00 | 857.58 | 448.05 | 0.00 |
| Asset-H | 3013.18 | 3013.18 | 2723.79 | 0.00 | 0.00 | 256.34 | 33.04 |
| Asset-I | 28.81 | 28.81 | 28.81 | 0.00 | 0.00 | 0.00 | 0.00 |
| Asset-J | 2446.06 | 2446.06 | 1747.95 | 698.11 | 0.00 | 0.00 | 0.00 |
| Asset-K | 32.52 | 32.52 | 22.49 | 10.03 | 0.00 | 0.00 | 0.00 |

47. The Petitioner has claimed IEDC in respect of the transmission assets as per the Auditor's Certificate. The Petitioner has submitted that entire IEDC mentioned in the Auditor's Certificate is on cash basis and was paid upto COD. IEDC claimed as per Auditor's Certificate, IEDC considered and discharged up to COD in respect of the transmission assets is as follows:

(₹ in lakh)

| Assets | IEDC claimed as per Auditor's certificate | IEDC Allowed | IEDC discharged upto COD |
|---------|---|--------------|--------------------------|
| Asset-A | 463.91 | 463.91 | 463.91 |
| Asset-B | 98.69 | 98.69 | 98.69 |
| Asset-C | 29.87 | 29.87 | 29.87 |
| Asset-D | 117.00 | 117.00 | 117.00 |
| Asset-E | 379.65 | 379.65 | 379.65 |
| Asset-F | 129.21 | 129.21 | 129.21 |
| Asset-G | 1100.62 | 1100.62 | 1100.62 |
| Asset-H | 777.54 | 777.54 | 777.54 |



| Assets | IEDC claimed as per Auditor's certificate | IEDC Allowed | IEDC discharged upto COD |
|---------|---|--------------|--------------------------|
| Asset-I | 12.47 | 12.47 | 12.47 |
| Asset-J | 756.71 | 756.71 | 756.71 |
| Asset-K | 10.24 | 10.24 | 10.24 |

Initial Spares

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

*“(d) Transmission System
Transmission line: 1.00%
Transmission sub-station (Green Field): 4.00%
Transmission sub-station (Brown Field): 6.00%
Gas Insulated sub-station :5.00%
Communication System: 3.5%”*

49. Initial Spares as claimed by the Petitioner are as follows:

(₹ in lakh)

| Name of the Assets | Plant and Machinery Cost | | Initial Spares Claimed | | Initial Spares Allowable | |
|--------------------|--------------------------|----------------------|------------------------|----------------------|--------------------------|----------------------|
| | Transmission Line | Sub-station and PLCC | Transmission Line | Sub-station and PLCC | Transmission Line | Sub-station and PLCC |
| Asset-A | 76.10 | 17285.71 | 0.00 | 489.46 | 0.80 | 699.80 |
| Asset-B | 0.00 | 4118.86 | 0.00 | 2.14 | 0.00 | 171.50 |
| Asset-C | 0.00 | 1943.34 | 0.00 | 24.15 | 0.00 | 80.00 |
| Asset-D | 0.00 | 7501.78 | 0.00 | 0.00 | 0.00 | 312.60 |
| Asset-E | 18476.87 | 1507.33 | 0.00 | 23.61 | 186.60 | 61.80 |
| Asset-F | 5975.13 | 1279.98 | 0.00 | 14.19 | 60.40 | 52.70 |
| Asset-G | 36648.76 | 2077.38 | 300.54 | 32.69 | 367.20 | 85.20 |
| Asset-H | 15747.95 | 1502.48 | 76.47 | 91.15 | 158.30 | 58.80 |
| Asset-I | 0.00 | 827.70 | 0.00 | 46.87 | 0.00 | 20.00 |
| Asset-J | 39102.17 | 0.00 | 280.09 | 0.00 | 392.10 | 0.00 |
| Asset-K | 552.68 | 0.00 | 3.93 | 0.00 | 5.50 | 0.00 |



50. We have considered the submissions of the Petitioner. Initial Spares allowed in respect of the transmission assets as percentage specified in the 2014 Tariff Regulations is as follows:

| Assets | Particulars | Plant and Machinery cost (excluding IDC/IEDC, Land cost & Cost of Civil Works) (₹ in lakh) | Initial Spares claimed (₹ in lakh) | Norms as per 2009/2014 Tariff Regulations (in %) | Initial Spares allowable (₹ in lakh) | Initial Spares disallowed (₹ in lakh) | Initial Spares Allowed (₹ in lakh) |
|---------|----------------------|--|------------------------------------|--|--------------------------------------|---------------------------------------|------------------------------------|
| | | A | B | C | $D=(A-B)*C/(100-C)$ | B-D | |
| Asset-A | Transmission Line | 76.10 | - | 1.00 | - | - | - |
| | Sub-station and PLCC | 17285.71 | 489.46 | 4.00 | 699.84 | - | 489.46 |
| Asset-B | Transmission Line | - | - | 1.00 | - | - | - |
| | Sub-station and PLCC | 4118.86 | 2.14 | 4.00 | 171.53 | - | 2.14 |
| Asset-C | Transmission Line | - | - | 1.00 | - | - | - |
| | Sub-station and PLCC | 1943.34 | 24.15 | 4.00 | 79.97 | - | 24.15 |
| Asset-D | Transmission Line | - | - | 1.00 | - | - | - |
| | Sub-station and PLCC | - | - | 4.00 | - | - | - |
| Asset-E | Transmission Line | - | - | 1.00 | - | - | - |
| | Sub-station and PLCC | 1507.33 | 23.61 | 4.00 | 61.82 | - | 23.61 |
| Asset-F | Transmission Line | - | - | 1.00 | - | - | - |
| | Sub-station and PLCC | 1279.98 | 14.19 | 4.00 | 52.74 | - | 14.19 |
| Asset-G | Transmission Line | 36648.76 | 300.54 | 1.00 | 367.15 | - | 300.54 |
| | Sub-station and PLCC | 2077.38 | 32.69 | 4.00 | 85.20 | - | 32.69 |



| Assets | Particulars | Plant and Machinery cost (excluding IDC/IEDC, Land cost & Cost of Civil Works) (₹ in lakh) | Initial Spares claimed (₹ in lakh) | Norms as per 2009/2014 Tariff Regulations (in %) | Initial Spares allowable (₹ in lakh) | Initial Spares disallowed (₹ in lakh) | Initial Spares Allowed (₹ in lakh) |
|---------|----------------------|--|------------------------------------|--|--------------------------------------|---------------------------------------|------------------------------------|
| | | A | B | C | $D=(A-B)*C/(100-C)$ | B-D | |
| Asset-H | Transmission Line | 15747.95 | 76.47 | 1.00 | 158.30 | - | 76.47 |
| | Sub-station and PLCC | 1502.48 | 91.15 | 4.00 | 58.81 | 32.34 | 58.81 |
| Asset-I | Transmission Line | - | - | 1.00 | - | - | - |
| | Sub-station and PLCC | 827.70 | 46.87 | 2.50 | 20.71 | 26.16 | 20.71 |
| Asset-J | Transmission Line | 39102.17 | 280.09 | 1.00 | 392.14 | - | 280.09 |
| | Sub-station and PLCC | - | - | 4.00 | - | - | - |
| Asset-K | Transmission Line | 552.68 | 3.93 | 1.00 | 5.54 | - | 3.93 |
| | Sub-station and PLCC | - | - | 4.00 | - | - | - |

51. The capital cost of the transmission project has been calculated in accordance with Regulation 9(2) of the 2014 Tariff Regulation and the same is as follows:

| Assets | Capital Cost claimed as per Auditor's Certificate (A) | Undischarged IDC (B) | Excess Initial Spares Disallowed (C) | Capital Cost allowed as on COD (D) = (A-B-C) |
|---------|---|----------------------|--------------------------------------|--|
| Asset-A | 16598.09 | 151.81 | - | 16446.28 |
| Asset-B | 3801.59 | 24.49 | - | 3777.10 |
| Asset-C | 1276.86 | 30.12 | - | 1246.74 |
| Asset-D | 5431.98 | 13.36 | - | 5418.62 |
| Asset-E | 17181.57 | 345.14 | - | 16836.43 |
| Asset-F | 5918.64 | 120.84 | - | 5797.80 |
| Asset-G | 42567.41 | 1305.63 | - | 41261.78 |



| Assets | Capital Cost claimed as per Auditor's Certificate (A) | Undischarged IDC (B) | Excess Initial Spares Disallowed (C) | Capital Cost allowed as on COD (D) = (A-B-C) |
|---------|---|----------------------|--------------------------------------|--|
| Asset-H | 20308.41 | 289.38 | 32.34 | 19986.69 |
| Asset-I | 730.48 | 0.00 | 26.16 | 704.32 |
| Asset-J | 36003.97 | 698.11 | - | 35305.86 |
| Asset-K | 508.83 | 10.03 | | 498.80 |

Additional Capital Expenditure ("ACE")

52. The Commission allowed the following ACE in respect of the transmission assets for 2014-19 tariff period *vide* orders dated 30.5.2016 in Petition No. 263/TT/2015, dated 19.2.2016 in Petition No. 489/TT/2014 and dated 25.4.2016 in Petition No. 107/TT/2014:

(₹ in lakh)

| Assets | Apportioned Approved Cost as per FR | Admitted Capital Cost as on COD/ 31.3.2014 | Admitted ACE | | | Admitted Capital Cost as on 31.3.2019 |
|---------|-------------------------------------|--|--------------|---------|---------|---------------------------------------|
| | | | 2014-15 | 2015-16 | 2016-17 | |
| Asset-A | 22501.79 | 16511.08 | 0.00 | 1758.96 | 348.60 | 18618.64 |
| Asset-B | 4788.62 | 3769.15 | 0.00 | 1019.47 | 0.00 | 4788.62 |
| Asset-C | 1427.13 | 1248.64 | 0.00 | 178.49 | 0.00 | 1427.13 |
| Asset-D | 6745.90 | 5284.31 | 0.00 | 413.59 | 77.61 | 5775.51 |
| Asset-E | 21203.12 | 16906.37 | 0.00 | 3764.48 | 0.00 | 20670.85 |
| Asset-F | 8280.17 | 5797.19 | 0.00 | 1244.07 | 0.00 | 7041.26 |
| Asset-G | 40748.56 | 40748.56 | 0.00 | 0.00 | 0.00 | 40748.56 |
| Asset-H | 10389.40 | 10389.40 | 0.00 | 0.00 | 0.00 | 10389.40 |
| Asset-I | 1059.73 | 704.32 | 123.98 | 0.00 | 0.00 | 828.30 |
| Asset-J | 43782.10 | 36003.97 | 4845.75 | 855.13 | 0.00 | 41704.85 |
| Asset-K | 6830.48 | 508.83 | 86.61 | 15.28 | 0.00 | 610.72 |

53. The Petitioner has claimed following ACE in respect of the transmission assets based on actual expenditure:

(₹ in lakh)

| Name of the Assets | Approved Cost as per FR | Approved Cost (RCE) | Capital Cost as on COD/ 31.3.2014 | ACE | | | | | Capital Cost as on 31.3.2019 |
|--------------------|-------------------------|---------------------|-----------------------------------|---------|---------|---------|---------|---------|------------------------------|
| | | | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | |
| Asset-A | 22501.79 | 23876.39 | 16598.09 | 0.00 | 2551.87 | 520.82 | 1493.96 | 657.88 | 21822.62 |



| | | | | | | | | | |
|---------|----------|----------|----------|---------|---------|--------|---------|--------|----------|
| Asset-B | 4788.62 | 4723.56 | 3801.59 | 0.00 | 17.70 | 216.09 | 207.43 | 135.26 | 4378.07 |
| Asset-C | 1427.13 | 2314.48 | 1276.86 | 0.00 | 205.59 | 209.84 | 207.43 | 135.26 | 2034.98 |
| Asset-D | 6745.90 | 9603.91 | 5431.98 | 0.00 | 470.33 | 304.74 | 1286.53 | 522.62 | 8016.20 |
| Asset-E | 21203.12 | 22769.53 | 17181.57 | 0.00 | 2840.01 | 780.89 | 235.43 | 311.00 | 21348.90 |
| Asset-F | 8280.17 | 8783.23 | 5918.64 | 0.00 | 1213.32 | 376.13 | 170.76 | 163.85 | 7842.70 |
| Asset-G | 40748.56 | 46137.58 | 42567.41 | 0.00 | 154.35 | 359.62 | 353.75 | 207.57 | 43642.70 |
| Asset-H | 10389.40 | 21189.11 | 20308.41 | 0.00 | 0.00 | 137.77 | 493.90 | 106.77 | 21046.85 |
| Asset-I | 1059.73 | 1349.06 | 704.32 | 57.21 | 18.32 | 47.85 | 0.00 | 0.00 | 827.70 |
| Asset-J | 43782.10 | 44364.79 | 36003.97 | 4629.45 | 86.18 | 589.70 | 861.00 | 0.00 | 42170.30 |
| Asset-K | 6830.48 | 699.36 | 508.83 | 86.61 | 0.00 | 0.00 | 0.00 | 0.00 | 595.44 |

54. In response to the Commission's query regarding justification for ACE during 2014-19 tariff period, the Petitioner vide affidavit dated 30.3.2021 has submitted the following:

Asset-A:

| Year | ACE (₹ in lakh) | Party Name | Package | Balance and Retention/ Deferred work |
|---------|--------------------|------------------|------------------|--|
| 2015-16 | 8.77 | GE T&D India Ltd | Civil & Building | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 673.24 | GE T&D India Ltd | Civil & Building | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| | 1867.12 | GE T&D India Ltd | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 2.74 | GE T&D India Ltd | IT | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| 2016-17 | 464.39 | GE T&D India Ltd | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 56.43 | GE T&D India Ltd | Sub-station | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| 2017-18 | 691.01 | GE T&D India Ltd | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 800.21 | GE T&D India Ltd | Sub-station | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| | 2.74 | GE T&D India Ltd | IT | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| 2018-19 | 657.88 | GE T&D India Ltd | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations |



Asset-B:

| Year | ACE (₹ in lakh) | Party Name | Package | Balance and Retention/ Deferred work |
|---------|--------------------|------------------|-------------|--|
| 2015-16 | 10.49 | GE T&D India Ltd | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 7.21 | GE T&D India Ltd | Sub-station | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| 2016-17 | 27.00 | GE T&D India Ltd | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations |
| | 187.92 | GE T&D India Ltd | Sub-station | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| | 1.17 | GE T&D India Ltd | IT | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| 2017-18 | 174.33 | CGL | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 33.10 | CGL | Sub-station | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| 2018-19 | 135.26 | GE T&D India Ltd | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |

Asset-C:

| Year | ACE (₹ in lakh) | Party Name | Package | Balance and Retention/ Deferred work |
|---------|--------------------|------------------|-------------|--|
| 2015-16 | 155.49 | GE T&D India Ltd | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 48.97 | GE T&D India Ltd | Sub-station | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations |
| | 1.17 | GE T&D India Ltd | IT | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| 2016-17 | 6.97 | GE T&D India Ltd | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 202.87 | GE T&D India Ltd | Sub-station | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| 2017-18 | 135.54 | GE T&D | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 70.72 | GE T&D | Sub-station | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| | 1.17 | GE T&D | IT | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| 2018-19 | 135.26 | GE T&D India Ltd | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |



Asset-D:

| Year | ACE (₹ in lakh) | Party Name | Package | Balance and Retention/ Deferred work |
|---------|--------------------|------------------|-------------|--|
| 2015-16 | 30.96 | GE T&D India Ltd | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 439.37 | GE T&D India Ltd | Sub-station | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| 2016-17 | 247.13 | GE T&D India Ltd | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 56.04 | GE T&D India Ltd | Sub-station | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| | 1.57 | GE T&D India Ltd | IT | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| 2017-18 | 60.89 | GE T&D | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 1225.64 | GE T&D | Sub-station | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| 2018-19 | 522.62 | GE T&D India Ltd | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |

Asset-E:

| Year | ACE (₹ in lakh) | Party Name | Package | Balance and Retention/ Deferred work |
|---------|--------------------|---|-------------------|--|
| 2015-16 | 392.22 | GE T&D India Ltd | Sub-station | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| | 6.98 | GE T&D India Ltd | PLCC | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| | 0.78 | GE T&D India Ltd | IT | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations |
| | 0.04 | Paid for ROW Expenditure Including Crop & Tree Comp | Transmission Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 2439.99 | Paid for ROW Expenditure Including Crop & Tree Comp | Transmission Line | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| 2016-17 | 300.5 | GE T&D India Ltd | Transmission Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 72.58 | EMC Ltd | Transmission Line | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| | 234.06 | Paid for ROW Expenditure Including Crop & Tree Comp | Transmission Line | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |



| Year | ACE (₹ in lakh) | Party Name | Package | Balance and Retention/ Deferred work |
|---------|--------------------|------------------|-------------------|--|
| | 173.75 | GE T&D India Ltd | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| 2017-18 | 97.00 | EMC Ltd | Transmission Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 137.65 | GE T&D | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 0.78 | GE T&D | IT | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| 2018-19 | 220.73 | GE T&D India Ltd | Transmission Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 90.27 | GE T&D India Ltd | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |

Asset-F:

| Year | ACE (₹ in lakh) | Party Name | Package | Balance and Retention/ Deferred work |
|---------|--------------------|------------------|-------------------|--|
| 2015-16 | 813.34 | GE T&D India Ltd | Transmission Line | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| | 392.22 | GE T&D India Ltd | Sub-station | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| | 6.98 | GE T&D India Ltd | PLCC | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| | 0.78 | GE T&D India Ltd | IT | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| 2016-17 | 77.52 | EMC Ltd | Transmission Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 124.86 | EMC Ltd | Transmission Line | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| | 173.75 | GE T&D India Ltd | Sub-station | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| 2017-18 | 32.33 | EMC Ltd | Transmission Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 137.65 | GE T&D | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 0.78 | GE T&D | IT | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| 2018-19 | 73.58 | EMC Ltd | Transmission Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 90.27 | GE T&D India Ltd | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |



Asset-G:

| Year | ACE (₹ in lakh) | Party Name | Package | Balance and Retention/ Deferred work |
|---------|-----------------------|-----------------------------|-----------------------|--|
| 2015-16 | 31.86 | Sterling and Wilson Ltd. | Sub-station | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| | 120.48 | EMC Ltd. | Transmissio n Line | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| | 2.01 | Sterling and Wilson Ltd. | PLCC | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| 2016-17 | 50.25 | Sterling and Wilson Ltd. | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 35.54 | Sterling and Wilson Ltd. | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 264.77 | EMC Ltd. | Transmissio n Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 9.06 | Sterling and Wilson Ltd. | PLCC | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| 2017-18 | 171.08 | Sterling and Wilson Ltd. | Sub-station | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| | 15.02 | Sterling and Wilson Ltd. | Sub-station | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| | 148.00 | EMC Ltd. | Transmissio n Line | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| | 19.65 | Sterling and Wilson Ltd. | PLCC | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| 2018-19 | 207.57 | EMC Ltd. | Transmissio n Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |

Asset-H:

| Year | ACE (₹ in lakh) | Party Name | Package | Balance and Retention/ Deferred work |
|---------|-----------------------|------------------------------|-----------------------|--|
| 2016-17 | 137.77 | KEC International Ltd. | Transmissio n Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| 2017-18 | 37.00 | Tata Projects Ltd. | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 456.90 | KEC International Ltd. | Transmissio n Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| 2018-19 | 106.77 | Tata Projects Ltd. | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |



Asset-I:

| Year | ACE (₹ in lakh) | Party Name | Package | Balance and Retention/ Deferred work |
|---------|-----------------------|--------------------|-------------|--|
| 2014-15 | 57.21 | Tata Projects Ltd. | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| 2015-16 | 18.32 | Tata Projects Ltd. | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| 2016-17 | 47.85 | Tata Projects Ltd. | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |

Asset-J:

| Year | ACE (₹ in lakh) | Party Name | Package | Balance and Retention/ Deferred work |
|---------|-----------------------|------------------------|-------------------|--|
| 2014-15 | 4295.39 | EMC Ltd | Transmission Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 334.06 | Dongguan Gaoneng Elec | Transmission Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| 2015-16 | 86.18 | KEC International Ltd. | Transmission Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| 2016-17 | 486.06 | EMC Ltd | Transmission Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 103.64 | EMC Ltd | Transmission Line | Deferred work liability as per Regulation 14(1)(ii) of the 2014 Tariff Regulations. |
| 2017-18 | 861.00 | EMC Ltd | Transmission Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |

Asset-K:

| Year | ACE (₹ in lakh) | Party Name | Package | Balance and Retention/ Deferred work |
|---------|-----------------------|------------|-------------------|--|
| 2014-15 | 86.61 | EMC Ltd | Transmission Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |

55. The Petitioner has submitted revised IDC statements for all the transmission assets vide affidavit dated 23.7.2021. However, the Petitioner has failed to submit the revised forms as per the updated IDC statements. We have considered the revised IDC statements made by the Petitioner. ACE claimed by the Petitioner has been allowed



under Regulation 14(1)(i) (Balance and Retention payment) and Regulation 14(1)(ii) (Deferred work liability) of the 2014 Tariff Regulations. The details of capital cost allowed as on COD/ 31.3.2014 and ACE (including undischarged IDC) approved upto 31.3.2019 in respect of the transmission assets covered in the instant petition are as follows:

(₹ in lakh)

| Assets | Approved Cost as per FR | Approved Cost (RCE) | Capital Cost as on COD/31.3.2014 | ACE (including undischarged IDC) | | | | | Capital Cost as on 31.3.2019 |
|---------|-------------------------|---------------------|----------------------------------|----------------------------------|---------|---------|---------|---------|------------------------------|
| | | | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | |
| Asset-A | 22501.79 | 23876.39 | 16446.28 | 0.00 | 2703.68 | 520.82 | 1493.96 | 657.88 | 21822.62 |
| Asset-B | 4788.62 | 4723.56 | 3777.10 | 0.00 | 42.19 | 216.09 | 207.43 | 135.26 | 4378.07 |
| Asset-C | 1427.13 | 2314.48 | 1246.74 | 0.00 | 233.71 | 211.84 | 207.43 | 135.26 | 2034.98 |
| Asset-D | 6745.90 | 9603.91 | 5418.62 | 0.00 | 483.69 | 304.74 | 1286.53 | 522.62 | 8016.20 |
| Asset-E | 21203.12 | 22769.53 | 16836.43 | 0.00 | 3185.15 | 780.89 | 235.43 | 311.00 | 21348.90 |
| Asset-F | 8280.17 | 8783.23 | 5797.80 | 0.00 | 1334.16 | 376.13 | 170.76 | 163.85 | 7842.70 |
| Asset-G | 40748.56 | 46137.58 | 41261.78 | 0.00 | 1011.93 | 807.67 | 353.75 | 207.57 | 43642.70 |
| Asset-H | 10389.40 | 21189.11 | 19986.69 | 0.00 | 0.00 | 394.11 | 526.94 | 106.77 | 21014.51 |
| Asset-I | 1059.73 | 1349.06 | 704.32 | 57.21 | 18.32 | 47.85 | 0.00 | 0.00 | 827.70 |
| Asset-J | 43782.10 | 44364.79 | 35305.86 | 5327.56 | 86.18 | 589.70 | 861.00 | 0.00 | 42170.30 |
| Asset-K | 6830.48 | 699.36 | 498.80 | 96.64 | 0.00 | 0.00 | 0.00 | 0.00 | 595.44 |

Debt-Equity ratio

56. The Petitioner has claimed debt-equity ratio of 70:30 as on COD and for ACE. Debt-equity ratio of 70:30 has been considered for capital cost as on COD and ACE during 2014-19 tariff period as provided under Regulation 19 of the 2014 Tariff Regulations. The details of debt-equity ratio in respect of the transmission assets as on COD and 31.3.2019 are as follows:

Asset-A

| Particulars | Capital Cost as on 1.4.2014/COD (₹ in lakh) | (in %) | ACE during 2014-19 (₹ in lakh) | (in %) | Capital Cost as on 31.3.2019 (₹ in lakh) | (in %) |
|--------------|---|---------------|--------------------------------|---------------|--|---------------|
| Debt | 11512.40 | 70.00 | 3763.44 | 70.00 | 15275.83 | 70.00 |
| Equity | 4933.88 | 30.00 | 1612.90 | 30.00 | 6546.79 | 30.00 |
| Total | 16446.28 | 100.00 | 5376.34 | 100.00 | 21822.62 | 100.00 |



Asset-B

| Particulars | Capital Cost as on 1.4.2014/COD (₹ in lakh) | (in %) | ACE during 2014-19 (₹ in lakh) | In (%) | Capital Cost as on 31.3.2019 (₹ in lakh) | (in %) |
|--------------|---|---------------|--------------------------------|---------------|--|---------------|
| Debt | 2643.97 | 70.00 | 420.68 | 70.00 | 3064.65 | 70.00 |
| Equity | 1133.13 | 30.00 | 180.29 | 30.00 | 1313.42 | 30.00 |
| Total | 3777.10 | 100.00 | 600.97 | 100.00 | 4378.07 | 100.00 |

Asset-C

| Particulars | Capital Cost as on 1.4.2014/COD (₹ in lakh) | (in %) | ACE during 2014-19 (₹ in lakh) | (in %) | Capital Cost as on 31.3.2019 (₹ in lakh) | (in %) |
|--------------|---|---------------|--------------------------------|---------------|--|---------------|
| Debt | 872.72 | 70.00 | 551.77 | 70.00 | 1424.49 | 70.00 |
| Equity | 374.02 | 30.00 | 236.47 | 30.00 | 610.49 | 30.00 |
| Total | 1246.74 | 100.00 | 788.24 | 100.00 | 2034.98 | 100.00 |

Asset-D

| Particulars | Capital Cost as on 1.4.2014/COD (₹ in lakh) | (in %) | ACE during 2014-19 (₹ in lakh) | (in %) | Capital Cost as on 31.3.2019 (₹ in lakh) | (in %) |
|--------------|---|---------------|--------------------------------|---------------|--|---------------|
| Debt | 3793.03 | 70.00 | 1818.31 | 70.00 | 5611.34 | 70.00 |
| Equity | 1625.59 | 30.00 | 779.27 | 30.00 | 2404.86 | 30.00 |
| Total | 5418.62 | 100.00 | 2597.58 | 100.00 | 8016.20 | 100.00 |

Asset-E

| Particulars | Capital Cost as on 1.4.2014/COD (₹ in lakh) | (in %) | ACE during 2014-19 (₹ in lakh) | (in %) | Capital Cost as on 31.3.2019 (₹ in lakh) | (in %) |
|--------------|---|---------------|--------------------------------|---------------|--|---------------|
| Debt | 11785.50 | 70.00 | 3158.73 | 70.00 | 14944.23 | 70.00 |
| Equity | 5050.93 | 30.00 | 1353.74 | 30.00 | 6404.67 | 30.00 |
| Total | 16836.43 | 100.00 | 4512.47 | 100.00 | 21348.90 | 100.00 |



Asset-F

| Particulars | Capital Cost as on 1.4.2014/COD (₹ in lakh) | (in %) | ACE during 2014-19 (₹ in lakh) | (in %) | Capital Cost as on 31.3.2019 (₹ in lakh) | (in %) |
|--------------|---|---------------|--------------------------------|---------------|--|---------------|
| Debt | 4058.46 | 70.00 | 1431.43 | 70.00 | 5489.89 | 70.00 |
| Equity | 1739.34 | 30.00 | 613.47 | 30.00 | 2352.81 | 30.00 |
| Total | 5797.80 | 100.00 | 2044.90 | 100.00 | 7842.70 | 100.00 |

Asset-G

| Particulars | Capital Cost as on 1.4.2014/COD (₹ in lakh) | (in %) | ACE during 2014-19 (₹ in lakh) | (in %) | Capital Cost as on 31.3.2019 (₹ in lakh) | (in %) |
|--------------|---|---------------|--------------------------------|---------------|--|---------------|
| Debt | 28883.25 | 70.00 | 1666.64 | 70.00 | 30549.89 | 70.00 |
| Equity | 12378.53 | 30.00 | 714.28 | 30.00 | 13092.81 | 30.00 |
| Total | 41261.78 | 100.00 | 2380.92 | 100.00 | 43642.70 | 100.00 |

Asset-H

| Particulars | Capital Cost as on 1.4.2014/COD (₹ in lakh) | (in %) | ACE during 2014-19 (₹ in lakh) | (in %) | Capital Cost as on 31.3.2019 (₹ in lakh) | (in %) |
|--------------|---|---------------|--------------------------------|---------------|--|---------------|
| Debt | 13990.68 | 70.00 | 719.47 | 70.00 | 14710.15 | 70.00 |
| Equity | 5996.01 | 30.00 | 308.35 | 30.00 | 6304.35 | 30.00 |
| Total | 19986.69 | 100.00 | 1027.82 | 100.00 | 21014.51 | 100.00 |

Asset-I

| Particulars | Capital Cost as on 1.4.2014/COD (₹ in lakh) | (in %) | ACE during 2014-19 (₹ in lakh) | (in %) | Capital Cost as on 31.3.2019 (₹ in lakh) | (in %) |
|--------------|---|---------------|--------------------------------|---------------|--|---------------|
| Debt | 493.02 | 70.00 | 86.37 | 70.00 | 579.39 | 70.00 |
| Equity | 211.30 | 30.00 | 37.01 | 30.00 | 248.31 | 30.00 |
| Total | 704.32 | 100.00 | 123.38 | 100.00 | 827.70 | 100.00 |



Asset-J

| Particulars | Capital Cost as on 1.4.2014/COD (₹ in lakh) | (in %) | ACE during 2014-19 (₹ in lakh) | (in %) | Capital Cost as on 31.3.2019 (₹ in lakh) | (in %) |
|--------------|---|---------------|--------------------------------|---------------|--|---------------|
| Debt | 24714.10 | 70.00 | 4805.11 | 70.00 | 29519.21 | 70.00 |
| Equity | 10591.76 | 30.00 | 2059.33 | 30.00 | 12651.09 | 30.00 |
| Total | 35305.86 | 100.00 | 6864.44 | 100.00 | 42170.30 | 100.00 |

Asset-K

| Particulars | Capital Cost as on 1.4.2014/COD (₹ in lakh) | (in %) | ACE during 2014-19 (₹ in lakh) | (in %) | Capital Cost as on 31.3.2019 (₹ in lakh) | (in %) |
|--------------|---|---------------|--------------------------------|---------------|--|---------------|
| Debt | 349.16 | 70.00 | 67.65 | 70.00 | 416.81 | 70.00 |
| Equity | 149.64 | 30.00 | 28.99 | 30.00 | 178.63 | 30.00 |
| Total | 498.80 | 100.00 | 96.64 | 100.00 | 595.44 | 100.00 |

Depreciation

57. The Petitioner's claim towards depreciation in this petition was found higher than the depreciation allowed in respect of the transmission assets in order dated 30.5.2016 in Petition No. 263/TT/2015. The Petitioner has neither given any justification for claiming higher depreciation than what was allowed earlier in order dated 30.5.2016 in Petition No. 263/TT/2015 nor made any specific prayer for allowing higher depreciation in the instant petition. In a similar case the Commission vide order dated 9.5.2020 in Petition No. 19/TT/2020, observed as follows:

"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 30.8.2012 and 9.5.2013 in 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 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."

58. In line with the above order, 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 2014-19 period. However, for 2019-24 tariff period, 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. The calculation of weighted average rate of depreciation (WAROD) is placed at Annexure-I. The Gross Block during 2014-19 tariff period has been depreciated at WAROD. WAROD has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed during tariff period 2014-19 in respect of the transmission assets is as follows:

Asset-A

| | (₹ in lakh) | | | |
|-------------------------|-------------|----------|----------|----------|
| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | | | | |
| Opening Gross Block (A) | 16446.28 | 19149.96 | 19670.78 | 21164.74 |
| ACE(B) | 2703.68 | 520.82 | 1493.96 | 657.88 |



| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|---------------|---------------|---------------|----------------|
| Closing Gross Block (C) = A+B | 19149.96 | 19670.78 | 21164.74 | 21822.62 |
| Average Gross Block (D) = (A+C)/2 | 17798.12 | 19410.37 | 20417.76 | 21493.68 |
| Freehold Land | 0.00 | 0.00 | 1307.31 | 1307.31 |
| Weighted Average Rate of Depreciation (WAROD) (in %) | 4.77 | 4.78 | 4.81 | 4.83 |
| Balance useful life of the asset (Year) | 25 | 24 | 23 | 22 |
| Lapsed life of the asset (Year) | 0 | 1 | 2 | 3 |
| Depreciable Value | 16018.31 | 17469.33 | 17199.41 | 18167.73 |
| Combined Depreciation during the year | 849.49 | 927.93 | 981.12 | 1037.93 |
| Cumulative Depreciation at the end of the year | 849.49 | 1777.43 | 2758.55 | 3796.48 |
| Remaining Depreciable Value at the end of the year | 15168.81 | 15691.91 | 14440.86 | 14371.25 |

59. The details of depreciation allowed in respect of Asset-A vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

| (₹ in lakh) | | | | |
|---|---------|---------|---------|---------|
| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 829.48 | 879.66 | 888.86 | 888.86 |
| Claimed by Petitioner in the instant petition | 856.81 | 933.60 | 986.93 | 1043.87 |
| Allowed after true-up in this order | 849.49 | 927.93 | 981.12 | 1037.93 |

Asset-B

| (₹ in lakh) | | | | |
|--|--------------------------------|---------|---------|---------|
| Particulars | 2015-16 (Pro-rata 271 days) | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | | | | |
| Opening Gross Block (A) | 3777.10 | 3819.29 | 4035.38 | 4242.81 |
| ACE(B) | 42.19 | 216.09 | 207.43 | 135.26 |
| Closing Gross Block (C) = A+B | 3819.29 | 4035.38 | 4242.81 | 4378.07 |
| Average Gross Block (D) = (A+C)/2 | 3798.20 | 3927.34 | 4139.10 | 4310.44 |
| Weighted Average Rate of Depreciation (WAROD) (in %) | 5.28 | 5.28 | 5.28 | 5.28 |



| Particulars | 2015-16 (Pro-rata 271 days) | 2016-17 | 2017-18 | 2018-19 |
|--|--------------------------------|---------------|---------------|---------------|
| Balance useful life of the asset (Year) | 25.00 | 25.00 | 24.00 | 23.00 |
| Lapsed Life of the asset (Year) | 0.00 | 0.00 | 1.00 | 2.00 |
| Depreciable Value | 3418.38 | 3534.60 | 3725.19 | 3879.40 |
| Combined Depreciation during the year | 148.49 | 207.36 | 218.54 | 227.59 |
| Cumulative Depreciation at the end of the year | 148.49 | 355.85 | 574.40 | 801.99 |
| Remaining Depreciable Value at the end of the year | 3269.89 | 3178.75 | 3150.79 | 3077.41 |

60. The details of depreciation allowed in respect of Asset-B vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

| (₹ in lakh) | | | | |
|--|--------------------------------|---------|---------|---------|
| Particulars | 2015-16 (Pro-rata 271 days) | 2016-17 | 2017-18 | 2018-19 |
| Approved <i>vide</i> order dated 30.5.2016 in Petition No. 263/TT/2015 | 167.28 | 252.84 | 252.84 | 252.84 |
| Claimed by Petitioner in the instant petition | 150.30 | 209.87 | 221.10 | 230.15 |
| Allowed after true-up in this order | 148.49 | 207.36 | 218.54 | 227.59 |

Asset-C

| (₹ in lakh) | | | | |
|--|--------------------------------|---------|---------|---------|
| Particulars | 2015-16 (Pro-rata 342 days) | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | | | | |
| Opening Gross Block (A) | 1246.74 | 1480.45 | 1692.29 | 1899.72 |
| ACE(B) | 233.71 | 211.84 | 207.43 | 135.26 |
| Closing Gross Block (C) = A+B | 1480.45 | 1692.29 | 1899.72 | 2034.98 |
| Average Gross Block (D) = (A+C)/2 | 1363.59 | 1586.37 | 1796.01 | 1967.35 |
| Weighted Average Rate of Depreciation (WAROD) (in %) | 5.28 | 5.28 | 5.28 | 5.28 |
| Balance useful life of the asset (Year) | 25.00 | 25.00 | 24.00 | 23.00 |
| Lapsed Life of the asset (Year) | 0.00 | 0.00 | 1.00 | 2.00 |



| Particulars | 2015-16 (Pro-rata 342 days) | 2016-17 | 2017-18 | 2018-19 |
|--|--------------------------------|--------------|--------------|---------------|
| Depreciable Value | 1227.23 | 1427.73 | 1616.40 | 1770.62 |
| Combined Depreciation during the year | 67.31 | 83.80 | 94.87 | 103.91 |
| Cumulative Depreciation at the end of the year | 67.31 | 151.11 | 245.97 | 349.88 |
| Remaining Depreciable Value at the end of the year | 1159.92 | 1276.63 | 1370.43 | 1420.73 |

61. The details of depreciation allowed in respect of Asset-C vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and tried up in the instant order is as follows:

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 342 days) | 2016-17 | 2017-18 | 2018-19 |
|---|--------------------------------|---------|---------|---------|
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 66.04 | 75.38 | 75.38 | 75.38 |
| Claimed by Petitioner in the instant petition | 69.59 | 86.26 | 97.34 | 106.44 |
| Allowed after true-up in this order | 67.31 | 83.80 | 94.87 | 103.91 |

Asset-D

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 214 days) | 2016-17 | 2017-18 | 2018-19 |
|--|--------------------------------|---------|---------|---------|
| Depreciation | | | | |
| Opening Gross Block (A) | 5418.62 | 5902.31 | 6207.05 | 7493.58 |
| ACE(B) | 483.69 | 304.74 | 1286.53 | 522.62 |
| Closing Gross Block (C) = A+B | 5902.31 | 6207.05 | 7493.58 | 8016.20 |
| Average Gross Block (D) = (A+C)/2 | 5660.47 | 6054.68 | 6850.32 | 7754.89 |
| Weighted Average Rate of Depreciation (WAROD) (in %) | 5.28 | 5.28 | 5.28 | 5.28 |
| Balance useful life of the asset (Year) | 25.00 | 25.00 | 24.00 | 23.00 |
| Lapsed Life of the asset (Year) | 0.00 | 0.00 | 1.00 | 2.00 |
| Depreciable Value | 5094.42 | 5449.21 | 6165.28 | 6979.40 |



| Particulars | 2015-16 (Pro-rata 214 days) | 2016-17 | 2017-18 | 2018-19 |
|--|--------------------------------|---------------|---------------|---------------|
| Combined Depreciation during the year | 174.78 | 319.73 | 361.74 | 409.50 |
| Cumulative Depreciation at the end of the year | 174.78 | 494.51 | 856.25 | 1265.75 |
| Remaining Depreciable Value at the end of the year | 4919.64 | 4954.70 | 5309.03 | 5713.65 |

62. The details of depreciation allowed in respect of Asset-D vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

| (₹ in lakh) | | | | |
|--|--------------------------------|---------|---------|---------|
| Particulars | 2015-16 (Pro-rata 214 days) | 2016-17 | 2017-18 | 2018-19 |
| Approved <i>vide</i> order dated 30.5.2016 in Petition No. 263/TT/2015 | 169.55 | 302.94 | 304.99 | 304.99 |
| Claimed by Petitioner in the instant petition | 173.36 | 320.98 | 365.14 | 412.90 |
| Allowed after true-up in this order | 174.78 | 319.73 | 361.74 | 409.50 |

Asset-E

| (₹ in lakh) | | | | |
|--|--------------------------------|----------------|----------------|----------------|
| Particulars | 2015-16 (Pro-rata 344 days) | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | | | | |
| Opening Gross Block (A) | 16836.43 | 20021.58 | 20802.47 | 21037.90 |
| ACE(B) | 3185.15 | 780.89 | 235.43 | 311.00 |
| Closing Gross Block (C) = A+B | 20021.58 | 20802.47 | 21037.90 | 21348.90 |
| Average Gross Block (D) = (A+C)/2 | 18429.01 | 20412.03 | 20920.19 | 21193.40 |
| Weighted Average Rate of Depreciation (WAROD) (in %) | 5.26 | 5.26 | 5.26 | 5.26 |
| Balance useful life of the asset (Year) | 34.00 | 34.00 | 33.00 | 32.00 |
| Lapsed Life of the asset (Year) | 0.00 | 0.00 | 1.00 | 2.00 |
| Depreciable Value | 16586.10 | 18370.82 | 18828.17 | 19074.06 |
| Combined Depreciation during the year | 910.82 | 1073.77 | 1100.60 | 1115.02 |
| Cumulative Depreciation at the end of the year | 910.82 | 1984.59 | 3085.18 | 4200.21 |



| Particulars | 2015-16 (Pro-rata 344 days) | 2016-17 | 2017-18 | 2018-19 |
|--|-----------------------------------|----------|----------|----------|
| Remaining Depreciable Value at the end of the year | 15675.29 | 16386.24 | 15742.98 | 14873.85 |

63. The details of depreciation allowed in respect of Asset-E vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

| (₹ in lakh) | | | | |
|---|-----------------------------------|---------|---------|---------|
| Particulars | 2015-16 (Pro-rata 344 days) | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 928.60 | 1087.32 | 1087.32 | 1087.32 |
| Claimed by Petitioner in the instant petition | 914.02 | 1075.37 | 1102.24 | 1116.70 |
| Allowed after true-up in this order | 910.82 | 1073.77 | 1100.60 | 1115.02 |

Asset-F

| (₹ in lakh) | | | | |
|--|-----------------------------------|---------------|---------------|---------------|
| Particulars | 2015-16 (Pro-rata 343 days) | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | | | | |
| Opening Gross Block (A) | 5797.80 | 7131.96 | 7508.09 | 7678.85 |
| ACE(B) | 1334.16 | 376.13 | 170.76 | 163.85 |
| Closing Gross Block (C) = A+B | 7131.96 | 7508.09 | 7678.85 | 7842.70 |
| Average Gross Block (D) = (A+C)/2 | 6464.88 | 7320.03 | 7593.47 | 7760.78 |
| Weighted Average Rate of Depreciation (WAROD) (in %) | 5.22 | 5.23 | 5.23 | 5.23 |
| Balance useful life of the asset (Year) | 34.00 | 34.00 | 33.00 | 32.00 |
| Lapsed Life of the asset (Year) | 0.00 | 0.00 | 1.00 | 2.00 |
| Depreciable Value | 5818.39 | 6588.02 | 6834.12 | 6984.70 |
| Combined Depreciation during the year | 316.17 | 382.52 | 396.96 | 405.79 |
| Cumulative Depreciation at the end of the year | 316.17 | 698.69 | 1095.64 | 1501.43 |
| Remaining Depreciable Value at the end of the year | 5502.22 | 5889.34 | 5738.48 | 5483.27 |



64. The details of depreciation allowed in respect of Asset-F vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

| (₹ in lakh) | | | | |
|---|--------------------------------------|---------|---------|---------|
| Particulars | 2015-16 (Pro-rata 343 days) | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 313.88 | 367.73 | 367.73 | 367.73 |
| Claimed by Petitioner in the instant petition | 317.62 | 384.12 | 398.60 | 407.48 |
| Allowed after true-up in this order | 316.17 | 382.52 | 396.96 | 405.79 |

Asset-G

| (₹ in lakh) | | | | |
|--|----------------------------------|----------------|----------------|----------------|
| Particulars | 2015-16 (Pro-rata 98 days) | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | | | | |
| Opening Gross Block (A) | 41261.78 | 42273.71 | 43081.38 | 43435.13 |
| ACE(B) | 1011.93 | 807.67 | 353.75 | 207.57 |
| Closing Gross Block (C) = A+B | 42273.71 | 43081.38 | 43435.13 | 43642.70 |
| Average Gross Block (D) = (A+C)/2 | 41767.75 | 42677.55 | 43258.26 | 43538.92 |
| Weighted Average Rate of Depreciation (WAROD) (in %) | 5.28 | 5.28 | 5.28 | 5.28 |
| Balance useful life of the asset | 34 | 34 | 33 | 32 |
| Elapsed Life of the asset | 0 | 0 | 1 | 2 |
| Depreciable Value | 37590.97 | 38409.79 | 38932.43 | 39185.02 |
| Combined Depreciation during the year | 590.91 | 2254.99 | 2285.81 | 2300.73 |
| Cumulative Depreciation at the end of the year | 590.91 | 2845.90 | 5131.70 | 7432.43 |
| Remaining Depreciable Value at the end of the year | 37000.06 | 35563.90 | 33800.73 | 31752.59 |

65. The details of depreciation allowed in respect of Asset-G vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:



(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 98 days) | 2016-17 | 2017-18 | 2018-19 |
|--|----------------------------------|---------|---------|---------|
| Approved <i>vide</i> order dated 30.5.2016 in Petition No. 263/TT/2015 | 576.49 | 2153.01 | 2153.01 | 2153.01 |
| Claimed by Petitioner in the instant petition | 603.31 | 2266.82 | 2285.80 | 2300.72 |
| Allowed after true-up in this order | 590.91 | 2254.99 | 2285.81 | 2300.73 |

Asset-H

(₹ in lakh)

| Particulars | 2016-17 (Pro-rata 289 days) | 2017-18 | 2018-19 |
|--|--------------------------------|----------------|----------------|
| Depreciation | | | |
| Opening Gross Block (A) | 19986.69 | 20380.80 | 20907.74 |
| ACE(B) | 394.11 | 526.94 | 106.77 |
| Closing Gross Block (C) = A+B | 20380.80 | 20907.74 | 21014.51 |
| Average Gross Block (D) = (A+C)/2 | 20183.74 | 20644.27 | 20961.12 |
| Weighted Average Rate of Depreciation (WAROD) (in %) | 5.29 | 5.29 | 5.29 |
| Balance useful life of the asset (Year) | 34 | 34 | 33 |
| Lapsed Life of the asset (Year) | 0 | 0 | 1 |
| Depreciable Value | 18165.37 | 18579.84 | 18865.01 |
| Combined Depreciation during the year | 845.16 | 1091.74 | 1108.47 |
| Cumulative Depreciation at the end of the year | 845.16 | 1936.90 | 3045.37 |
| Remaining Depreciable Value at the end of the year | 17320.21 | 16642.94 | 15819.63 |

66. The details of depreciation allowed in respect of Asset-H *vide* order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

| Particulars | 2016-17 (Pro-rata 289 days) | 2017-18 | 2018-19 |
|--|-----------------------------------|---------|---------|
| Approved <i>vide</i> order dated 30.5.2016 in Petition No. 263/TT/2015 | 436.55 | 549.45 | 549.45 |
| Claimed by Petitioner in the instant petition | 847.97 | 1095.27 | 1112.00 |
| Allowed after true-up in this order | 845.16 | 1091.74 | 1108.47 |



Asset-I

| (₹ in lakh) | | | | | |
|--|--------------|--------------|--------------|--------------|--------------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | | | | | |
| Opening Gross Block (A) | 704.32 | 761.53 | 779.85 | 827.70 | 827.70 |
| ACE(B) | 57.21 | 18.32 | 47.85 | 0.00 | 0.00 |
| Closing Gross Block (C) = A+B | 761.53 | 779.85 | 827.70 | 827.70 | 827.70 |
| Average Gross Block (D) = (A+C)/2 | 732.93 | 770.69 | 803.78 | 827.70 | 827.70 |
| Weighted Average Rate of Depreciation (WAROD) (in %) | 5.25 | 5.25 | 5.25 | 5.25 | 5.25 |
| Balance useful life of the asset (Year) | 24.00 | 23.00 | 22.00 | 21.00 | 20.00 |
| Lapsed Life of the asset (Year) | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 |
| Depreciable Value | 659.63 | 693.62 | 723.40 | 744.93 | 744.93 |
| Combined Depreciation during the year | 38.46 | 40.46 | 42.20 | 43.47 | 43.47 |
| Cumulative Depreciation at the end of the year | 78.14 | 118.60 | 160.80 | 204.27 | 247.73 |
| Remaining Depreciable Value at the end of the year | 581.49 | 575.02 | 562.60 | 540.66 | 497.20 |

67. The details of depreciation allowed in respect of Asset-I vide order dated 19.2.2016 in Petition No. 489/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

| (₹ in lakh) | | | | | |
|--|---------|---------|---------|---------|---------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Approved <i>vide</i> order dated 19.2.2016 in Petition No. 489/TT/2014 | 40.22 | 43.50 | 43.50 | 43.50 | 43.50 |
| Claimed by Petitioner in the instant petition | 39.85 | 41.84 | 43.59 | 44.85 | 44.85 |
| Allowed after true-up in this order | 38.46 | 40.46 | 42.20 | 43.47 | 43.47 |

Asset-J

| (₹ in lakh) | | | | | |
|-------------------------------|----------|----------|----------|----------|----------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | | | | | |
| Opening Gross Block (A) | 35305.86 | 40633.42 | 40719.60 | 41309.30 | 42170.30 |
| ACE(B) | 5327.56 | 86.18 | 589.70 | 861.00 | 0.00 |
| Closing Gross Block (C) = A+B | 40633.42 | 40719.60 | 41309.30 | 42170.30 | 42170.30 |



| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|----------------|----------------|----------------|----------------|----------------|
| Average Gross Block (D) = (A+C)/2 | 37969.64 | 40676.51 | 41014.45 | 41739.80 | 42170.30 |
| Weighted Average Rate of Depreciation (WAROD) (in %) | 5.28 | 5.28 | 5.28 | 5.28 | 5.28 |
| Balance useful life of the asset (Year) | 35.00 | 34.00 | 33.00 | 32.00 | 31.00 |
| Lapsed Life of the asset (Year) | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 |
| Depreciable Value | 34172.68 | 36608.86 | 36913.01 | 37565.82 | 37953.27 |
| Combined Depreciation during the year | 2004.80 | 2147.72 | 2165.56 | 2203.86 | 2226.59 |
| Cumulative Depreciation at the end of the year | 2004.80 | 4152.52 | 6318.08 | 8521.94 | 10748.53 |
| Remaining Depreciable Value at the end of the year | 32167.88 | 32456.34 | 30594.93 | 29043.88 | 27204.74 |

68. The details of depreciation allowed in respect of Asset-J vide order dated 25.4.2016 in Petition No. 107/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---|---------|---------|---------|---------|---------|
| Approved vide order dated 25.4.2016 in Petition No. 107/TT/2014 | 2028.94 | 2179.44 | 2202.22 | 2202.22 | 2202.22 |
| Claimed by Petitioner in the instant petition | 2023.23 | 2147.72 | 2165.56 | 2203.86 | 2226.59 |
| Allowed after true-up in this order | 2004.80 | 2147.72 | 2165.56 | 2203.86 | 2226.59 |

Asset-K

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|--------------|--------------|--------------|--------------|--------------|
| Depreciation | | | | | |
| Opening Gross Block (A) | 498.80 | 595.44 | 595.44 | 595.44 | 595.44 |
| ACE(B) | 96.64 | 0.00 | 0.00 | 0.00 | 0.00 |
| Closing Gross Block (C) = A+B | 595.44 | 595.44 | 595.44 | 595.44 | 595.44 |
| Average Gross Block (D) = (A+C)/2 | 547.12 | 595.44 | 595.44 | 595.44 | 595.44 |
| Weighted Average Rate of Depreciation (WAROD) (in %) | 5.28 | 5.28 | 5.28 | 5.28 | 5.28 |
| Balance useful life of the asset (Year) | 35.00 | 34.00 | 33.00 | 32.00 | 31.00 |
| Lapsed Life of the asset (Year) | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 |
| Depreciable Value | 492.41 | 535.90 | 535.90 | 535.90 | 535.90 |
| Combined Depreciation during the year | 28.89 | 31.44 | 31.44 | 31.44 | 31.44 |



| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|---------|---------|---------|---------|---------|
| Cumulative Depreciation at the end of the year | 28.89 | 60.33 | 91.77 | 123.21 | 154.64 |
| Remaining Depreciable Value at the end of the year | 463.52 | 475.57 | 444.13 | 412.69 | 381.25 |

69. The details of depreciation allowed in respect of Asset-K vide order dated 25.4.2016 in Petition No. 107/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

| (₹ in lakh) | | | | | |
|---|---------|---------|---------|---------|---------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 25.4.2016 in Petition No. 107/TT/2014 | 29.15 | 31.84 | 32.25 | 32.25 | 32.25 |
| Claimed by Petitioner in the instant petition | 29.15 | 31.44 | 31.44 | 31.44 | 31.44 |
| Allowed after true-up in this order | 28.89 | 31.44 | 31.44 | 31.44 | 31.44 |

Interest on Loan (“IoL”)

70. The Petitioner has claimed the weighted average rate of IoL based on its actual loan portfolio and rate of interest. Accordingly, IoL is calculated based on actual interest rate in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of IoL allowed in respect of the transmission assets are as follows:

Asset-A

| (₹ in lakh) | | | | |
|--|---------------|---------------|---------------|---------------|
| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Interest on Loan | | | | |
| Gross Normative Loan | 11512.40 | 13404.97 | 13769.55 | 14815.32 |
| Cumulative Repayments up to Previous Year | 0.00 | 849.49 | 1777.43 | 2758.55 |
| Net Loan-Opening | 11512.40 | 12555.48 | 11992.12 | 12056.77 |
| Additions | 1892.58 | 364.57 | 1045.77 | 460.52 |
| Repayment during the year | 849.49 | 927.93 | 981.12 | 1037.93 |
| Net Loan-Closing | 12555.48 | 11992.12 | 12056.77 | 11479.35 |
| Average Loan | 12033.94 | 12273.80 | 12024.44 | 11768.06 |
| Weighted Average Rate of Interest on Loan (in %) | 5.3200 | 5.5360 | 5.5243 | 5.5782 |
| Interest on Loan | 640.20 | 679.48 | 664.26 | 656.44 |



71. The details of IoL approved in respect of Asset-A vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and as trued up in the instant order is as follows:

| Particulars | (₹ in lakh) | | | |
|---|-------------|---------|---------|---------|
| | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 588.77 | 576.66 | 532.03 | 482.07 |
| Claimed by the Petitioner in the instant petition | 641.29 | 678.92 | 663.39 | 655.23 |
| Allowed after true-up in this order | 640.20 | 679.48 | 664.26 | 656.44 |

Asset-B

| Particulars | (₹ in lakh) | | | |
|--|-----------------------------------|---------------|---------------|---------------|
| | 2015-16 (Pro-rata 271 days) | 2016-17 | 2017-18 | 2018-19 |
| Interest on Loan | | | | |
| Gross Normative Loan | 2643.97 | 2673.50 | 2824.77 | 2969.97 |
| Cumulative Repayments up to Previous Year | 0.00 | 148.49 | 355.85 | 574.40 |
| Net Loan-Opening | 2643.97 | 2525.01 | 2468.91 | 2395.57 |
| Additions | 29.53 | 151.26 | 145.20 | 94.68 |
| Repayment during the year | 148.49 | 207.36 | 218.54 | 227.59 |
| Net Loan-Closing | 2525.01 | 2468.91 | 2395.57 | 2262.66 |
| Average Loan | 2584.49 | 2496.96 | 2432.24 | 2329.11 |
| Weighted Average Rate of Interest on Loan (in %) | 9.0141 | 8.9195 | 8.6853 | 8.5783 |
| Interest on Loan | 172.50 | 222.72 | 211.25 | 199.80 |

72. The details of IoL approved in respect of Asset-B vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and as trued up in the instant order is as follows:



(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 271 days) | 2016-17 | 2017-18 | 2018-19 |
|--|-----------------------------------|---------|---------|---------|
| Approved <i>vide</i> order dated 30.5.2016 in Petition No. 263/TT/2015 | 193.32 | 273.99 | 250.71 | 227.40 |
| Claimed by the Petitioner in the instant petition | 172.44 | 222.44 | 210.76 | 199.10 |
| Allowed after true-up in this order | 172.50 | 222.72 | 211.25 | 199.80 |

Asset-C

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 342 days) | 2016-17 | 2017-18 | 2018-19 |
|--|-----------------------------------|--------------|--------------|--------------|
| Interest on Loan | | | | |
| Gross Normative Loan | 872.72 | 1036.31 | 1184.60 | 1329.80 |
| Cumulative Repayments up to Previous Year | 0.00 | 67.31 | 151.11 | 245.97 |
| Net Loan-Opening | 872.72 | 969.00 | 1033.50 | 1083.83 |
| Additions | 163.60 | 148.29 | 145.20 | 94.68 |
| Repayment during the year | 67.31 | 83.80 | 94.87 | 103.91 |
| Net Loan-Closing | 969.00 | 1033.50 | 1083.83 | 1074.60 |
| Average Loan | 920.86 | 1001.25 | 1058.66 | 1079.22 |
| Weighted Average Rate of Interest on Loan (in %) | 8.9253 | 8.8349 | 8.6181 | 8.5069 |
| Interest on Loan | 76.80 | 88.46 | 91.24 | 91.81 |

73. The details of IoL approved in respect of Asset-C *vide* order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and as trued up in the instant order is as follows:

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 342 days) | 2016-17 | 2017-18 | 2018-19 |
|--|-----------------------------------|---------|---------|---------|
| Approved <i>vide</i> order dated 30.5.2016 in Petition No. 263/TT/2015 | 74.83 | 79.35 | 72.67 | 65.99 |
| Claimed by the Petitioner in the instant petition | 76.75 | 88.21 | 90.72 | 91.09 |
| Allowed after true-up in this order | 76.80 | 88.46 | 91.24 | 91.81 |



Asset-D

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 214 days) | 2016-17 | 2017-18 | 2018-19 |
|--|-----------------------------------|---------------|---------------|---------------|
| Interest on Loan | | | | |
| Gross Normative Loan | 3793.03 | 4131.62 | 4344.94 | 5245.51 |
| Cumulative Repayments up to Previous Year | 0.00 | 174.78 | 494.51 | 856.25 |
| Net Loan-Opening | 3793.03 | 3956.84 | 3850.43 | 4389.26 |
| Additions | 338.58 | 213.32 | 900.57 | 365.83 |
| Repayment during the year | 174.78 | 319.73 | 361.74 | 409.50 |
| Net Loan-Closing | 3956.84 | 3850.43 | 4389.26 | 4345.59 |
| Average Loan | 3874.94 | 3903.63 | 4119.84 | 4367.42 |
| Weighted Average Rate of Interest on Loan (in %) | 8.9913 | 8.8587 | 8.3561 | 8.1797 |
| Interest on Loan | 203.71 | 345.81 | 344.26 | 357.24 |

74. The details of IoL approved in respect of Asset-D vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and as trued up in the instant order is as follows:

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 214 days) | 2016-17 | 2017-18 | 2018-19 |
|---|-----------------------------------|---------|---------|---------|
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 188.50 | 316.54 | 292.33 | 265.89 |
| Claimed by the Petitioner in the instant petition | 199.85 | 343.48 | 344.13 | 356.84 |
| Allowed after true-up in this order | 203.71 | 345.81 | 344.26 | 357.24 |

Asset-E

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 344 days) | 2016-17 | 2017-18 | 2018-19 |
|---|-----------------------------------|----------|----------|----------|
| Interest on Loan | | | | |
| Gross Normative Loan | 11785.50 | 14015.11 | 14561.73 | 14726.53 |
| Cumulative Repayments up to Previous Year | 0.00 | 910.82 | 1984.59 | 3085.18 |
| Net Loan-Opening | 11785.50 | 13104.29 | 12577.14 | 11641.35 |



| Particulars | 2015-16 (Pro-rata 344 days) | 2016-17 | 2017-18 | 2018-19 |
|--|-----------------------------------|----------------|----------------|---------------|
| Additions | 2229.61 | 546.62 | 164.80 | 217.70 |
| Repayment during the year | 910.82 | 1073.77 | 1100.60 | 1115.02 |
| Net Loan-Closing | 13104.29 | 12577.14 | 11641.35 | 10744.02 |
| Average Loan | 12444.89 | 12840.72 | 12109.24 | 11192.68 |
| Weighted Average Rate of Interest on Loan (in %) | 8.6260 | 8.5307 | 8.2980 | 8.2156 |
| Interest on Loan | 1008.97 | 1095.40 | 1004.83 | 919.55 |

75. The details of IoL approved in respect of Asset-E vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and as trued up in the instant order is as follows:

| (₹ in lakh) | | | | |
|---|-----------------------------------|---------|---------|---------|
| Particulars | 2015-16 (Pro-rata 344 days) | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 1032.96 | 1124.46 | 1027.47 | 930.53 |
| Claimed by the Petitioner in the instant petition | 1010.82 | 1095.06 | 1004.36 | 918.95 |
| Allowed after true-up in this order | 1008.97 | 1095.40 | 1004.83 | 919.55 |

Asset-F

| (₹ in lakh) | | | | |
|--|-----------------------------------|---------------|---------------|---------------|
| Particulars | 2015-16 (Pro-rata 343 days) | 2016-17 | 2017-18 | 2018-19 |
| Interest on Loan | | | | |
| Gross Normative Loan | 4058.46 | 4992.37 | 5255.66 | 5375.20 |
| Cumulative Repayments up to Previous Year | 0.00 | 316.17 | 698.69 | 1095.64 |
| Net Loan-Opening | 4058.46 | 4676.20 | 4556.98 | 4279.55 |
| Additions | 933.91 | 263.29 | 119.53 | 114.70 |
| Repayment during the year | 316.17 | 382.52 | 396.96 | 405.79 |
| Net Loan-Closing | 4676.20 | 4556.98 | 4279.55 | 3988.46 |
| Average Loan | 4367.33 | 4616.59 | 4418.26 | 4134.01 |
| Weighted Average Rate of Interest on Loan (in %) | 9.1007 | 8.9765 | 8.6372 | 8.5226 |
| Interest on Loan | 372.48 | 414.41 | 381.61 | 352.32 |



76. The details of IoL approved in respect of Asset-F vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and as trued up in the instant order is as follows:

| (₹ in lakh) | | | | |
|---|-----------------------------------|---------|---------|---------|
| Particulars | 2015-16 (Pro-rata 343 days) | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 369.11 | 401.86 | 368.06 | 334.21 |
| Claimed by the Petitioner in the instant petition | 372.40 | 414.21 | 381.28 | 351.86 |
| Allowed after true-up in this order | 372.48 | 414.41 | 381.61 | 352.32 |

Asset-G

| (₹ in lakh) | | | | |
|--|----------------------------------|----------------|----------------|----------------|
| Particulars | 2015-16 (Pro-rata 98 days) | 2016-17 | 2017-18 | 2018-19 |
| Interest on Loan | | | | |
| Gross Normative Loan | 28883.25 | 29591.60 | 30156.97 | 30404.59 |
| Cumulative Repayments up to Previous Year | 0.00 | 590.91 | 2845.90 | 5131.70 |
| Net Loan-Opening | 28883.25 | 29000.69 | 27311.07 | 25272.89 |
| Additions | 708.35 | 565.37 | 247.63 | 145.30 |
| Repayment during the year | 590.91 | 2254.99 | 2285.81 | 2300.73 |
| Net Loan-Closing | 29000.69 | 27311.07 | 25272.89 | 23117.46 |
| Average Loan | 28941.97 | 28155.88 | 26291.98 | 24195.18 |
| Weighted Average Rate of Interest on Loan (in %) | 7.9726 | 7.9449 | 7.8655 | 7.8172 |
| Interest on Loan | 617.83 | 2236.96 | 2067.99 | 1891.38 |

77. The details of IoL approved in respect of Asset-G vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and as trued up in the instant order is as follows:

| (₹ in lakh) | | | | |
|---|----------------------------------|---------|---------|---------|
| Particulars | 2015-16 (Pro-rata 98 days) | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 602.81 | 2138.33 | 1960.29 | 1781.82 |



| Particulars | 2015-16 (Pro-rata 98 days) | 2016-17 | 2017-18 | 2018-19 |
|---|----------------------------------|---------|---------|---------|
| Claimed by the Petitioner in the instant petition | 630.81 | 2247.96 | 2066.09 | 1889.49 |
| Allowed after true-up in this order | 617.83 | 2236.96 | 2067.99 | 1891.38 |

Asset-H

(₹ in lakh)

| Particulars | 2016-17 (Pro-rata 289 days) | 2017-18 | 2018-19 |
|--|--------------------------------|----------------|---------------|
| Interest on Loan | | | |
| Gross Normative Loan | 13990.68 | 14266.56 | 14635.41 |
| Cumulative Repayments up to Previous Year | 0.00 | 845.16 | 1936.90 |
| Net Loan-Opening | 13990.68 | 13421.40 | 12698.51 |
| Additions | 275.88 | 368.86 | 74.74 |
| Repayment during the year | 845.16 | 1091.74 | 1108.47 |
| Net Loan-Closing | 13421.40 | 12698.51 | 11664.78 |
| Average Loan | 13706.04 | 13059.96 | 12181.65 |
| Weighted Average Rate of Interest on Loan (in %) | 8.2822 | 8.0720 | 7.9890 |
| Interest on Loan | 898.80 | 1054.20 | 973.19 |

78. The details of IoL approved in respect of Asset-H vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and as tried up in the instant order is as follows:

(₹ in lakh)

| Particulars | 2016-17 (Pro-rata 289 days) | 2017-18 | 2018-19 |
|---|-----------------------------------|---------|---------|
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 468.00 | 547.22 | 500.71 |
| Claimed by the Petitioner in the instant petition | 900.22 | 1055.66 | 974.35 |
| Allowed after true-up in this order | 898.80 | 1054.20 | 973.19 |

Asset-I

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-------------------------|---------|---------|---------|---------|---------|
| Interest on Loan | | | | | |
| Gross Normative Loan | 493.02 | 533.07 | 545.90 | 579.39 | 579.39 |



| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---|----------------|----------------|----------------|----------------|----------------|
| Cumulative Repayments up to Previous Year | 39.68 | 78.14 | 118.60 | 160.80 | 204.27 |
| Net Loan-Opening | 453.34 | 454.93 | 427.30 | 418.59 | 375.12 |
| Additions | 40.05 | 12.82 | 33.50 | 0.00 | 0.00 |
| Repayment during the year | 38.46 | 40.46 | 42.20 | 43.47 | 43.47 |
| Net Loan-Closing | 454.93 | 427.30 | 418.59 | 375.12 | 331.66 |
| Average Loan | 454.14 | 441.11 | 422.94 | 396.86 | 353.39 |
| Weighted Average Rate of Interest on Loan (%) | 9.2914 | 9.2231 | 9.1589 | 9.0811 | 9.0556 |
| Interest on Loan | 42.20 | 40.68 | 38.74 | 36.04 | 32.00 |

79. The details of IoL approved in respect of Asset-I vide order dated 19.2.2016 in Petition No. 489/TT/2014, claimed by the Petitioner in the instant petition and as trued up in the instant order is as follows:

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---|----------------|----------------|----------------|----------------|----------------|
| Approved vide order dated 19.2.2016 in Petition No. 489/TT/2014 | 44.49 | 44.64 | 40.58 | 36.52 | 32.46 |
| Claimed by the Petitioner in the instant petition | 43.83 | 42.18 | 40.10 | 37.26 | 33.10 |
| Allowed after true-up in this order | 42.20 | 40.68 | 38.74 | 36.04 | 32.00 |

Asset-J

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|----------------|----------------|----------------|----------------|----------------|
| Interest on Loan | | | | | |
| Gross Normative Loan | 24714.10 | 28443.39 | 28503.72 | 28916.51 | 29519.21 |
| Cumulative Repayments up to Previous Year | 0.00 | 2004.80 | 4152.52 | 6318.08 | 8521.94 |
| Net Loan-Opening | 24714.10 | 26438.60 | 24351.20 | 22598.43 | 20997.27 |
| Additions | 3729.29 | 60.33 | 412.79 | 602.70 | 0.00 |
| Repayment during the year | 2004.80 | 2147.72 | 2165.56 | 2203.86 | 2226.59 |
| Net Loan-Closing | 26438.60 | 24351.20 | 22598.43 | 20997.27 | 18770.68 |
| Average Loan | 25576.35 | 25394.90 | 23474.82 | 21797.85 | 19883.97 |
| Weighted Average Rate of Interest on Loan (in %) | 7.7050 | 7.7278 | 7.6723 | 7.5640 | 7.4892 |



| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|------------------|---------|---------|---------|---------|---------|
| Interest on Loan | 1970.66 | 1962.47 | 1801.06 | 1648.80 | 1489.16 |

80. The details of IoL approved in respect of Asset-J vide order dated 25.4.2016 in Petition No. 107/TT/2014, claimed by the Petitioner in the instant petition and as trued up in the instant order is as follows:

| (₹ in lakh) | | | | | |
|---|---------|---------|---------|---------|---------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 25.4.2016 in Petition No. 107/TT/2014 | 1976.44 | 1964.31 | 1809.33 | 1625.54 | 1442.13 |
| Claimed by the Petitioner in the instant petition | 1988.77 | 1961.04 | 1799.65 | 1647.40 | 1487.77 |
| Allowed after true-up in this order | 1970.66 | 1962.47 | 1801.06 | 1648.80 | 1489.16 |

Asset-K

| (₹ in lakh) | | | | | |
|--|--------------|--------------|--------------|--------------|--------------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Interest on Loan | | | | | |
| Gross Normative Loan | 349.16 | 416.81 | 416.81 | 416.81 | 416.81 |
| Cumulative Repayments up to Previous Year | 0.00 | 28.89 | 60.33 | 91.77 | 123.21 |
| Net Loan-Opening | 349.16 | 387.92 | 356.48 | 325.04 | 293.60 |
| Additions | 67.65 | 0.00 | 0.00 | 0.00 | 0.00 |
| Repayment during the year | 28.89 | 31.44 | 31.44 | 31.44 | 31.44 |
| Net Loan-Closing | 387.92 | 356.48 | 325.04 | 293.60 | 262.16 |
| Average Loan | 368.54 | 372.20 | 340.76 | 309.32 | 277.88 |
| Weighted Average Rate of Interest on Loan (in %) | 7.8447 | 7.9002 | 7.7906 | 7.5707 | 7.4546 |
| Interest on Loan | 28.91 | 29.40 | 26.55 | 23.42 | 20.72 |

81. The details of IoL approved in respect of Asset-J vide order dated 25.4.2016 in Petition No. 107/TT/2014, claimed by the Petitioner in the instant petition and as trued up in the instant order is as follows:



(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|---------|---------|---------|---------|---------|
| Approved <i>vide</i> order dated 25.4.2016 in Petition No. 107/TT/2014 | 28.55 | 28.89 | 26.70 | 24.01 | 21.31 |
| Claimed by the Petitioner in the instant petition | 29.18 | 29.38 | 26.53 | 23.40 | 20.70 |
| Allowed after true-up in this order | 28.91 | 29.40 | 26.55 | 23.42 | 20.72 |

Return on Equity (“RoE”)

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

| Year | Claimed effective tax rate (in %) | Grossed up RoE (in %) [(Base Rate)/(1-t)] |
|---------|-----------------------------------|---|
| 2014-15 | 21.018 | 19.624 |
| 2015-16 | 21.382 | 19.715 |
| 2016-17 | 21.338 | 19.704 |
| 2017-18 | 21.337 | 19.704 |
| 2018-19 | 21.549 | 19.757 |

83. UPPCL has submitted that the RoE is grossed up by effective tax rate for years 2014-18. The Petitioner has not submitted return for year 2018-19. However, the Petitioner is considering grossing up of RoE by MAT @ 18.5%, surcharge @ 12% and cess @ 4% which is not in accordance with Regulation 25(3) of 2014 Tariff Regulations. Hence, the Petitioner may not be allowed to gross up RoE for 2018-19 period unless tax is paid.

84. In response the Petitioner has submitted that the effective rates of tax considered for 2014-15, 2015-16 and 2016-17 are based on Assessment Orders issued by Income-Tax authorities for the purpose of grossing up of RoE rate. Further, effective rates of tax considered for 2017-18 and 2018-19 are based on the income-tax returns filed for the



purpose of grossing up of RoE rate of respective years. Hence, authenticated tax rates have been considered for calculation of RoE. The Petitioner has further submitted that the Petitioner has so far been granted trued-up tariff of 2014-19 period by the Commission vide tariff orders in Petition No. 247/TT/2019 dated 18.4.2020, Petition No. 274/TT/2019 dated 27.4.2020, Petition No. 245/TT/2019 dated 23.4.2020 and Petition No. 307/TT/2019 dated 16.4.2020 in respect of the transmission assets under the respective petitions.

85. We have considered the submissions of the Petitioner and UPPCL. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same are as follows:

| Year | Notified MAT rates (in %) (inclusive of 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 |

86. MAT rates as allowed vide order dated 27.4.2020 in Petition No. 274/TT/2019 are considered for the purpose of grossing up of rate of RoE for truing up of the tariff of 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations and the same are as follows:

| Year | Notified MAT rates (inclusive of surcharge & cess) (in %) | Base rate of RoE (in %) | Grossed up RoE (Base Rate/1-t) (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 |



87. The Petitioner has claimed RoE for 2014-19 tariff period after grossing up RoE of 15.50% with Effective Tax rates (based on MAT rates) each year as per the above said Regulation. RoE is trued up on the basis of the MAT rate applicable in the respective years and is allowed in respect of the transmission assets and the same is as follows:

Asset-A

| (₹ in lakh) | | | | |
|-------------------------------------|----------------|----------------|----------------|----------------|
| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Return on Equity | | | | |
| Opening Equity (A) | 4933.88 | 5744.99 | 5901.23 | 6349.42 |
| Additions (B) | 811.10 | 156.25 | 448.19 | 197.36 |
| Closing Equity (C) = A+B | 5744.99 | 5901.23 | 6349.42 | 6546.79 |
| Average Equity (D) = (A+C)/2 | 5339.44 | 5823.11 | 6125.33 | 6448.10 |
| Return on Equity (Base Rate) (in %) | 15.500 | 15.500 | 15.500 | 15.500 |
| MAT Rate for respective year (in %) | 21.342 | 21.342 | 21.342 | 21.549 |
| Rate of Return on Equity (in %) | 19.705 | 19.705 | 19.705 | 19.758 |
| Return on Equity | 1052.14 | 1147.44 | 1207.00 | 1274.02 |

88. RoE allowed in respect of Asset-A vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

| (₹ in lakh) | | | | |
|---|---------|---------|---------|---------|
| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 1023.09 | 1085.08 | 1095.33 | 1095.33 |
| Claimed by Petitioner in the instant petition | 1054.70 | 1147.45 | 1207.00 | 1274.02 |
| Allowed after true-up in this order | 1052.14 | 1147.44 | 1207.00 | 1274.02 |



Asset-B

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 271 days) | 2016-17 | 2017-18 | 2018-19 |
|-------------------------------------|--------------------------------|---------------|---------------|---------------|
| Return on Equity | | | | |
| Opening Equity (A) | 1133.13 | 1145.79 | 1210.61 | 1272.84 |
| Additions (B) | 12.66 | 64.83 | 62.23 | 40.58 |
| Closing Equity (C) = A+B | 1145.79 | 1210.61 | 1272.84 | 1313.42 |
| Average Equity (D) = (A+C)/2 | 1139.46 | 1178.20 | 1241.73 | 1293.13 |
| Return on Equity (Base Rate) (in %) | 15.50 | 15.50 | 15.50 | 15.50 |
| MAT Rate for respective year (in %) | 21.34 | 21.34 | 21.34 | 21.55 |
| Rate of Return on Equity (in %) | 19.71 | 19.71 | 19.71 | 19.76 |
| Return on Equity | 166.25 | 232.16 | 244.68 | 255.50 |

89. RoE allowed in respect of Asset-B vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 271 days) | 2016-17 | 2017-18 | 2018-19 |
|--|--------------------------------|---------|---------|---------|
| Approved <i>vide</i> order dated 30.5.2016 in Petition No. 263/TT/2015 | 186.39 | 281.71 | 281.71 | 281.71 |
| Claimed by Petitioner in the instant petition | 166.34 | 232.17 | 244.68 | 255.50 |
| Allowed after true-up in this order | 166.25 | 232.16 | 244.68 | 255.50 |

Asset-C

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 342 days) | 2016-17 | 2017-18 | 2018-19 |
|------------------------------|--------------------------------|---------|---------|---------|
| Return on Equity | | | | |
| Opening Equity (A) | 374.02 | 444.13 | 507.69 | 569.92 |
| Additions (B) | 70.11 | 63.55 | 62.23 | 40.58 |
| Closing Equity (C) = A+B | 444.13 | 507.69 | 569.92 | 610.49 |
| Average Equity (D) = (A+C)/2 | 409.08 | 475.91 | 538.80 | 590.21 |



| Particulars | 2015-16 (Pro-rata 342 days) | 2016-17 | 2017-18 | 2018-19 |
|-------------------------------------|--------------------------------|--------------|---------------|---------------|
| Return on Equity (Base Rate) (in %) | 15.50 | 15.50 | 15.50 | 15.50 |
| MAT Rate for respective year (in %) | 21.34 | 21.34 | 21.34 | 21.55 |
| Rate of Return on Equity (in %) | 19.71 | 19.71 | 19.71 | 19.76 |
| Return on Equity | 75.32 | 93.78 | 106.17 | 116.61 |

90. RoE allowed in respect of Asset-C vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in in the instant order is as follows:

| (₹ in lakh) | | | | |
|---|--------------------------------|---------|---------|---------|
| Particulars | 2015-16 (Pro-rata 342 days) | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 73.55 | 83.96 | 83.96 | 83.96 |
| Claimed by Petitioner in the instant petition | 75.46 | 93.84 | 106.17 | 116.61 |
| Allowed after true-up in this order | 75.32 | 93.78 | 106.17 | 116.61 |

Asset-D

| (₹ in lakh) | | | | |
|-------------------------------------|--------------------------------|---------------|---------------|---------------|
| Particulars | 2015-16 (Pro-rata 214 days) | 2016-17 | 2017-18 | 2018-19 |
| Return on Equity | | | | |
| Opening Equity (A) | 1625.59 | 1770.69 | 1862.12 | 2248.07 |
| Additions (B) | 145.11 | 91.42 | 385.96 | 156.79 |
| Closing Equity (C) = A+B | 1770.69 | 1862.12 | 2248.07 | 2404.86 |
| Average Equity (D) = (A+C)/2 | 1698.14 | 1816.40 | 2055.09 | 2326.47 |
| Return on Equity (Base Rate) (in %) | 15.50 | 15.50 | 15.50 | 15.50 |
| MAT Rate for respective year (in %) | 21.34 | 21.34 | 21.34 | 21.55 |
| Rate of Return on Equity (in %) | 19.71 | 19.71 | 19.71 | 19.76 |
| Return on Equity | 195.65 | 357.92 | 404.96 | 459.66 |



91. RoE allowed in respect of Asset-D vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

| (₹ in lakh) | | | | |
|---|--------------------------------------|---------|---------|---------|
| Particulars | 2015-16 (Pro-rata 214 days) | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 188.88 | 337.49 | 339.77 | 339.77 |
| Claimed by Petitioner in the instant petition | 192.09 | 355.63 | 404.95 | 459.66 |
| Allowed after true-up in this order | 195.65 | 357.92 | 404.96 | 459.66 |

Asset-E

| (₹ in lakh) | | | | |
|-------------------------------------|--------------------------------------|----------------|----------------|----------------|
| Particulars | 2015-16 (Pro-rata 344 days) | 2016-17 | 2017-18 | 2018-19 |
| Return on Equity | | | | |
| Opening Equity (A) | 5050.93 | 6006.47 | 6240.74 | 6311.37 |
| Additions (B) | 955.55 | 234.27 | 70.63 | 93.30 |
| Closing Equity (C) = A+B | 6006.47 | 6240.74 | 6311.37 | 6404.67 |
| Average Equity (D) = (A+C)/2 | 5528.70 | 6123.61 | 6276.06 | 6358.02 |
| Return on Equity (Base Rate) (in %) | 15.50 | 15.50 | 15.50 | 15.50 |
| MAT Rate for respective year (in %) | 21.34 | 21.34 | 21.34 | 21.55 |
| Rate of Return on Equity (in %) | 19.71 | 19.71 | 19.71 | 19.76 |
| Return on Equity | 1023.95 | 1206.66 | 1236.70 | 1256.22 |

92. RoE allowed in respect of Asset-E vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

| (₹ in lakh) | | | | |
|---|--------------------------------------|---------|---------|---------|
| Particulars | 2015-16 (Pro-rata 344 days) | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 1038.89 | 1216.07 | 1216.07 | 1216.07 |



| Particulars | 2015-16 (Pro-rata 344 days) | 2016-17 | 2017-18 | 2018-19 |
|---|--------------------------------------|---------|---------|---------|
| Claimed by Petitioner in the instant petition | 1026.41 | 1206.66 | 1236.70 | 1256.22 |
| Allowed after true-up in this order | 1023.95 | 1206.66 | 1236.70 | 1256.22 |

Asset-F

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 343 days) | 2016-17 | 2017-18 | 2018-19 |
|-------------------------------------|--------------------------------------|---------------|---------------|---------------|
| Return on Equity | | | | |
| Opening Equity (A) | 1739.34 | 2139.59 | 2252.43 | 2303.66 |
| Additions (B) | 400.25 | 112.84 | 51.23 | 49.16 |
| Closing Equity (C) = A+B | 2139.59 | 2252.43 | 2303.66 | 2352.81 |
| Average Equity (D) = (A+C)/2 | 1939.46 | 2196.01 | 2278.04 | 2328.23 |
| Return on Equity (Base Rate) (in %) | 15.50 | 15.50 | 15.50 | 15.50 |
| MAT Rate for respective year (in %) | 21.34 | 21.34 | 21.34 | 21.55 |
| Rate of Return on Equity (in %) | 19.71 | 19.71 | 19.71 | 19.76 |
| Return on Equity | 358.16 | 432.72 | 448.89 | 460.01 |

93. RoE allowed in respect of Asset-F vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 343 days) | 2016-17 | 2017-18 | 2018-19 |
|---|--------------------------------------|---------|---------|---------|
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 353.91 | 414.24 | 414.24 | 414.24 |
| Claimed by Petitioner in the instant petition | 358.32 | 432.72 | 448.89 | 460.01 |
| Allowed after true-up in this order | 358.16 | 432.72 | 448.89 | 460.01 |



Asset-G

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 98 days) | 2016-17 | 2017-18 | 2018-19 |
|-------------------------------------|----------------------------------|----------------|----------------|----------------|
| Return on Equity | | | | |
| Opening Equity (A) | 12378.53 | 12682.11 | 12924.41 | 13030.54 |
| Additions (B) | 303.58 | 242.30 | 106.13 | 62.27 |
| Closing Equity (C) = A+B | 12682.11 | 12924.41 | 13030.54 | 13092.81 |
| Average Equity (D) = (A+C)/2 | 12530.32 | 12803.26 | 12977.48 | 13061.67 |
| Return on Equity (Base Rate) (in %) | 15.50 | 15.50 | 15.50 | 15.50 |
| MAT Rate for respective year (in %) | 21.34 | 21.34 | 21.34 | 21.55 |
| Rate of Return on Equity (in %) | 19.71 | 19.71 | 19.71 | 19.76 |
| Return on Equity | 661.13 | 2522.88 | 2557.21 | 2580.73 |

94. RoE allowed in respect of Asset-G vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 98 days) | 2016-17 | 2017-18 | 2018-19 |
|--|----------------------------------|---------|---------|---------|
| Approved <i>vide</i> order dated 30.5.2016 in Petition No. 263/TT/2015 | 641.88 | 2397.24 | 2397.24 | 2397.24 |
| Claimed by Petitioner in the instant petition | 675.35 | 2536.12 | 2557.21 | 2580.72 |
| Allowed after true-up in this order | 661.13 | 2522.88 | 2557.21 | 2580.73 |

Asset-H

(₹ in lakh)

| Particulars | 2016-17 (Pro-rata 289 days) | 2017-18 | 2018-19 |
|-------------------------------------|-----------------------------------|---------|---------|
| Return on Equity | | | |
| Opening Equity (A) | 5996.01 | 6114.24 | 6272.32 |
| Additions (B) | 118.23 | 158.08 | 32.03 |
| Closing Equity (C) = A+B | 6114.24 | 6272.32 | 6304.35 |
| Average Equity (D) = (A+C)/2 | 6055.12 | 6193.28 | 6288.34 |
| Return on Equity (Base Rate) (in %) | 15.500 | 15.500 | 15.500 |



| Particulars | 2016-17 (Pro-rata 289 days) | 2017-18 | 2018-19 |
|-------------------------------------|-----------------------------------|----------------|----------------|
| MAT Rate for respective year (in %) | 21.342 | 21.342 | 21.549 |
| Rate of Return on Equity (in %) | 19.705 | 19.705 | 19.758 |
| Return on Equity | 944.72 | 1220.39 | 1242.45 |

95. RoE allowed in respect of Asset-H vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

| (₹ in lakh) | | | |
|---|-----------------------------------|---------|---------|
| Particulars | 2016-17 (Pro-rata 289 days) | 2017-18 | 2018-19 |
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 485.62 | 611.21 | 611.21 |
| Claimed by Petitioner in the instant petition | 946.27 | 1222.30 | 1244.37 |
| Allowed after true-up in this order | 944.72 | 1220.39 | 1242.45 |

Asset-I

| (₹ in lakh) | | | | | |
|-------------------------------------|--------------|--------------|--------------|--------------|--------------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Return on Equity | | | | | |
| Opening Equity (A) | 211.30 | 228.46 | 233.96 | 248.31 | 248.31 |
| Additions (B) | 17.16 | 5.50 | 14.36 | 0.00 | 0.00 |
| Closing Equity (C) = A+B | 228.46 | 233.96 | 248.31 | 248.31 | 248.31 |
| Average Equity (D) = (A+C)/2 | 219.88 | 231.21 | 241.13 | 248.31 | 248.31 |
| Return on Equity (Base Rate) (in %) | 15.50 | 15.50 | 15.50 | 15.50 | 15.50 |
| MAT Rate for respective year (in %) | 20.96 | 21.34 | 21.34 | 21.34 | 21.55 |
| Rate of Return on Equity (in %) | 19.61 | 19.71 | 19.71 | 19.71 | 19.76 |
| Return on Equity | 43.12 | 45.56 | 47.52 | 48.93 | 49.06 |

96. RoE allowed in respect of Asset-I vide order dated 19.2.2016 in Petition No. 489/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:



(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|---------|---------|---------|---------|---------|
| Approved <i>vide</i> order dated 19.2.2016 in Petition No. 489/TT/2014 | 45.08 | 48.73 | 48.73 | 48.73 | 48.73 |
| Claimed by Petitioner in the instant petition | 44.69 | 47.13 | 49.06 | 50.48 | 50.61 |
| Allowed after true-up in this order | 43.12 | 45.56 | 47.52 | 48.93 | 49.06 |

Asset-J

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-------------------------------------|----------------|----------------|----------------|----------------|----------------|
| Return on Equity | | | | | |
| Opening Equity (A) | 10591.76 | 12190.03 | 12215.88 | 12392.79 | 12651.09 |
| Additions (B) | 1598.27 | 25.85 | 176.91 | 258.30 | 0.00 |
| Closing Equity (C) = A+B | 12190.03 | 12215.88 | 12392.79 | 12651.09 | 12651.09 |
| Average Equity (D) = (A+C)/2 | 11390.89 | 12202.95 | 12304.34 | 12521.94 | 12651.09 |
| Return on Equity (Base Rate) (in %) | 15.50 | 15.50 | 15.50 | 15.50 | 15.50 |
| MAT Rate for respective year (in %) | 20.96 | 21.34 | 21.34 | 21.34 | 21.55 |
| Rate of Return on Equity (in %) | 19.61 | 19.71 | 19.71 | 19.71 | 19.76 |
| Return on Equity | 2233.75 | 2404.59 | 2424.57 | 2467.45 | 2499.60 |

97. RoE allowed in respect of Asset-J *vide* order dated 25.4.2016 in Petition No. 107/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|---------|---------|---------|---------|---------|
| Approved <i>vide</i> order dated 25.4.2016 in Petition No. 107/TT/2014 | 2260.65 | 2428.34 | 2453.50 | 2453.50 | 2453.50 |
| Claimed by Petitioner in the instant petition | 2256.01 | 2405.81 | 2424.57 | 2467.45 | 2499.60 |
| Allowed after true-up in this order | 2233.75 | 2404.59 | 2424.57 | 2467.45 | 2499.60 |

Asset-K

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--------------------------|---------|---------|---------|---------|---------|
| Return on Equity | | | | | |
| Opening Equity (A) | 149.64 | 178.63 | 178.63 | 178.63 | 178.63 |
| Additions (B) | 28.99 | 0.00 | 0.00 | 0.00 | 0.00 |
| Closing Equity (C) = A+B | 178.63 | 178.63 | 178.63 | 178.63 | 178.63 |



| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-------------------------------------|--------------|--------------|--------------|--------------|--------------|
| Average Equity (D) = (A+C)/2 | 164.14 | 178.63 | 178.63 | 178.63 | 178.63 |
| Return on Equity (Base Rate) (in %) | 15.50 | 15.50 | 15.50 | 15.50 | 15.50 |
| MAT Rate for respective year (in %) | 20.96 | 21.34 | 21.34 | 21.34 | 21.55 |
| Rate of Return on Equity (in %) | 19.61 | 19.71 | 19.71 | 19.71 | 19.76 |
| Return on Equity | 32.19 | 35.20 | 35.20 | 35.20 | 35.29 |

98. RoE allowed in respect of Asset-K vide order dated 25.4.2016 in Petition No. 107/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

| (₹ in lakh) | | | | | |
|--|---------|---------|---------|---------|---------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 25.4.2016 in Petition No. 107/TT/2014. | 32.48 | 35.48 | 35.93 | 35.93 | 35.93 |
| Claimed by Petitioner in the instant petition. | 32.51 | 35.22 | 35.20 | 35.20 | 35.29 |
| Allowed after true-up in this order. | 32.19 | 35.20 | 35.20 | 35.20 | 35.29 |

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

99. O&M Expenses claimed by the Petitioner in respect of the transmission assets for 2014-19 period are as follows:

Asset-A

| (₹ in lakh) | | | | |
|--|---------------|---------------|---------------|---------------|
| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| 50 km S/C 2 nd circuit 400 kV D/C Quad Bareilly (Existing) Bareilly (New) 2 Numbers 765 kV Bays Bareilly ICT I, Bareilly-Lucknow both ends 3 Number 400 kV Bays (Bareilly (Existing), Bareilly (New) and ICT Bay) | | | | |
| Total O&M Expenses Claimed | 536.72 | 554.56 | 572.97 | 591.97 |

Asset-B

| (₹ in lakh) | | | | |
|--|-----------------------------------|--------------|--------------|--------------|
| Particulars | 2015-16 (Pro-rata 271 days) | 2016-17 | 2017-18 | 2018-19 |
| 1 Number 765 kV Bays Bus Reactor at Bareilly | | | | |
| Total O&M Expenses Claimed | 64.58 | 90.12 | 93.11 | 96.20 |



Asset-C

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 342 days) | 2016-17 | 2017-18 | 2018-19 |
|---|-----------------------------------|---------------|---------------|---------------|
| 2 Number 400 kV Bays (Bareilly (Existing) and Bareilly (New)) | | | | |
| Total O&M Expenses Claimed | 116.43 | 128.74 | 133.02 | 137.42 |

Asset-D

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 214 days) | 2016-17 | 2017-18 | 2018-19 |
|--|-----------------------------------|---------------|---------------|---------------|
| 1 Number 765 kV Bays Bareilly ICT Bank II 1 Number 400 kV Bays Bareilly ICT Bank II | | | | |
| Total O&M Expenses Claimed | 87.43 | 154.49 | 159.62 | 164.91 |

Asset-E

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 344 days) | 2016-17 | 2017-18 | 2018-19 |
|---|-----------------------------------|---------------|---------------|---------------|
| 104.26 km S/C 1 st circuit 400 kV D/C Quad Bareilly-Kashipur 2 Number 400 kV Bays (Bareilly-Kashipur) | | | | |
| Total O&M Expenses Claimed | 178.56 | 196.20 | 202.77 | 209.46 |

Asset-F

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 343 days) | 2016-17 | 2017-18 | 2018-19 |
|---|-----------------------------------|---------------|---------------|---------------|
| 104.26 km S/C 1 st circuit 400 kV D/C Quad Bareilly-Kashipur 2 Number 400 kV Bays (Bareilly-Kashipur) | | | | |
| Total O&M Expenses Claimed | 178.02 | 196.20 | 202.77 | 209.46 |



Asset-G

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 98 days) | 2016-17 | 2017-18 | 2018-19 |
|--|-------------------------------|---------------|---------------|---------------|
| 301.64 km D/C 2 nd circuit 400 kV D/C Kashipur-Roorkee 4 Number 400 kV Bays (Kashipur-Roorkee) | | | | |
| Total O&M Expenses Claimed | 111.02 | 428.37 | 442.66 | 457.35 |

Asset-H

(₹ in lakh)

| Particulars | 2016-17 (Pro-rata 289 days) | 2017-18 | 2018-19 |
|--|--------------------------------|---------------|---------------|
| 36.5 km D/C 2 nd circuit 400 kV D/C Roorkee-Saharanpur 4 Number 400 kV Bays Roorkee-Saharanpur | | | |
| Total O&M Expenses Claimed | 236.60 | 308.78 | 319.01 |

Asset-I

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|--------------|--------------|--------------|--------------|--------------|
| 1 Number 400 kV Bays (Muzaffarnagar : Roorkee Bus Reactor) | | | | | |
| Total O&M Expenses Claimed | 60.30 | 62.30 | 64.37 | 66.51 | 68.71 |

Asset-J

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|---------------|---------------|---------------|---------------|---------------|
| 251.610 km S/C 765 kV S/C Bareilly Lucknow at 400 kV | | | | | |
| Total O&M Expenses Claimed | 152.48 | 157.76 | 162.79 | 168.33 | 173.86 |

Asset-K

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|-------------|-------------|-------------|-------------|-------------|
| 1.53 km S/C Bareilly (New) Bareilly (Existing) | | | | | |
| Total O&M Expenses Claimed | 0.93 | 0.96 | 0.99 | 1.02 | 1.06 |



100. Regulation 29(3) of the 2014 Tariff Regulations specifies norms for O&M Expenses for the transmission system. Norms specified in respect of the elements covered in the transmission assets are as follows:

| Element | Norms for 2014-15 | Norms for 2015-16 | Norms for 2016-17 | Norms for 2017-18 | Norms for 2018-19 |
|--------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Single Circuit Twin/Triple Conductor | ₹0.404 lakh/ km | ₹0.418 lakh/ km | ₹0.432 lakh/ km | ₹0.446 lakh/ km | ₹0.461 lakh/ km |
| Double Circuit Twin/Triple Conductor | ₹0.707 lakh/ km | ₹0.731 lakh/ km | ₹0.755 lakh/ km | ₹0.780 lakh/ km | ₹0.806 lakh/ km |
| Double Circuit Single Conductor | ₹0.303 lakh/ km | ₹0.313 lakh/ km | ₹0.324 lakh/ km | ₹0.334 lakh/ km | ₹0.346 lakh/ km |
| 220 kV Sub-station | ₹42.21 lakh/bay | ₹43.61 lakh/bay | ₹45.06 lakh/ bay | ₹46.55 lakh/ bay | ₹48.10 lakh/ bay |
| 400 kV Sub-station | ₹60.30 lakh/bay | ₹62.30 lakh/bay | ₹64.37 lakh/ bay | ₹66.51 lakh/ bay | ₹68.71 lakh/ bay |

101. We have considered the submissions of the Petitioner. O&M Expenses allowed in respect of the transmission assets as per norms specified in the 2014 Tariff Regulations are as follows:

Asset-A

| | (₹ in lakh) | | | |
|---|---------------|---------------|---------------|---------------|
| | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| O&M Expenses | | | | |
| 4 Number of 765 kV bays | | | | |
| Norms (₹ lakh/Bay) | 87.22 | 90.12 | 93.11 | 96.2 |
| Total | 348.88 | 360.48 | 372.44 | 384.80 |
| 3 Number of 400 kV bays | | | | |
| Norms (₹ lakh/Bay) | 62.30 | 64.37 | 66.51 | 68.71 |
| Total | 186.90 | 193.11 | 199.53 | 206.13 |
| 1.5 km Single Circuit (Bundled with 4 sub-conductors) | | | | |
| Norms (₹ lakh/km) | 0.627 | 0.647 | 0.669 | 0.691 |
| Total | 0.94 | 0.97 | 1.00 | 1.04 |
| Total O&M Expense allowed (₹ in lakh) | 536.72 | 554.56 | 572.97 | 591.97 |

102. The details of O&M Expenses allowed in respect of Asset-A vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:



(₹ in lakh)

| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|---------|---------|---------|---------|
| Approved <i>vide</i> order dated 30.5.2016 in Petition No. 263/TT/2015 | 536.72 | 554.56 | 572.97 | 591.97 |
| Claimed by Petitioner in the instant petition | 536.72 | 554.56 | 572.97 | 591.97 |
| Allowed after true-up in this order | 536.72 | 554.56 | 572.97 | 591.97 |

Asset-B

(₹ in lakh)

| | 2015-16 (Pro-rata 271 days) | 2016-17 | 2017-18 | 2018-19 |
|--|--------------------------------------|--------------|--------------|--------------|
| O&M Expenses | | | | |
| 1 Number of 765 kV bays | | | | |
| Norms (₹ lakh/Bay) | 87.22 | 90.12 | 93.11 | 96.2 |
| Total | 64.58 | 90.12 | 93.11 | 96.20 |
| Total O&M Expense allowed (₹ in lakh) | 64.58 | 90.12 | 93.11 | 96.20 |

103. The details of O&M Expenses allowed in respect of Asset-B vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 271 days) | 2016-17 | 2017-18 | 2018-19 |
|--|-----------------------------------|---------|---------|---------|
| Approved <i>vide</i> order dated 30.5.2016 in Petition No. 263/TT/2015 | 64.58 | 90.12 | 93.11 | 96.20 |
| Claimed by Petitioner in the instant petition | 64.58 | 90.12 | 93.11 | 96.20 |
| Allowed after true-up in this order | 64.58 | 90.12 | 93.11 | 96.20 |

Asset-C

(₹ in lakh)

| | 2015-16 (Pro-rata 342 days) | 2016-17 | 2017-18 | 2018-19 |
|--------------------------|--------------------------------------|---------|---------|---------|
| O&M Expenses | | | | |
| 2 Numbers of 400 kV bays | | | | |
| Norms (₹ lakh/Bay) | 62.30 | 64.37 | 66.51 | 68.71 |



| | 2015-16 (Pro-rata 342 days) | 2016-17 | 2017-18 | 2018-19 |
|--|--------------------------------------|---------------|---------------|---------------|
| Total | 116.43 | 128.74 | 133.02 | 137.42 |
| Total O&M Expense allowed (₹ in lakh) | 116.43 | 128.74 | 133.02 | 137.42 |

104. The details of O&M Expenses allowed in respect of Asset-C vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 342 days) | 2016-17 | 2017-18 | 2018-19 |
|---|-----------------------------------|---------|---------|---------|
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 116.43 | 128.74 | 133.02 | 137.42 |
| Claimed by Petitioner in the instant petition | 116.43 | 128.74 | 133.02 | 137.42 |
| Allowed after true-up in this order | 116.43 | 128.74 | 133.02 | 137.42 |

Asset-D

(₹ in lakh)

| | 2015-16 (Pro-rata 214 days) | 2016-17 | 2017-18 | 2018-19 |
|--|-----------------------------------|---------------|---------------|---------------|
| O&M Expenses | | | | |
| 1 Number of 765 kV bays | | | | |
| Norms (₹ lakh/Bay) | 87.22 | 90.12 | 93.11 | 96.2 |
| Total | 51.00 | 90.12 | 93.11 | 96.20 |
| 1 Number of 400 kV bays | | | | |
| Norms (₹ lakh/Bay) | 62.30 | 64.37 | 66.51 | 68.71 |
| Total | 36.43 | 64.37 | 66.51 | 68.71 |
| Total O&M Expense allowed (₹ in lakh) | 87.42 | 154.49 | 159.62 | 164.91 |

105. The details of O&M Expenses allowed in respect of Asset-D vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:



(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 214 days) | 2016-17 | 2017-18 | 2018-19 |
|--|-----------------------------------|---------|---------|---------|
| Approved <i>vide</i> order dated 30.5.2016 in Petition No. 263/TT/2015 | 87.42 | 154.49 | 159.62 | 164.91 |
| Claimed by Petitioner in the instant petition | 87.43 | 154.49 | 159.62 | 164.91 |
| Allowed after true-up in this order | 87.42 | 154.49 | 159.62 | 164.91 |

Asset-E

(₹ in lakh)

| | 2015-16 (Pro-rata 344 days) | 2016-17 | 2017-18 | 2018-19 |
|--|-----------------------------------|---------------|---------------|---------------|
| O&M Expenses | | | | |
| 2 Numbers of 400 kV bays | | | | |
| Norms (₹ lakh/Bay) | 62.30 | 64.37 | 66.51 | 68.71 |
| Total | 117.11 | 128.74 | 133.02 | 137.42 |
| 104.26 km Single Circuit (Bundled with 4 sub-conductors) (Tariff Allowed for only one day) | | | | |
| Norms (₹ lakh/km) | 0.627 | 0.647 | 0.669 | 0.691 |
| Total | 0.18 | - | - | - |
| Total O&M Expense allowed (₹ in lakh) | 117.29 | 128.74 | 133.02 | 137.42 |

106. For S/C line, O&M Expenses have been allowed for only one day, i.e. 23.4.2015. From 24.4.2015, O&M Expenses have been allowed under the norms of D/C line for Asset-F. Hence, the details of O&M Expenses allowed in respect of Asset-E *vide* order dated 30.5.2016 in Petition No. 263/TT/2015, as claimed by the Petitioner in the instant petition and tried up in the instant order is as follows:

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 344 days) | 2016-17 | 2017-18 | 2018-19 |
|--|-----------------------------------|---------------|---------------|---------------|
| Approved <i>vide</i> order dated 30.5.2016 in Petition No. 263/TT/2015 | 178.55 | 196.20 | 202.77 | 209.46 |
| Claimed by Petitioner in the instant petition | 178.56 | 196.20 | 202.77 | 209.46 |
| Allowed after true-up in this order | 117.29 | 128.74 | 133.02 | 137.42 |



Asset-F

| (₹ in lakh) | | | | |
|--|-----------------------------------|---------------|---------------|---------------|
| | 2015-16 (Pro-rata 343 days) | 2016-17 | 2017-18 | 2018-19 |
| O&M Expenses | | | | |
| 2 Numbers of 400 kV bays | | | | |
| Norms (₹ lakh/Bay) | 62.30 | 64.37 | 66.51 | 68.71 |
| Total | 116.77 | 128.74 | 133.02 | 137.42 |
| 104.26 km Double Circuit (Bundled with 4 sub-conductors) | | | | |
| Norms (₹ lakh/km) | 1.097 | 1.133 | 1.171 | 1.21 |
| Total | 107.19 | 118.13 | 122.09 | 126.15 |
| Total O&M Expense allowed (₹ in lakh) | 223.96 | 246.87 | 255.11 | 263.57 |

107. The reason for variation is as explained above in Asset-E. The details of O&M Expenses allowed in respect of Asset-F vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

| (₹ in lakh) | | | | |
|---|-----------------------------------|---------------|---------------|---------------|
| Particulars | 2015-16 (Pro-rata 343 days) | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 178.03 | 196.20 | 202.77 | 209.46 |
| Claimed by Petitioner in the instant petition | 178.02 | 196.20 | 202.77 | 209.46 |
| Allowed after true-up in this order | 223.96 | 246.87 | 255.11 | 263.57 |

Asset-G

| (₹ in lakh) | | | | |
|---|-------------------------------|---------|---------|---------|
| | 2015-16 (Pro-rata 98 days) | 2016-17 | 2017-18 | 2018-19 |
| O&M Expenses | | | | |
| 4 Numbers of 400 kV bays | | | | |
| Norms (₹ lakh/Bay) | 62.30 | 64.37 | 66.51 | 68.71 |
| Total | 66.73 | 257.48 | 266.04 | 274.84 |
| 150.832 km Double Circuit (Bundled with 4 sub-conductors) | | | | |
| Norms (₹ lakh/km) | 1.097 | 1.133 | 1.171 | 1.21 |



| | 2015-16 (Pro-rata 98 days) | 2016-17 | 2017-18 | 2018-19 |
|--|----------------------------|---------------|---------------|---------------|
| Total | 44.30 | 170.89 | 176.62 | 182.51 |
| Total O&M Expense allowed (₹ in lakh) | 111.03 | 428.37 | 442.66 | 457.35 |

108. The details of O&M Expenses allowed in respect of Asset-G vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 98 days) | 2016-17 | 2017-18 | 2018-19 |
|---|----------------------------|---------|---------|---------|
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 111.03 | 428.37 | 442.66 | 457.35 |
| Claimed by Petitioner in the instant petition | 111.02 | 428.37 | 442.66 | 457.35 |
| Allowed after true-up in this order | 111.03 | 428.37 | 442.66 | 457.35 |

Asset-H

(₹ in lakh)

| | 2016-17 (Pro-rata 289 days) | 2017-18 | 2018-19 |
|---|-----------------------------|---------------|---------------|
| O&M Expenses | | | |
| 4 Number of 400 kV bays | | | |
| Norms (₹ lakh/Bay) | 64.37 | 66.51 | 68.71 |
| Total | 203.87 | 266.04 | 274.84 |
| 36.50 km Double Circuit (Bundled with 4 sub-conductors) | | | |
| Norms (₹ lakh/km) | 1.133 | 1.171 | 1.21 |
| Total | 32.74 | 42.74 | 44.17 |
| Total O&M Expense allowed (₹ in lakh) | 236.61 | 308.78 | 319.01 |

109. The details of O&M Expenses allowed in respect of Asset-H vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:



(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 289 days) | 2017-18 | 2018-19 |
|--|-----------------------------------|---------|---------|
| Approved <i>vide</i> order dated 30.5.2016 in Petition No. 263/TT/2015 | 237.43 | 308.78 | 319.01 |
| Claimed by Petitioner in the instant petition | 236.60 | 308.78 | 319.01 |
| Allowed after true-up in this order | 236.61 | 308.78 | 319.01 |

Asset-I

(₹ in lakh)

| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|--------------|--------------|--------------|--------------|--------------|
| O&M Expenses | | | | | |
| 1 Number of 400 kV bays | | | | | |
| Norms (₹ lakh/Bay) | 60.30 | 62.30 | 64.37 | 66.51 | 68.71 |
| Total | 60.30 | 62.30 | 64.37 | 66.51 | 68.71 |
| Total O&M Expense allowed (₹ in lakh) | 60.30 | 62.30 | 64.37 | 66.51 | 68.71 |

110. The details of O&M Expenses allowed in respect of Asset-I *vide* order dated 19.2.2016 in Petition No. 489/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|---------|---------|---------|---------|---------|
| Approved <i>vide</i> order dated 19.2.2016 in Petition No. 489/TT/2014 | 60.30 | 62.30 | 64.37 | 66.51 | 68.71 |
| Claimed by Petitioner in the instant petition | 60.30 | 62.30 | 64.37 | 66.51 | 68.71 |
| Allowed after true-up in this order | 60.30 | 62.30 | 64.37 | 66.51 | 68.71 |

Asset-J

(₹ in lakh)

| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---|---------------|---------------|---------------|---------------|---------------|
| O&M Expenses | | | | | |
| 251.6 km Single Circuit (Bundled with 4 sub-conductors) | | | | | |
| Norms (₹ lakh/km) | 0.606 | 0.627 | 0.647 | 0.669 | 0.691 |
| Total | 152.47 | 157.75 | 162.79 | 168.32 | 173.86 |
| Total O&M Expense allowed (₹ in lakh) | 152.47 | 157.75 | 162.79 | 168.32 | 173.86 |



111. The details of O&M Expenses allowed in respect of Asset-J vide order dated 25.4.2016 in Petition No. 107/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

| (₹ in lakh) | | | | | |
|---|---------|---------|---------|---------|---------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 25.4.2016 in Petition No. 107/TT/2014 | 152.48 | 157.76 | 162.79 | 168.33 | 173.86 |
| Claimed by Petitioner in the instant petition | 152.48 | 157.76 | 162.79 | 168.33 | 173.86 |
| Allowed after true-up in this order | 152.47 | 157.75 | 162.79 | 168.32 | 173.86 |

Asset-K

| (₹ in lakh) | | | | | |
|--|-------------|-------------|-------------|-------------|-------------|
| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| O&M Expenses | | | | | |
| 1.53 km Single Circuit (Bundled with 4 sub-conductors) | | | | | |
| Norms (₹ lakh/km) | 0.606 | 0.627 | 0.647 | 0.669 | 0.691 |
| Total | 0.93 | 0.96 | 0.99 | 1.02 | 1.06 |
| Total O&M Expense allowed (₹ in lakh) | 0.93 | 0.96 | 0.99 | 1.02 | 1.06 |

112. The details of O&M Expenses allowed in respect of Asset-K vide order dated 25.4.2016 in Petition No. 107/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

| (₹ in lakh) | | | | | |
|---|---------|---------|---------|---------|---------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 25.4.2016 in Petition No. 107/TT/2014 | 0.93 | 0.96 | 0.99 | 1.02 | 1.06 |
| Claimed by Petitioner in the instant petition | 0.93 | 0.96 | 0.99 | 1.02 | 1.06 |
| Allowed after true-up in this order | 0.93 | 0.96 | 0.99 | 1.02 | 1.06 |



Interest on Working Capital (“IWC”)

113. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations in respect of the transmission assets and the same is as follows:

Asset-A

| Particulars | (₹ in lakh) | | | |
|---|--------------|--------------|--------------|---------------|
| | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| O&M Expenses (O&M Expenses for one month) | 44.73 | 46.21 | 47.75 | 49.33 |
| Maintenance Spares (15% of O&M Expenses) | 80.51 | 83.18 | 85.95 | 88.79 |
| Receivables (Equivalent to two months of annual fixed cost) | 527.78 | 567.24 | 587.11 | 610.23 |
| Total Working Capital | 653.02 | 696.64 | 720.80 | 748.36 |
| Rate of Interest (in %) | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 88.16 | 94.05 | 97.31 | 101.03 |

114. The details of IWC allowed in respect of Asset-A vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

| Particulars | (₹ in lakh) | | | |
|---|-------------|---------|---------|---------|
| | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 85.84 | 89.13 | 89.57 | 89.47 |
| Claimed by Petitioner in the instant petition | 88.41 | 94.16 | 97.42 | 101.14 |
| Allowed after true-up in this order | 88.16 | 94.05 | 97.31 | 101.03 |

Asset-B

| Particulars | (₹ in lakh) | | | |
|---|-----------------------------------|---------|---------|---------|
| | 2015-16 (Pro-rata 271 days) | 2016-17 | 2017-18 | 2018-19 |
| O&M Expenses (O&M Expenses for one month) | 7.27 | 7.51 | 7.76 | 8.02 |
| Maintenance Spares (15% of O&M Expenses) | 13.08 | 13.52 | 13.97 | 14.43 |
| Receivables (Equivalent to two months of annual fixed cost) | 127.54 | 128.76 | 131.38 | 133.35 |



| Particulars | 2015-16 (Pro-rata 271 days) | 2016-17 | 2017-18 | 2018-19 |
|------------------------------------|-----------------------------------|--------------|--------------|--------------|
| Total Working Capital | 147.89 | 149.79 | 153.10 | 155.80 |
| Rate of Interest (in %) | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 14.78 | 20.22 | 20.67 | 21.03 |

115. The details of IWC allowed in respect of Asset-B vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

| (₹ in lakh) | | | | |
|--|-----------------------------------|---------|---------|---------|
| Particulars | 2015-16 (Pro-rata 271 days) | 2016-17 | 2017-18 | 2018-19 |
| Approved <i>vide</i> order dated 30.5.2016 in Petition No. 263/TT/2015 | 16.16 | 23.59 | 23.22 | 22.85 |
| Claimed by Petitioner in the instant petition | 14.82 | 20.27 | 20.72 | 21.08 |
| Allowed after true-up in this order | 14.78 | 20.22 | 20.67 | 21.03 |

Asset-C

| (₹ in lakh) | | | | |
|---|--------------------------------|--------------|--------------|--------------|
| Particulars | 2015-16 (Pro-rata 342 days) | 2016-17 | 2017-18 | 2018-19 |
| O&M Expenses (O&M Expenses for one month) | 10.38 | 10.73 | 11.09 | 11.45 |
| Maintenance Spares (15% of O&M Expenses) | 18.69 | 19.31 | 19.95 | 20.61 |
| Receivables (Equivalent to two months of annual fixed cost) | 61.95 | 68.00 | 73.23 | 77.42 |
| Total Working Capital | 91.03 | 98.04 | 104.27 | 109.49 |
| Rate of Interest (in %) | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 11.48 | 13.24 | 14.08 | 14.78 |

116. The details of IWC allowed in respect of Asset-C vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:



(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 342 days) | 2016-17 | 2017-18 | 2018-19 |
|---|--------------------------------------|---------|---------|---------|
| Approved <i>vide</i> order dated 30.5.2016 in Petition No. 263/TT/2015 | 11.37 | 12.61 | 12.69 | 12.78 |
| Claimed by Petitioner in the instant petition | 11.54 | 13.29 | 14.12 | 14.82 |
| Allowed after true-up in this order | 11.48 | 13.24 | 14.08 | 14.78 |

Asset-D

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 214 days) | 2016-17 | 2017-18 | 2018-19 |
|--|-----------------------------------|--------------|--------------|--------------|
| O&M Expenses (O&M Expenses for one month) | 12.46 | 12.87 | 13.30 | 13.74 |
| Maintenance Spares (15% of O&M Expenses) | 22.43 | 23.17 | 23.94 | 24.74 |
| Receivables (Equivalent to two months of annual fixed cost) | 193.72 | 201.67 | 217.49 | 238.11 |
| Total Working Capital | 228.61 | 237.72 | 254.74 | 276.59 |
| Rate of Interest (in %) | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 18.05 | 32.09 | 34.39 | 37.34 |

117. The details of IWC allowed in respect of Asset-D *vide* order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 214 days) | 2016-17 | 2017-18 | 2018-19 |
|---|--------------------------------------|---------|---------|---------|
| Approved <i>vide</i> order dated 30.5.2016 in Petition No. 263/TT/2015 | 17.42 | 30.56 | 30.39 | 30.07 |
| Claimed by Petitioner in the instant petition | 17.84 | 32.01 | 34.46 | 37.41 |
| Allowed after true-up in this order | 18.05 | 32.09 | 34.39 | 37.34 |



Asset-E

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 344 days) | 2016-17 | 2017-18 | 2018-19 |
|---|--------------------------------------|--------------|--------------|--------------|
| O&M Expenses (O&M Expenses for one month) | 10.40 | 10.73 | 11.09 | 11.45 |
| Maintenance Spares (15% of O&M Expenses) | 18.72 | 19.31 | 19.95 | 20.61 |
| Receivables (Equivalent to two months of annual fixed cost) | 555.96 | 598.23 | 593.24 | 585.26 |
| Total Working Capital | 585.08 | 628.27 | 624.27 | 617.32 |
| Rate of Interest (in %) | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 74.24 | 84.82 | 84.28 | 83.34 |

118. The details of IWC allowed in respect of Asset-E vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 344 days) | 2016-17 | 2017-18 | 2018-19 |
|---|--------------------------------------|--------------|--------------|--------------|
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 78.93 | 89.74 | 87.87 | 86.01 |
| Claimed by Petitioner in the instant petition | 77.79 | 88.57 | 88.16 | 87.34 |
| Allowed after true-up in this order | 74.24 | 84.82 | 84.28 | 83.34 |

Asset-F

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 343 days) | 2016-17 | 2017-18 | 2018-19 |
|---|-----------------------------------|---------|---------|---------|
| O&M Expenses (O&M Expenses for one month) | 19.91 | 20.57 | 21.26 | 21.96 |
| Maintenance Spares (15% of O&M Expenses) | 35.85 | 37.03 | 38.27 | 39.54 |
| Receivables (Equivalent to two months of annual fixed cost) | 232.48 | 253.08 | 254.15 | 254.05 |
| Total Working Capital | 288.24 | 310.68 | 313.68 | 315.55 |
| Rate of Interest (in %) | 13.50 | 13.50 | 13.50 | 13.50 |



| Particulars | 2015-16 (Pro-rata 343 days) | 2016-17 | 2017-18 | 2018-19 |
|------------------------------------|-----------------------------------|--------------|--------------|--------------|
| Interest on Working Capital | 36.47 | 41.94 | 42.35 | 42.60 |

119. The details of IWC allowed in respect of Asset-F vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

| (₹ in lakh) | | | | |
|--|--------------------------------------|--------------|--------------|--------------|
| Particulars | 2015-16 (Pro-rata 343 days) | 2016-17 | 2017-18 | 2018-19 |
| Approved <i>vide</i> order dated 30.5.2016 in Petition No. 263/TT/2015 | 33.70 | 38.09 | 37.67 | 37.26 |
| Claimed by Petitioner in the instant petition | 33.96 | 39.17 | 39.49 | 39.64 |
| Allowed after true-up in this order | 36.47 | 41.94 | 42.35 | 42.60 |

Asset-G

| (₹ in lakh) | | | | |
|---|----------------------------------|---------------|---------------|---------------|
| Particulars | 2015-16 (Pro-rata 98 days) | 2016-17 | 2017-18 | 2018-19 |
| O&M Expenses (O&M Expenses for one month) | 34.56 | 35.70 | 36.89 | 38.11 |
| Maintenance Spares (15% of O&M Expenses) | 62.20 | 64.26 | 66.40 | 68.60 |
| Receivables (Equivalent to two months of annual fixed cost) | 1263.62 | 1271.39 | 1256.20 | 1235.22 |
| Total Working Capital | 1360.37 | 1371.34 | 1359.49 | 1341.94 |
| Rate of Interest (in %) | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 49.17 | 185.13 | 183.53 | 181.16 |

120. The details of IWC allowed in respect of Asset-G vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:



(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 98 days) | 2016-17 | 2017-18 | 2018-19 |
|---|----------------------------------|---------|---------|---------|
| Approved <i>vide</i> order dated 30.5.2016 in Petition No. 263/TT/2015 | 48.05 | 177.62 | 174.31 | 171.02 |
| Claimed by Petitioner in the instant petition | 50.08 | 185.96 | 183.49 | 181.12 |
| Allowed after true-up in this order | 49.17 | 185.13 | 183.53 | 181.16 |

Asset-H

(₹ in lakh)

| Particulars | 2016-17 (Pro-rata 289 days) | 2017-18 | 2018-19 |
|--|-----------------------------------|--------------|--------------|
| O&M Expenses (O&M Expenses for one month) | 24.90 | 25.73 | 26.58 |
| Maintenance Spares (15% of O&M Expenses) | 44.83 | 46.32 | 47.85 |
| Receivables (Equivalent to two months of annual fixed cost) | 630.70 | 627.44 | 622.04 |
| Total Working Capital | 700.43 | 699.49 | 696.48 |
| Rate of Interest (in %) | 12.80 | 12.80 | 12.80 |
| Interest on Working Capital | 70.99 | 89.53 | 89.15 |

121. The details of IWC allowed in respect of Asset-H *vide* order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 289 days) | 2017-18 | 2018-19 |
|---|-----------------------------------|---------|---------|
| Approved <i>vide</i> order dated 30.5.2016 in Petition No. 263/TT/2015 | 42.72 | 53.38 | 52.90 |
| Claimed by Petitioner in the instant petition | 71.11 | 89.69 | 89.29 |
| Allowed after true-up in this order | 70.99 | 89.53 | 89.15 |



Asset-I

| (₹ in lakh) | | | | | |
|---|-------------|-------------|-------------|-------------|-------------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Interest on Working Capital | | | | | |
| O&M Expenses (O&M Expenses for one month) | 5.03 | 5.19 | 5.36 | 5.54 | 5.73 |
| Maintenance Spares (15% of O&M Expenses) | 9.05 | 9.35 | 9.66 | 9.98 | 10.31 |
| Receivables (Equivalent to two months of annual fixed cost) | 31.71 | 32.56 | 33.22 | 33.60 | 33.32 |
| Total Working Capital | 45.78 | 47.10 | 48.24 | 49.11 | 49.35 |
| Rate of Interest (in %) | 13.50 | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 6.18 | 6.36 | 6.51 | 6.63 | 6.66 |

122. The details of IWC allowed in respect of Asset-I vide order dated 19.2.2016 in Petition No. 489/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

| (₹ in lakh) | | | | | |
|---|---------|---------|---------|---------|---------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 19.2.2016 in Petition No. 489/TT/2014 | 6.32 | 6.59 | 6.61 | 6.64 | 6.67 |
| Claimed by Petitioner in the instant petition | 6.29 | 6.46 | 6.61 | 6.73 | 6.76 |
| Allowed after true-up in this order | 6.18 | 6.36 | 6.51 | 6.63 | 6.66 |

Asset-J

| (₹ in lakh) | | | | | |
|---|---------------|---------------|---------------|---------------|---------------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Interest on Working Capital | | | | | |
| O&M Expenses (O&M Expenses for one month) | 12.71 | 13.15 | 13.57 | 14.03 | 14.49 |
| Maintenance Spares (15% of O&M Expenses) | 22.87 | 23.66 | 24.42 | 25.25 | 26.08 |
| Receivables (Equivalent to two months of annual fixed cost) | 1085.50 | 1138.54 | 1118.35 | 1107.20 | 1090.31 |
| Total Working Capital | 1121.08 | 1175.34 | 1156.33 | 1146.48 | 1130.88 |
| Rate of Interest (in %) | 13.50 | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 151.35 | 158.67 | 156.10 | 154.77 | 152.67 |



123. The details of IWC allowed in respect of Asset-J vide order dated 25.4.2016 in Petition No. 107/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

| (₹ in lakh) | | | | | |
|---|---------|---------|---------|---------|---------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 25.4.2016 in Petition No. 107/TT/2014 | 152.65 | 159.99 | 157.80 | 153.88 | 149.96 |
| Claimed by Petitioner in the instant petition | 152.70 | 158.67 | 156.07 | 154.74 | 152.64 |
| Allowed after true-up in this order | 151.35 | 158.67 | 156.10 | 154.77 | 152.67 |

Asset-K

| (₹ in lakh) | | | | | |
|---|-------------|-------------|-------------|-------------|-------------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Interest on Working Capital | | | | | |
| O&M Expenses (O&M Expenses for one month) | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 |
| Maintenance Spares (15% of O&M Expenses) | 0.14 | 0.14 | 0.15 | 0.15 | 0.16 |
| Receivables (Equivalent to two months of annual fixed cost) | 15.51 | 16.54 | 16.06 | 15.53 | 15.10 |
| Total Working Capital | 15.72 | 16.77 | 16.29 | 15.77 | 15.34 |
| Rate of Interest (in %) | 13.50 | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 2.12 | 2.26 | 2.20 | 2.13 | 2.07 |

124. The details of IWC allowed in respect of Asset-K vide order dated 25.4.2016 in Petition No. 107/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

| (₹ in lakh) | | | | | |
|---|---------|---------|---------|---------|---------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 25.4.2016 in Petition No. 107/TT/2014 | 2.13 | 2.27 | 2.24 | 2.18 | 2.12 |
| Claimed by Petitioner in the instant petition | 2.14 | 2.26 | 2.20 | 2.13 | 2.07 |
| Allowed after true-up in this order | 2.12 | 2.26 | 2.20 | 2.13 | 2.07 |



Approved Annual Fixed Charges for 2014-19 Period

125. The trued up Annual Fixed Charges allowed in respect of the transmission assets for 2014-19 tariff period are as follows:

Asset-A

| (₹ in lakh) | | | | |
|-----------------------------|----------------|----------------|----------------|----------------|
| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | 849.49 | 927.93 | 981.12 | 1037.93 |
| Interest on Loan | 640.20 | 679.48 | 664.26 | 656.44 |
| Return on Equity | 1052.14 | 1147.44 | 1207.00 | 1274.02 |
| O&M Expenses | 536.72 | 554.56 | 572.97 | 591.97 |
| Interest on Working Capital | 88.16 | 94.05 | 97.31 | 101.03 |
| Total | 3166.71 | 3403.46 | 3522.66 | 3661.39 |

126. Accordingly, the comparison between Annual Transmission Charges allowed in respect of Asset-A vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and approved after truing up in the instant order is as follows:

| (₹ in lakh) | | | | |
|---|----------------|----------------|----------------|----------------|
| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 3063.90 | 3185.09 | 3178.78 | 3147.71 |
| Claimed by Petitioner in the instant petition | 3177.93 | 3408.69 | 3527.71 | 3666.23 |
| Allowed after true-up in this order | 3166.71 | 3403.46 | 3522.66 | 3661.39 |

Asset-B

| (₹ in lakh) | | | | |
|-----------------------------|-----------------------------------|---------------|---------------|---------------|
| Particulars | 2015-16 (Pro-rata 271 days) | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | 148.49 | 207.36 | 218.54 | 227.59 |
| Interest on Loan | 172.50 | 222.72 | 211.25 | 199.80 |
| Return on Equity | 166.25 | 232.16 | 244.68 | 255.50 |
| O&M Expenses | 64.58 | 90.12 | 93.11 | 96.20 |
| Interest on Working Capital | 14.78 | 20.22 | 20.67 | 21.03 |
| Total | 566.60 | 772.58 | 788.25 | 800.12 |



127. Accordingly, the comparison between Annual Transmission Charges allowed in respect of Asset-B vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and approved after truing up in the instant order is as follows:

| (₹ in lakh) | | | | |
|---|-----------------------------------|---------|---------|---------|
| Particulars | 2015-16 (Pro-rata 271 days) | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 627.73 | 922.25 | 901.59 | 881.00 |
| Claimed by Petitioner in the instant petition | 568.48 | 774.87 | 790.37 | 802.03 |
| Allowed after true-up in this order | 566.60 | 772.58 | 788.25 | 800.12 |

Asset-C

| (₹ in lakh) | | | | |
|-----------------------------|-----------------------------------|---------------|---------------|---------------|
| Particulars | 2015-16 (Pro-rata 342 days) | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | 67.31 | 83.80 | 94.87 | 103.91 |
| Interest on Loan | 76.80 | 88.46 | 91.24 | 91.81 |
| Return on Equity | 75.32 | 93.78 | 106.17 | 116.61 |
| O&M Expenses | 116.43 | 128.74 | 133.02 | 137.42 |
| Interest on Working Capital | 11.48 | 13.24 | 14.08 | 14.78 |
| Total | 347.34 | 408.02 | 439.38 | 464.53 |

128. Accordingly, the comparison between Annual Transmission Charges allowed in respect of Asset-C vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner and approved after truing up in the instant order is as follows:

| (₹ in lakh) | | | | |
|---|-----------------------------------|---------|---------|---------|
| Particulars | 2015-16 (Pro-rata 342 days) | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 342.00 | 380.03 | 377.71 | 375.52 |
| Claimed by Petitioner in the instant petition | 349.77 | 410.34 | 441.37 | 466.38 |
| Allowed after true-up in this order | 347.34 | 408.02 | 439.38 | 464.53 |



Asset-D

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 214 days) | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|-----------------------------------|----------------|----------------|----------------|
| Depreciation | 174.78 | 319.73 | 361.74 | 409.50 |
| Interest on Loan | 203.71 | 345.81 | 344.26 | 357.24 |
| Return on Equity | 195.65 | 357.92 | 404.96 | 459.66 |
| O&M Expenses | 87.42 | 154.49 | 159.62 | 164.91 |
| Interest on Working Capital | 18.05 | 32.09 | 34.39 | 37.34 |
| Total | 679.61 | 1210.04 | 1304.97 | 1428.65 |

129. Accordingly, the comparison between Annual Transmission Charges allowed in respect of Asset-D vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner and approved after true-up in the instant order is as follows:

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 214 days) | 2016-17 | 2017-18 | 2018-19 |
|---|-----------------------------------|---------|---------|---------|
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 651.77 | 1142.03 | 1127.11 | 1105.63 |
| Claimed by Petitioner in the instant petition | 670.57 | 1206.59 | 1308.30 | 1431.72 |
| Allowed after true-up in this order | 679.61 | 1210.04 | 1304.97 | 1428.65 |

Asset-E

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 344 days) | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|-----------------------------------|----------------|----------------|----------------|
| Depreciation | 910.82 | 1073.77 | 1100.60 | 1115.02 |
| Interest on Loan | 1008.97 | 1095.40 | 1004.83 | 919.55 |
| Return on Equity | 1023.95 | 1206.66 | 1236.70 | 1256.22 |
| O&M Expenses | 117.29 | 128.74 | 133.02 | 137.42 |
| Interest on Working Capital | 74.24 | 84.82 | 84.28 | 83.34 |
| Total | 3135.27 | 3589.39 | 3559.43 | 3511.55 |

130. Accordingly, the comparison between Annual Transmission Charges allowed in respect of Asset-E vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by



the Petitioner in the instant petition and approved after truing up in the instant order is as follows:

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 344 days) | 2016-17 | 2017-18 | 2018-19 |
|---|-----------------------------------|----------------|----------------|----------------|
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 3257.94 | 3713.78 | 3621.50 | 3529.39 |
| Claimed by Petitioner in the instant petition | 3207.60 | 3661.86 | 3634.23 | 3588.67 |
| Allowed after true-up in this order | 3135.27 | 3589.39 | 3559.43 | 3511.55 |

Asset-F

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 343 days) | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|-----------------------------------|----------------|----------------|----------------|
| Depreciation | 316.17 | 382.52 | 396.96 | 405.79 |
| Interest on Loan | 372.48 | 414.41 | 381.61 | 352.32 |
| Return on Equity | 358.16 | 432.72 | 448.89 | 460.01 |
| O&M Expenses | 223.96 | 246.87 | 255.11 | 263.57 |
| Interest on Working Capital | 36.47 | 41.94 | 42.35 | 42.60 |
| Total | 1307.24 | 1518.46 | 1524.92 | 1524.29 |

131. Accordingly, the comparison between Annual Transmission Charges allowed in respect of Asset-F vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and approved after truing up in the instant order is as follows:

(₹ in lakh)

| Particulars | 2015-16 (Pro-rata 343 days) | 2016-17 | 2017-18 | 2018-19 |
|---|--------------------------------|----------------|----------------|----------------|
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 1248.63 | 1418.10 | 1390.47 | 1362.90 |
| Claimed by Petitioner in the instant petition | 1260.32 | 1466.42 | 1471.03 | 1468.45 |
| Allowed after true-up in this order | 1307.24 | 1518.46 | 1524.92 | 1524.29 |



Asset-G

| Particulars | (₹ in lakh) | | | |
|-----------------------------|----------------------------------|----------------|----------------|----------------|
| | 2015-16 (Pro-rata 98 days) | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | 590.91 | 2254.99 | 2285.81 | 2300.73 |
| Interest on Loan | 617.83 | 2236.96 | 2067.99 | 1891.38 |
| Return on Equity | 661.13 | 2522.88 | 2557.21 | 2580.73 |
| O&M Expenses | 111.03 | 428.37 | 442.66 | 457.35 |
| Interest on Working Capital | 49.17 | 185.13 | 183.53 | 181.16 |
| Total | 2030.07 | 7628.33 | 7537.20 | 7411.35 |

132. Accordingly, the comparison between Annual Transmission Charges allowed in respect of Asset-G vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by the Petitioner in the instant petition and approved after truing up in the instant order is as follows:

| Particulars | (₹ in lakh) | | | |
|---|----------------------------------|---------|---------|---------|
| | 2015-16 (Pro-rata 98 days) | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 30.5.2016 in Petition No. 263/TT/2015 | 1980.27 | 7294.57 | 7127.51 | 6960.43 |
| Claimed by Petitioner in the instant petition | 2070.57 | 7665.23 | 7535.25 | 7409.40 |
| Allowed after true-up in this order | 2030.07 | 7628.33 | 7537.20 | 7411.35 |

Asset-H

| Particulars | (₹ in lakh) | | |
|-----------------------------|-----------------------------------|----------------|----------------|
| | 2016-17 (Pro-rata 289 days) | 2017-18 | 2018-19 |
| Depreciation | 845.16 | 1091.74 | 1108.47 |
| Interest on Loan | 898.80 | 1054.20 | 973.19 |
| Return on Equity | 944.72 | 1220.39 | 1242.45 |
| O&M Expenses | 236.61 | 308.78 | 319.01 |
| Interest on Working Capital | 70.99 | 89.53 | 89.15 |
| Total | 2996.28 | 3764.64 | 3732.27 |

133. Accordingly, the comparison between Annual Transmission Charges allowed in respect of Asset-H vide order dated 30.5.2016 in Petition No. 263/TT/2015, claimed by



the Petitioner in the instant petition and approved after truing up in the instant order is as follows:

| (₹ in lakh) | | | |
|--|-----------------------------------|---------|---------|
| Particulars | 2016-17 (Pro-rata 289 days) | 2017-18 | 2018-19 |
| Approved <i>vide</i> order dated 30.5.2016 in Petition No. 263/TT/2015 | 1670.32 | 2070.04 | 2033.27 |
| Claimed by Petitioner in the instant petition | 3002.17 | 3771.70 | 3739.02 |
| Allowed after true-up in this order | 2996.28 | 3764.64 | 3732.27 |

Asset-I

| (₹ in lakh) | | | | | |
|-----------------------------|---------------|---------------|---------------|---------------|---------------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | 38.46 | 40.46 | 42.20 | 43.47 | 43.47 |
| Interest on Loan | 42.20 | 40.68 | 38.74 | 36.04 | 32.00 |
| Return on Equity | 43.12 | 45.56 | 47.52 | 48.93 | 49.06 |
| O&M Expenses | 60.30 | 62.30 | 64.37 | 66.51 | 68.71 |
| Interest on Working Capital | 6.18 | 6.36 | 6.51 | 6.63 | 6.66 |
| Total | 190.26 | 195.36 | 199.34 | 201.58 | 199.90 |

134. Accordingly, the comparison between Annual Transmission Charges allowed in respect of Asset-I *vide* order dated 19.2.2016 in Petition No. 489/TT/2014, claimed by the Petitioner in the instant petition and approved after truing up in the instant order is as follows:

| (₹ in lakh) | | | | | |
|--|---------|---------|---------|---------|---------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Approved <i>vide</i> order dated 19.2.2016 in Petition No. 489/TT/2014 | 196.41 | 205.76 | 203.79 | 201.90 | 200.06 |
| Claimed by Petitioner in the instant petition | 194.96 | 199.91 | 203.73 | 205.83 | 204.03 |
| Allowed after true-up in this order | 190.26 | 195.36 | 199.34 | 201.58 | 199.90 |



Asset-J

| (₹ in lakh) | | | | | |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | 2004.80 | 2147.72 | 2165.56 | 2203.86 | 2226.59 |
| Interest on Loan | 1970.66 | 1962.47 | 1801.06 | 1648.80 | 1489.16 |
| Return on Equity | 2233.75 | 2404.59 | 2424.57 | 2467.45 | 2499.60 |
| O&M Expenses | 152.47 | 157.75 | 162.79 | 168.32 | 173.86 |
| Interest on Working Capital | 151.35 | 158.67 | 156.10 | 154.77 | 152.67 |
| Total | 6513.03 | 6831.20 | 6710.08 | 6643.20 | 6541.88 |

135. Accordingly, the comparison between Annual Transmission Charges allowed in respect of Asset-J vide order dated 25.4.2016 in Petition No. 107/TT/2014, claimed by the Petitioner in the instant petition and approved after truing up in the instant order is as follows:

| (₹ in lakh) | | | | | |
|---|---------|---------|---------|---------|---------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Approved vide order dated 25.4.2016 in Petition No. 107/TT/2014 | 6571.16 | 6889.94 | 6785.44 | 6603.26 | 6421.47 |
| Claimed by Petitioner in the instant petition | 6573.19 | 6831.00 | 6708.64 | 6641.78 | 6540.46 |
| Allowed after true-up in this order | 6513.03 | 6831.20 | 6710.08 | 6643.20 | 6541.88 |

Asset-K

| (₹ in lakh) | | | | | |
|-----------------------------|--------------|--------------|--------------|--------------|--------------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | 28.89 | 31.44 | 31.44 | 31.44 | 31.44 |
| Interest on Loan | 28.91 | 29.40 | 26.55 | 23.42 | 20.72 |
| Return on Equity | 32.19 | 35.20 | 35.20 | 35.20 | 35.29 |
| O&M Expenses | 0.93 | 0.96 | 0.99 | 1.02 | 1.06 |
| Interest on Working Capital | 2.12 | 2.26 | 2.20 | 2.13 | 2.07 |
| Total | 93.04 | 99.26 | 96.38 | 93.21 | 90.58 |

136. Accordingly, the comparison between Annual Transmission Charges allowed in respect of Asset-K vide order dated 25.4.2016 in Petition No. 107/TT/2014, claimed by



the Petitioner in the instant petition and approved after truing up in the instant order is as follows:

| (₹ in lakh) | | | | | |
|---|---------|---------|---------|---------|---------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Approved <i>vide</i> order dated 25.4.2016 in Petition No.107/TT/2014 | 93.24 | 99.44 | 98.11 | 95.38 | 92.66 |
| Claimed by Petitioner in the instant petition | 93.91 | 99.26 | 96.36 | 93.19 | 90.56 |
| Allowed after true-up in this order | 93.04 | 99.26 | 96.38 | 93.21 | 90.58 |

Determination of Annual Fixed Charges for 2019-24 Tariff Period

137. The Petitioner has claimed the following transmission charges in respect of the Combined Asset for 2019-24 tariff period:

| (₹ in lakh) | | | | | |
|-----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Particulars | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Depreciation | 9148.25 | 9208.18 | 9212.14 | 9192.25 | 9177.99 |
| Interest on Loan | 6357.32 | 5653.27 | 4913.66 | 4506.01 | 4177.50 |
| Return on Equity | 9848.49 | 9910.96 | 9915.18 | 9915.18 | 9915.18 |
| Interest on Working Capital | 510.38 | 507.28 | 500.95 | 499.42 | 498.13 |
| O&M Expenses | 2962.44 | 3065.10 | 3173.07 | 3285.61 | 3400.29 |
| Total | 28826.88 | 28344.79 | 27715.00 | 27398.47 | 27169.09 |

138. The Petitioner has claimed the following IWC in respect of the Combined Asset for 2019-24 tariff period:

| (₹ in lakh) | | | | | |
|------------------------------------|---------------|---------------|---------------|---------------|---------------|
| Particulars | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| O&M Expenses | 246.87 | 255.43 | 264.42 | 273.80 | 283.36 |
| Maintenance Spares | 444.37 | 459.77 | 475.96 | 492.84 | 510.04 |
| Receivables | 3544.29 | 3494.56 | 3416.92 | 3377.89 | 3340.46 |
| Total Working Capital | 4235.53 | 4209.76 | 4157.30 | 4144.53 | 4133.86 |
| Rate of Interest (in %) | 12.05 | 12.05 | 12.05 | 12.05 | 12.05 |
| Interest on Working Capital | 510.38 | 507.28 | 500.95 | 499.42 | 498.13 |

Effective Date of Commercial Operation (“E-COD”)

139. The Petitioner has submitted that E-COD of the Combined Asset works out to be 12.5.2015 and the same has been worked out as 11.5.2015 based on the trued-up



capital cost and COD of the individual assets. The E-COD has been worked out as follows:

| Assets | Capital Cost as on COD (₹ in lakh) | COD | No. of days from COD from last COD | Weight of cost (in %) | Weighted days | E-COD (latest COD – total weighted days) |
|--------------|------------------------------------|------------|------------------------------------|-----------------------|---------------|--|
| Asset-A | 21822.62 | 1.4.2015 | 442 | 12.56 | 55.53 | 11.5.2015 |
| Asset-B | 4378.07 | 5.7.2015 | 347 | 2.52 | 8.75 | |
| Asset-C | 2034.98 | 25.4.2015 | 418 | 1.17 | 4.90 | |
| Asset-D | 8016.20 | 31.8.2015 | 290 | 4.62 | 13.38 | |
| Asset-E | 21348.90 | 23.4.2015 | 420 | 12.29 | 51.62 | |
| Asset-F | 7842.70 | 24.4.2015 | 419 | 4.52 | 18.92 | |
| Asset-G | 43642.70 | 25.12.2015 | 174 | 25.13 | 43.72 | |
| Asset-H | 21014.51 | 16.6.2016 | 0 | 12.10 | 0.00 | |
| Asset-I | 827.70 | 1.2.2013 | 1231 | 0.48 | 5.87 | |
| Asset-J | 42170.30 | 1.4.2014 | 807 | 24.28 | 195.93 | |
| Asset-K | 595.44 | 1.4.2014 | 807 | 0.34 | 2.77 | |
| Total | 173694.12 | | | | 401.38 | |

140. E-COD is used to determine the lapsed life of the project as a whole which works out as 3 (three) 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 Project

141. The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of Weighted Average Life.

142. 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. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as specified 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 all the transmission assets executed during 2014-19 period has been worked out as 32 years and the same is as follows:

| Particulars | Life (in years) (1) | Capital Cost as on 31.3.2019 (₹ in lakh) (2) | Weighted Cost (₹ in lakh) (3) = (1) * (2) | Weighted Avg. Life of Asset (in years) (4) = (3) / (2) |
|---------------------------------|---------------------|--|---|--|
| Building & Civil Works | 25 | 1961.19 | 49029.75 | 32.4431 years (rounded off to 32 years) |
| Transmission Line | 35 | 129213.71 | 4522479.85 | |
| Sub-Station | 25 | 40475.48 | 1011886.89 | |
| PLCC | 15 | 534.77 | 8021.55 | |
| IT Equipment including software | 6.67 | 201.66 | 1344.40 | |
| Total | | 172386.81* | 5592762.44 | |

**land cost of ₹1307.31 lakh has been excluded from computation of WAL*

143. 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 11.5.2015 and elapsed life of the project as a whole works out as 3 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 of the Combined Asset as on 31.3.2019 to be 29 years.

Capital Cost

144. Regulation 19 of the 2019 Tariff Regulations provides as follows:

“19. Capital Cost: (1) *The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.*

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

- (a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in*



excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;

- (c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;
- (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;
- (e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;
- (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
- (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
- (h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;
- (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;
- (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;
- (l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
- (n) Expenditure on account of change in law and force majeure events; and
- (o) 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.

(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.



- (4) *The capital cost in case of existing or new hydro generating station shall also include:*
- (a) *cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*
 - (b) *cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.*
- (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 de-capitalised 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.”*

145. UPPCL has submitted that the the Petitioner has considered capital cost as on 31.3.2019 for calculation of tariff for 2019-24 period. After considering ACE during 2019-24 period, the closing capital cost of the transmission project as on 31.3.2024 is ₹175969.00 lakh in comparison to RCE of ₹185811.00 lakh. The Petitioner considers that there was no cost over-run because the capital cost as on 31.3.2024 is well within RCE cost.

146. UPPCL has made the following submissions with respect to capital cost:

- (i) The transmission assets of the project have average delay of 2 year and 4 months. The cost of each asset is required to be scrutinized for cost over-run.



(ii) Since the approval of REC was for incurring expenditure up to 31.3.2019 only as such the unutilized amount of ₹12059.00 lakh (expenditure of ₹173752 lakh as on 31.3.2019 minus RCE of ₹185811 lakh) is not available to the Petitioner for the purpose of incurring additional expenditure after 31.3.2019 for capital additions during 2019-20 and 2020-21. Therefore, the Petitioner is required to obtain fresh sanction of its Board of Director with respect to ₹2220 lakh towards projected capital additions during 2019-20 and 2020-21.

147. In response, the Petitioner has submitted that cost variation in price is mainly due to open competitive bidding route. The best competitive bid prices against tenders may be lower or higher than the cost estimate depending upon prevailing market conditions and the same is on account of inflationary trends prevalent during execution of project. Cost variation in respect of the transmission assets is indicated in Form -5.

148. The Petitioner has submitted that RCE of the transmission project has been approved by the Petitioner on 20.1.2017 with estimated cost of ₹185811 lakh including IDC of ₹14819 lakh, based on April, 2016 price level.

149. We have considered the submissions of the Petitioner and UPPCL. The Petitioner has claimed capital cost of ₹173752.62 lakh as on 31.3.2019 in respect of the Combined Asset. However, the capital cost as on 31.3.2019 has been worked out as ₹173694.12 lakh as on 31.3.2019.

Initial Spares

150. As discussed above, the transmission assets covered in the transmission project are combined and overall project cost is arrived at in 2019-24 tariff period. Therefore, Initial Spares are allowed during 2019-24 tariff period on the basis of overall project cost



as per the APTEL’s judgement dated 14.9.2019 in Appeal No. 74 of 2017. Thus, in compliance of the APTEL’s judgement dated 14.9.2019 in Appeal No. 74 of 2017, additional Initial Spares of ₹58.50 lakh as calculated in 2014-19 period (₹32.34 lakh for Asset-H and ₹26.16 lakh for Asset-I) has been allowed with respect to the Combined Asset.

151. Capital cost as on 1.4.2019 allowed after adding Initial Spares is as follows:

| (₹ in lakh) | | |
|---------------------------------------|--|--------------------------------------|
| Combined Capital Cost as on 31.3.2019 | Additional Initial Spares allowed as per APTEL’s judgement dated 14.9.2019 | Combined Capital Cost as on 1.4.2019 |
| 173694.12 | 58.50 | 173752.62 |

152. The trued-up capital cost of ₹173752.62 lakh in respect of the Combined Asset is considered as admitted capital cost as on 1.4.2019 for working out tariff for 2019-24 period in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure (“ACE”)

153. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provide as follows:

“24. Additional Capitalisation 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.”*

25. Additional Capitalisation within the original scope and after the cut-off date

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

- (a) *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;*
- (b) *Change in law or compliance of any existing law;*
- (c) *Deferred works relating to ash pond or ash handling system in the original scope of work;*
- (d) *Liability for works executed prior to the cut-off date;*
- (e) *Force Majeure events;*
- (f) *Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;*
- (g) *Raising of ash dyke as a part of ash disposal system.*

(2) *In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:*

- (a) *The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;*
- (b) *The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;*
- (c) *The replacement of such asset or equipment is necessary on account of obsolescence of technology; and*
- (d) *The replacement of such asset or equipment has otherwise been allowed by the Commission.”*

154. The Petitioner has claimed ACE of ₹2217.34 lakh during 2019-24 tariff period. The proposed ACE is on account of undischarged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date and is claimed under Regulation 25(1)(d) of the 2019 Tariff Regulations. The Petitioner has claimed the following capital cost as on 31.3.2024:



(₹ in lakh)

| Assets | Apportioned Approved Cost as per FR | Apportioned Approved Cost as per RCE | Capital Cost as on 31.3.2019 | Projected ACE | | Capital Cost as on 31.3.2024 |
|--------------|-------------------------------------|--------------------------------------|------------------------------|----------------|---------------|------------------------------|
| | | | | 2019-20 | 2020-21 | |
| Asset-A | 22501.79 | 23876.39 | 21822.62 | 352.97 | 0.00 | 22175.59 |
| Asset-B | 4788.62 | 4723.56 | 4378.07 | 180.98 | 0.00 | 4559.05 |
| Asset-C | 1427.13 | 2314.48 | 2034.98 | 45.82 | 0.00 | 2080.8 |
| Asset-D | 6745.90 | 9603.91 | 8016.20 | 61.13 | 0.00 | 8077.33 |
| Asset-E | 21203.12 | 22769.53 | 21348.90 | 593.56 | 0.00 | 21942.46 |
| Asset-F | 8280.17 | 8783.23 | 7842.70 | 218.24 | 0.00 | 8060.94 |
| Asset-G | 40748.56 | 46137.58 | 43642.70 | 340.00 | 150.00 | 44132.70 |
| Asset-H | 10389.40 | 21189.11 | 21046.85 | 140.00 | 0.00 | 20668.83 |
| Asset-I | 1059.73 | 1349.06 | 853.86 | 0.00 | 0.00 | 853.86 |
| Asset-J | 43782.10 | 44364.79 | 42170.30 | 134.64 | 0.00 | 42304.94 |
| Asset-K | 6830.48 | 699.36 | 595.44 | 0.00 | 0.00 | 595.44 |
| Total | 167367.56 | 185811.00 | 173752.62 | 2067.34 | 150.00 | 175969.96 |

155. In response to the Commission's query in respect of the detailed justification for ACE during 2019-24 tariff period, the Petitioner vide affidavit dated 30.3.2021 has submitted the following:

Asset-A:

| Year | ACE (₹ in lakh) | Party Name | Package | Balance and Retention/ Deferred work |
|---------|-----------------|------------------|-------------|--|
| 2019-20 | 352.97 | GE T&D India Ltd | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |

Asset-B:

| Year | ACE (₹ in lakh) | Party Name | Package | Balance and Retention/ Deferred work |
|---------|-----------------|-------------------|-------------|--|
| 2019-20 | 180.98 | GE T&D India Ltd. | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |

Asset-C:

| Year | ACE (₹ in lakh) | Party Name | Package | Balance and Retention/ Deferred work |
|---------|-----------------|-------------------|-------------|--|
| 2019-20 | 45.82 | GE T&D India Ltd. | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |



Asset-D:

| Year | ACE (₹ in lakh) | Party Name | Package | Balance and Retention/ Deferred work |
|---------|--------------------|-------------------|-------------|--|
| 2019-20 | 61.13 | GE T&D India Ltd. | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |

Asset-E:

| Year | ACE (₹ in lakh) | Party Name | Package | Balance and Retention/ Deferred work |
|---------|--------------------|-------------------|-------------------|--|
| 2019-20 | 562.98 | GE T&D India Ltd. | Transmission Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 30.58 | GE T&D India Ltd. | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |

Asset-F:

| Year | ACE (₹ in lakh) | Party Name | Package | Balance and Retention/ Deferred work |
|---------|--------------------|-------------------|-------------------|--|
| 2019-20 | 187.66 | EMC Ltd. | Transmission Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 30.58 | GE T&D India Ltd. | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |

Asset-G:

| Year | ACE (₹ in lakh) | Party Name | Package | Balance and Retention/ Deferred work |
|---------|--------------------|--------------------|-------------------|--|
| 2019-20 | 115.00 | Tata Projects Ltd. | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 200.00 | EMC Ltd. | Transmission Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 12.00 | Tata Projects Ltd. | PLCC | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 13.00 | Tata Projects Ltd. | IT | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| 2020-21 | 150.00 | EMC Ltd. | Transmission Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |



Asset-H:

| Year | ACE (₹ in lakh) | Party Name | Package | Balance and Retention/ Deferred work |
|---------|--------------------|--------------------|-------------|--|
| 2019-20 | 115.00 | Tata Projects Ltd. | Sub-station | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 12.00 | Tata Projects Ltd. | PLCC | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |
| | 13.00 | Tata Projects Ltd. | IT | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |

Asset-J:

| Year | ACE (₹ in lakh) | Party Name | Package | Balance and Retention/ Deferred work |
|---------|--------------------|------------|-------------------|--|
| 2019-20 | 134.64 | EMC Ltd. | Transmission Line | Balance and Retention payment as per Regulation 14(1)(i) of the 2014 Tariff Regulations. |

156. We have considered the submissions of the Petitioner. ACE claimed by the Petitioner has been allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations. Accordingly, capital cost considered in respect of the Combined Asset for 2019-24 tariff period is as follows:

| Capital Cost as on 31.3.2019 | ACE | | Capital Cost as on 31.3.2024 |
|---------------------------------|---------|---------|---------------------------------|
| | 2019-20 | 2020-21 | |
| 173752.62 | 2067.34 | 150.00 | 175969.96 |

Debt-Equity ratio

157. Regulation 18 of the 2019 Tariff Regulations provides as follows:

“18. Debt-Equity Ratio: (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:*
- ii. the equity invested in foreign currency shall be designated in Indian rupees*



on the date of each investment:

- iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.

Explanation-The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

(2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

(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.”

(6) Any expenditure incurred for the emission control system during the tariff period as may be admitted by the Commission as additional capital expenditure for determination of supplementary tariff, shall be serviced in the manner specified in clause (1) of this Regulation.”

158. Debt-equity ratio for 2019-24 period is allowed as per Regulation 18(3) of the 2019 Tariff Regulations. Debt-equity considered for the purpose of computation of tariff for 2019-24 tariff period is as follows:



| Particulars | Capital Cost as on 1.4.2019 (₹ in lakh) | (in %) | ACE during 2019-24 (₹ in lakh) | (in %) | Capital Cost as on 31.3.2024 (₹ in lakh) | (in %) |
|--------------|---|---------------|--------------------------------|---------------|--|---------------|
| Debt | 121626.83 | 70.00 | 1552.14 | 70.00 | 123178.97 | 70.00 |
| Equity | 52125.79 | 30.00 | 665.20 | 30.00 | 52790.99 | 30.00 |
| Total | 173752.62 | 100.00 | 2217.34 | 100.00 | 175969.96 | 100.00 |

Depreciation

159. Regulation 33 of the 2019 Tariff Regulations provides as follows:

“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.

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

Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable;

Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:

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

Provided also that any depreciation disallowed on account of lower availability of the generating station or unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life or the extended life.

(4) Land other than the land held under lease and the land for reservoir in case of



hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(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.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.

(7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.

(8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services.

(9) Where the emission control system is implemented within the original scope of the generating station and the date of commercial operation of the generating station or unit thereof and the date of operation of the emission control system are the same, depreciation of the generating station or unit thereof including the emission control system shall be computed in accordance with Clauses (1) to (8) of this Regulation.

(10) Depreciation of the emission control system of an existing or a new generating station or unit thereof where the date of operation of the emission control system is subsequent to the date of commercial operation of the generating station or unit thereof, shall be computed annually from the date of operation of such emission control system based on straight line method, with salvage value of 10%, over a period of-

- a) twenty five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or
- b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or
- c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life.”

160. Depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. WAROD has been



worked out as Annexure-II as per the rates of depreciation prescribed in 2019 Tariff Regulations. Depreciation allowed in respect of the Combined Asset is as follows:

| (₹ in lakh) | | | | | |
|--|----------------|----------------|----------------|----------------|----------------|
| Particulars | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Opening Gross Block (A) | 173752.62 | 175819.96 | 175969.96 | 175969.96 | 175969.96 |
| Projected ACE (B) | 2067.34 | 150.00 | 0.00 | 0.00 | 0.00 |
| Closing Gross Block (C) = A+B | 175819.96 | 175969.96 | 175969.96 | 175969.96 | 175969.96 |
| Average Gross Block (D) = (A+C)/2 | 174786.29 | 175894.96 | 175969.96 | 175969.96 | 175969.96 |
| Freehold Land | 1307.31 | 1307.31 | 1307.31 | 1307.31 | 1307.31 |
| Weighted average rate of Depreciation (WAROD) (in %) | 5.23 | 5.24 | 5.24 | 5.24 | 5.24 |
| Depreciable Value | 156152.55 | 157151.65 | 157219.15 | 157219.15 | 157219.15 |
| Cumulative Depreciation at the beginning of the year | 33544.46 | 42692.71 | 51900.89 | 61113.02 | 70325.16 |
| Balance useful life of the asset (Year) | 29 | 28 | 27 | 26 | 25 |
| Lapsed life (Year) | 3 | 4 | 5 | 6 | 7 |
| Depreciation | 9148.25 | 9208.18 | 9212.14 | 9212.14 | 9212.14 |
| Aggregate Cumulative Depreciation | 42692.71 | 51900.89 | 61113.02 | 70325.16 | 79537.30 |
| Remaining Depreciation Value at the end of the year | 113459.84 | 105250.76 | 96106.13 | 86893.99 | 77681.86 |

Interest on Loan ("IoL")

161. Regulation 32 of the 2019 Tariff Regulations provides as follows:

"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 de-capitalization 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.

(5a) The rate of interest on loan for installation of emission control system shall be the weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company 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.”

162. UPPCL has submitted that the Petitioner has calculated IoL based on actual rate of interest and is proposing to claim or adjust the change in interest rate due to floating interest rates directly from the beneficiaries. In line with the order dated 30.12.2015 in Petition No. 435/TT/2014, the Petitioner may be directed that ‘weighted average rate’ of interest based on loan prevailing as on 1.4.2014 be considered for calculation of interest. The impact of floating rate of interest may be considered at the time of true-up of 2019-24 tariff period.

163. In response, the Petitioner has submitted that detailed calculation of IoL along with the detailed calculation of weighted average rate of interest has been provided in tariff Forms 9E and 9C enclosed with the present petition and the same may be allowed.

164. We have considered the submissions of the Petitioner and UPPCL. The weighted average rate of interest of IoL has been considered on the basis of the rates prevailing as on 1.4.2019. The Petitioner has prayed that change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted.



Accordingly, the floating rate of interest, if any, shall be considered at the time of truing-up. In view of above, IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed in respect of the Combined Asset is as follows:

| (₹ in lakh) | | | | | |
|--|----------------|----------------|----------------|----------------|----------------|
| Particulars | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Gross Normative Loan | 121626.83 | 123073.97 | 123178.97 | 123178.97 | 123178.97 |
| Cumulative Repayments up to Previous Year | 33544.46 | 42692.71 | 51900.89 | 61113.02 | 70325.16 |
| Net Loan-Opening | 88082.37 | 80381.26 | 71278.09 | 62065.95 | 52853.81 |
| Additions | 1447.14 | 105.00 | 0.00 | 0.00 | 0.00 |
| Repayment during the year | 9148.25 | 9208.18 | 9212.14 | 9212.14 | 9212.14 |
| Net Loan-Closing | 80381.26 | 71278.09 | 62065.95 | 52853.81 | 43641.68 |
| Average Loan | 84231.82 | 75829.67 | 66672.02 | 57459.88 | 48247.74 |
| Weighted Average Rate of Interest on Loan (in %) | 7.5586 | 7.4675 | 7.3836 | 7.8577 | 8.6742 |
| Interest on Loan | 6366.76 | 5662.54 | 4922.83 | 4515.01 | 4185.09 |

Return on Equity (“RoE”)

165. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provide as follows:

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

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope, excluding additional capitalization on account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%.

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.”

(3) The return on equity in respect of additional capitalization on account of emission control system shall be computed at the base rate of one-year marginal cost of lending rate (MCLR) of the State Bank of India as on 1st April of the year in which the date of operation (ODE) occurs plus 350 basis point, subject to ceiling of 14%.”

“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:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

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.

Illustration-

(i) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess:

$$\text{Rate of return on equity} = 15.50 / (1 - 0.2155) = 19.758\%$$



(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:

- (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;
 (b) Estimated Advance Tax for the year on above is Rs 240 crore;
 (c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;
 (d) Rate of return on equity = $15.50 / (1 - 0.24) = 20.395\%$.

(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 under-recovery 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.”

166. The Petitioner has submitted that MAT rate is applicable to it. Accordingly, MAT rate applicable in 2019-20 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. RoE allowed in respect of the Combined Asset has been worked out as follows:

| Particulars | (₹ in lakh) | | | | |
|-------------------------------------|----------------|----------------|----------------|----------------|----------------|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Opening Equity (A) | 52125.79 | 52745.99 | 52790.99 | 52790.99 | 52790.99 |
| Additions (B) | 620.20 | 45.00 | 0.00 | 0.00 | 0.00 |
| Closing Equity (C) = A+B | 52745.99 | 52790.99 | 52790.99 | 52790.99 | 52790.99 |
| Average Equity (D) = (A+C)/2 | 52435.89 | 52768.49 | 52790.99 | 52790.99 | 52790.99 |
| Return on Equity (Base Rate) (in %) | 15.500 | 15.500 | 15.500 | 15.500 | 15.500 |
| MAT Rate for respective year (in %) | 17.472 | 17.472 | 17.472 | 17.472 | 17.472 |
| Rate of Return on Equity (in %) | 18.782 | 18.782 | 18.782 | 18.782 | 18.782 |
| Return on Equity | 9848.51 | 9910.98 | 9915.20 | 9915.20 | 9915.20 |



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

167. O&M Expenses claimed by the Petitioner in respect of the Combined Asset for 2019-24 period are as follows:

| Name of the Assets | (₹ in lakh) | | | | |
|---|----------------|----------------|----------------|----------------|----------------|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| 6 Number of 765 kV bays | 270.06 | 279.60 | 289.38 | 299.56 | 310.08 |
| 19 Number of 400 kV bays | 610.85 | 632.32 | 654.55 | 677.54 | 701.29 |
| 765 kV Sub-station ICT | 1473.00 | 1524.00 | 1578.00 | 1635.00 | 1692.00 |
| 463.16 km Single Circuit (Bundled with 4 sub-conductors) | 349.70 | 361.73 | 374.70 | 387.68 | 401.56 |
| 187.332 km Double Circuit (Bundled with 4 sub-conductors) | 247.65 | 256.27 | 265.26 | 274.63 | 284.18 |
| PLCC (2% of ₹558.77 lakh) | 11.18 | 11.18 | 11.18 | 11.18 | 11.18 |
| Total O&M Expenses | 2962.44 | 3065.10 | 3173.07 | 3285.61 | 3400.29 |

168. The norms specified under Regulation 35(3)(a) and Regulation 35(4) of the 2019 Tariff Regulations provide as follows:

“35. Operation and Maintenance Expenses:

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

| Particulars | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|---|---------|---------|---------|---------|---------|
| Norms for sub-station Bays (Rs 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 (Rs 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 |
| Norms for AC and HVDC lines (Rs 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 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 Conductor) | 0.881 | 0.912 | 0.944 | 0.977 | 1.011 |



| Particulars | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|--|----------------|----------------|----------------|----------------|----------------|
| <i>Double Circuit (Single Conductor)</i> | 0.377 | 0.391 | 0.404 | 0.419 | 0.433 |
| <i>Multi Circuit (Bundled Conductor with four or more sub-conductor)</i> | 2.319 | 2.401 | 2.485 | 2.572 | 2.662 |
| <i>Multi Circuit (Twin & Triple Conductor)</i> | 1.544 | 1.598 | 1.654 | 1.713 | 1.773 |
| Norms for HVDC stations | | | | | |
| <i>HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)</i> | 834 | 864 | 894 | 925 | 958 |
| <i>Gazuwaka HVDC Back-to-Back station (Rs. Lakh per 500 MW)</i> | 1,666 | 1,725 | 1,785 | 1,848 | 1,913 |
| <i>500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)</i> | 2,252 | 2,331 | 2,413 | 2,498 | 2,586 |
| <i>±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)</i> | 2,468 | 2,555 | 2,645 | 2,738 | 2,834 |
| <i>±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)</i> | 1,696 | 1,756 | 1,817 | 1,881 | 1,947 |
| <i>±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)</i> | 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 (2500 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.”

169. We have considered the submissions of the Petitioner. The Petitioner has claimed O&M Expenses separately for PLCC under Regulation 35(4) of the 2019 Tariff Regulations @2% of its original project cost in the instant petition. The Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the sub-station in the 2014 Tariff Regulations and the 2019 Tariff Regulations and the norms for sub-station have been specified accordingly. Accordingly, the Commission vide order dated 24.1.2021 in Petition No. 126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner’s claim for separate O&M Expenses for PLCC @2% is not allowed.

170. O&M Expenses have been worked out as per the norms specified in the 2019 Tariff Regulations and the same are as follows:

| | (₹ in lakh) | | | | |
|--------------------------|-------------|---------|---------|---------|---------|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| O&M Expenses | | | | | |
| 6 Number of 765 kV bays | | | | | |
| Norms (₹ lakh/Bay) | 45.01 | 46.6 | 48.23 | 49.93 | 51.68 |
| Total | 270.06 | 279.60 | 289.38 | 299.58 | 310.08 |
| 19 Number of 400 kV bays | | | | | |
| Norms (₹ lakh/Bay) | 32.15 | 33.28 | 34.45 | 35.66 | 36.91 |



| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|---|----------------|----------------|----------------|----------------|----------------|
| O&M Expenses | | | | | |
| Total | 610.85 | 632.32 | 654.55 | 677.54 | 701.29 |
| 254.66 km Single Circuit (Bundled with 4 sub-conductors) | | | | | |
| Norms (₹ lakh/km) | 0.755 | 0.781 | 0.809 | 0.837 | 0.867 |
| Total | 192.27 | 198.89 | 206.02 | 213.15 | 220.79 |
| 291.592 km Double Circuit (Bundled with 4 sub-conductors) | | | | | |
| Norms (₹ lakh/km) | 1.322 | 1.368 | 1.416 | 1.466 | 1.517 |
| Total | 385.48 | 398.90 | 412.89 | 427.47 | 442.35 |
| 765 kV Sub-station ICT | | | | | |
| Norms (₹ lakh/MVA) | 0.491 | 0.508 | 0.526 | 0.545 | 0.564 |
| Total | 1473.00 | 1524.00 | 1578.00 | 1635.00 | 1692.00 |
| Total O&M Expense allowed (₹ in lakh) | 2931.66 | 3033.71 | 3140.84 | 3252.74 | 3366.51 |

Interest on Working Capital (“IWC”)

171. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations 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. Definitions. - *In these regulations, unless the context otherwise requires:-*

‘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;”

172. The Petitioner has submitted that it has computed IWC for 2019-24 period considering SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%.

173. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (RoI) considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, RoI for 2020-21 has been considered as 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) whereas, RoI for 2021-22 onwards has been considered as 10.50% (SBI 1-year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points). The components of the working capital and interest allowed thereon are as follows:

| (₹ in lakh) | | | | | |
|--|---------------|---------------|---------------|---------------|---------------|
| Particulars | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| O&M Expenses (O&M Expenses for one month) | 244.31 | 252.81 | 261.74 | 271.06 | 280.54 |
| Maintenance Spares (15% of O&M Expenses) | 439.75 | 455.06 | 471.13 | 487.91 | 504.98 |
| Receivables (Equivalent to 45 days of annual transmission charges) | 3541.52 | 3487.49 | 3405.89 | 3369.27 | 3333.37 |
| Total Working Capital | 4225.58 | 4195.35 | 4138.76 | 4128.25 | 4118.89 |
| Rate of Interest (in %) | 12.05 | 11.25 | 10.50 | 10.50 | 10.50 |
| Interest on Working Capital | 509.18 | 471.98 | 434.57 | 433.47 | 432.48 |

Annual Fixed Charges for 2019-24 Tariff Period

174. The transmission charges allowed in respect of the Combined Asset for 2019-24 tariff period are as follows:

| (₹ in lakh) | | | | | |
|--------------|---------|---------|---------|---------|---------|
| Particulars | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Depreciation | 9148.25 | 9208.18 | 9212.14 | 9212.14 | 9212.14 |



| Particulars | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|-----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Interest on Loan | 6366.76 | 5662.54 | 4922.83 | 4515.01 | 4185.09 |
| Return on Equity | 9848.51 | 9910.98 | 9915.20 | 9915.20 | 9915.20 |
| O&M Expenses | 2931.66 | 3033.71 | 3140.84 | 3252.74 | 3366.51 |
| Interest on Working Capital | 509.18 | 471.98 | 434.57 | 433.47 | 432.48 |
| Total | 28804.36 | 28287.39 | 27625.58 | 27328.56 | 27111.42 |

Filing Fees and Publication Expenses

175. The Petitioner has sought reimbursement of fees 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 Fees & RLDC Fees and Charges

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

Security Expenses

177. 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.

178. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it on projected basis for 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The said petition has already been



disposed of by the Commission vide order dated 3.8.2021. Therefore, the Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.

Goods and Services Tax

179. The Petitioner has submitted that GST, if is levied at any rate and at any point of time in future on charges of transmission of electricity, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Government/ Statutory authorities, the same may be allowed to be recovered from the beneficiaries.

180. We have considered the submissions of the Petitioner. Since GST is not levied on transmission service at present, we are of the view that the Petitioner's prayer is premature.

Capital Spares

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

Sharing of Transmission Charges

182. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission system was governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2010. With effect from 1.11.2020, sharing of transmission charges is governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2020 ('the 2020 Sharing Regulations'). Accordingly, the liabilities of the DICs for arrears



of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and shall be recovered from the concerned DICs through Bill 2 under Regulation 15(2) (b) of the 2020 Sharing Regulations. For subsequent period, the billing, collection and disbursement of the transmission charges approved in this order shall be governed by the provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

183. To summarise:

- a. The trued-up AFC allowed in respect of the transmission assets for 2014-19 period are as follows:

| (₹ in lakh) | | | | | |
|-------------|---------|---------|---------|---------|---------|
| Assets | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Asset-A | | 3166.71 | 3403.46 | 3522.66 | 3661.39 |
| Asset-B | | 566.60 | 772.58 | 788.25 | 800.12 |
| Asset-C | | 347.34 | 408.02 | 439.38 | 464.53 |
| Asset-D | | 679.61 | 1210.04 | 1304.97 | 1428.65 |
| Asset-E | | 3135.27 | 3589.39 | 3559.43 | 3511.55 |
| Asset-F | | 1307.24 | 1518.46 | 1524.92 | 1524.29 |
| Asset-G | | 2030.07 | 7628.33 | 7537.20 | 7411.35 |
| Asset-H | | | 2996.28 | 3764.64 | 3732.27 |
| Asset-I | 190.26 | 195.36 | 199.34 | 201.58 | 199.90 |
| Asset-J | 6513.03 | 6831.20 | 6710.08 | 6643.20 | 6541.88 |
| Asset-K | 93.04 | 99.26 | 96.38 | 93.21 | 90.58 |

- b. AFC allowed in respect of the Combined Asset for 2019-24 tariff period in this order are as follows:

| (₹ in lakh) | | | | | |
|-------------|----------|----------|----------|----------|----------|
| Particulars | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| AFC | 28804.36 | 28287.39 | 27625.58 | 27328.56 | 27111.42 |

184. The Annexure-I and Annexure-II to this order form part of the order.



185. This order disposes of Petition No. 472/TT/2020 in terms of the above findings and discussions.

sd/-
(P. K. Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(I. S. Jha)
Member



Annexure-I

Asset-A

| 2014-19 Capital Expenditure | Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh) | ACE (₹ in lakh) | | | | | Admitted Capital Cost as on 31.3.2019 (₹ in lakh) | Rate of Depreciation as per Regulations | Annual Depreciation as per Regulations (₹ in lakh) | | | | |
|-----------------------------------|--|--------------------|---------------|----------------|---------------|----------------|---|--|---|-----------------|-----------------|-----------------|-----------------|
| | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | Total | | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | |
| Land – Freehold | 1307.31 | - | - | - | - | - | 1307.31 | - | - | - | - | - | |
| Building Civil Works & Colony | 788.88 | 689.92 | 0.00 | - | - | 689.92 | 1478.80 | 3.34% | 37.87 | 49.39 | 49.39 | 49.39 | |
| Transmission Line | 85.19 | 0.85 | 0.00 | - | - | 0.85 | 86.04 | 5.28% | 4.52 | 4.54 | 4.54 | 4.54 | |
| Sub Station | 14136.29 | 2008.88 | 520.82 | 1491.22 | 657.88 | 4678.80 | 18815.09 | 5.28% | 799.43 | 866.21 | 919.33 | 976.07 | |
| PLCC | 73.48 | 0.74 | 0.00 | - | - | 0.74 | 74.22 | 6.33% | 4.67 | 4.70 | 4.70 | 4.70 | |
| IT Equipment (Incl. Software) | 55.13 | 3.29 | 0.00 | 2.74 | - | 6.03 | 61.16 | 5.28% | 3.00 | 3.08 | 3.16 | 3.23 | |
| Total | 16446.28 | 2703.68 | 520.82 | 1493.96 | 657.88 | 5376.34 | 21822.62 | | 849.49 | 927.93 | 981.12 | 1037.93 | |
| | | | | | | | | | Average Gross Block (₹ in lakh) | 17798.12 | 19410.37 | 20417.76 | 21493.68 |
| | | | | | | | | | Weighted Average Rate of Depreciation (in %) | 4.77% | 4.78% | 4.81% | 4.83% |



Asset-B

| 2014-19 Capital Expenditure | Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh) | ACE (₹ in lakh) | | | | | Admitted Capital Cost as on 31.3.2019 (₹ in lakh) | Rate of Depreciation as per Regulations | Annual Depreciation as per Regulations (₹ in lakh) | | | | | |
|--------------------------------|--|-----------------|---------------|---------------|---------------|---------------|---|---|--|---------------|---------------|---------------|---------|---------|
| | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | Total | | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | | |
| Sub Station | 3752.08 | 42.03 | 214.92 | 207.43 | 135.26 | 599.64 | 4351.72 | 5.28% | 199.22 | 206.00 | 217.15 | 226.20 | | |
| IT Equipment (Incl. Software) | 25.02 | 0.16 | 1.17 | - | - | 1.33 | 26.35 | 5.28% | 1.33 | 1.36 | 1.39 | 1.39 | | |
| Total | 3777.10 | 42.19 | 216.09 | 207.43 | 135.26 | 600.97 | 4378.07 | | 200.54 | 207.36 | 218.54 | 227.59 | | |
| | | | | | | | | | Average Gross Block (₹ in lakh) | | 3798.20 | 3927.34 | 4139.10 | 4310.44 |
| | | | | | | | | | Weighted Average Rate of Depreciation (in %) | | 5.28% | 5.28% | 5.28% | 5.28% |

Asset-C

| 2014-19 Capital Expenditure | Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh) | ACE (₹ in lakh) | | | | | Admitted Capital Cost as on 31.3.2019 (₹ in lakh) | Rate of Depreciation as per Regulations | Annual Depreciation as per Regulations (₹ in lakh) | | | | | |
|--------------------------------|--|-----------------|---------------|---------------|---------------|---------------|---|---|--|--------------|--------------|---------------|---------|---------|
| | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | Total | | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | | |
| Sub Station | 1220.28 | 231.94 | 211.80 | 206.26 | 135.26 | 785.26 | 2005.54 | 5.28% | 70.55 | 82.27 | 93.31 | 102.32 | | |
| PLCC | 3.36 | 0.08 | 0.01 | - | - | 0.08 | 3.44 | 6.33% | 0.22 | 0.22 | 0.22 | 0.22 | | |
| IT Equipment (Incl. Software) | 23.10 | 1.69 | 0.04 | 1.17 | - | 2.90 | 26.00 | 5.28% | 1.26 | 1.31 | 1.34 | 1.37 | | |
| Total | 1246.74 | 233.71 | 211.84 | 207.43 | 135.26 | 788.24 | 2034.98 | | 72.03 | 83.80 | 94.87 | 103.91 | | |
| | | | | | | | | | Average Gross Block (₹ in lakh) | | 1363.59 | 1586.37 | 1796.01 | 1967.35 |
| | | | | | | | | | Weighted Average Rate of Depreciation (in %) | | 5.28% | 5.28% | 5.28% | 5.28% |

Asset-D



| 2014-19 Capital Expenditure | Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh) | ACE (₹ in lakh) | | | | | Admitted Capital Cost as on 31.3.2019 (₹ in lakh) | Rate of Depreciation as per Regulations | Annual Depreciation as per Regulations (₹ in lakh) | | | | |
|--|--|--------------------|---------------|----------------|---------------|----------------|---|--|---|----------------|----------------|----------------|----------------|
| | | 2015- 16 | 2016- 17 | 2017-18 | 2018-19 | Total | | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | |
| Sub Station | 5381.06 | 483.60 | 303.17 | 1286.53 | 522.62 | 2595.92 | 7976.98 | 5.28% | 296.89 | 317.66 | 359.63 | 407.39 | |
| PLCC | 4.26 | 0.01 | - | - | - | 0.01 | 4.27 | 6.33% | 0.27 | 0.27 | 0.27 | 0.27 | |
| IT Equipment (Incl. Software) | 33.30 | 0.08 | 1.57 | - | - | 1.65 | 34.95 | 5.28% | 1.76 | 1.80 | 1.85 | 1.85 | |
| Total | 5418.62 | 483.69 | 304.74 | 1286.53 | 522.62 | 2597.58 | 8016.20 | | 298.92 | 319.73 | 361.74 | 409.50 | |
| | | | | | | | | | Average Gross Block (₹ in lakh) | 5660.47 | 6054.68 | 6850.32 | 7754.89 |
| | | | | | | | | | Weighted Average Rate of Depreciation (in %) | 5.28% | 5.28% | 5.28% | 5.28% |

Asset-E

| 2014-19 Capital Expenditure | Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh) | ACE (₹ in lakh) | | | | | Admitted Capital Cost as on 31.3.2019 (₹ in lakh) | Rate of Depreciation as per Regulations | Annual Depreciation as per Regulations (₹ in lakh) | | | |
|-------------------------------------|--|--------------------|-------------|---------|---------|---------|---|--|---|---------|---------|---------|
| | | 2015- 16 | 2016- 17 | 2017-18 | 2018-19 | Total | | | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Building Civil Works & Colony | 230.57 | 4.73 | - | - | - | 4.73 | 235.30 | 3.34% | 7.78 | 7.86 | 7.86 | 7.86 |
| Transmission Line | 15870.30 | 2765.36 | 607.14 | 97.00 | 220.73 | 3690.23 | 19560.53 | 5.28% | 910.96 | 999.99 | 1018.58 | 1026.97 |
| Sub Station | 673.14 | 406.02 | 173.75 | 137.65 | 90.27 | 807.69 | 1480.83 | 5.28% | 46.26 | 61.57 | 69.79 | 75.80 |
| PLCC | 47.06 | 7.94 | - | - | - | 7.94 | 55.00 | 6.33% | 3.23 | 3.48 | 3.48 | 3.48 |
| IT Equipment (Incl. Software) | 15.37 | 1.09 | - | 0.78 | - | 1.87 | 17.24 | 5.28% | 0.84 | 0.87 | 0.89 | 0.91 |



| | | | | | | | | | | | | |
|--------------|-----------------|----------------|---------------|---------------|---------------|----------------|-----------------|---|-----------------|-----------------|-----------------|-----------------|
| Total | 16836.43 | 3185.15 | 780.89 | 235.43 | 311.00 | 4512.47 | 21348.90 | | 969.07 | 1073.77 | 1100.60 | 1115.02 |
| | | | | | | | | Average Gross Block (₹ in lakh) | 18429.01 | 20412.03 | 20920.19 | 21193.40 |
| | | | | | | | | Weighted Average Rate of Depreciation (in %) | 5.26% | 5.26% | 5.26% | 5.26% |

Asset-F

| 2014-19 Capital Expenditure | Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh) | ACE (₹ in lakh) | | | | | Admitted Capital Cost as on 31.3.2019 (₹ in lakh) | Rate of Depreciation as per Regulations | Annual Depreciation as per Regulations (₹ in lakh) | | | |
|--------------------------------|--|-----------------|---------------|---------------|---------------|----------------|---|---|--|----------------|----------------|----------------|
| | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | Total | | | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Building Civil Works & Colony | 230.11 | 4.80 | - | - | - | 4.80 | 234.91 | 3.34% | 7.77 | 7.85 | 7.85 | 7.85 |
| Transmission Line | 5080.95 | 919.24 | 202.38 | 32.33 | 73.58 | 1227.53 | 6308.48 | 5.28% | 292.54 | 322.15 | 328.35 | 331.15 |
| Sub Station | 424.35 | 401.06 | 173.75 | 137.65 | 90.27 | 802.73 | 1227.08 | 5.28% | 32.99 | 48.17 | 56.39 | 62.41 |
| PLCC | 47.03 | 7.96 | - | - | - | 7.96 | 54.99 | 6.33% | 3.23 | 3.48 | 3.48 | 3.48 |
| IT Equipment (Incl. Software) | 15.36 | 1.10 | - | 0.78 | - | 1.88 | 17.24 | 5.28% | 0.84 | 0.87 | 0.89 | 0.91 |
| Total | 5797.80 | 1334.16 | 376.13 | 170.76 | 163.85 | 2044.90 | 7842.70 | | 337.37 | 382.52 | 396.96 | 405.79 |
| | | | | | | | | Average Gross Block (₹ in lakh) | 6464.88 | 7320.03 | 7593.47 | 7760.78 |
| | | | | | | | | Weighted Average Rate of Depreciation (in %) | 5.22% | 5.23% | 5.23% | 5.23% |

Asset-G



| 2014-19 Capital Expenditure | Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh) | ACE (₹ in lakh) | | | | | Admitted Capital Cost as on 31.3.2019 (₹ in lakh) | Rate of Depreciation as per Regulations | Annual Depreciation as per Regulations (₹ in lakh) | | | | |
|-----------------------------------|--|--------------------|---------------|---------------|---------------|----------------|---|--|---|-----------------|-----------------|-----------------|-----------------|
| | | 2015- 16 | 2016- 17 | 2017-18 | 2018-19 | Total | | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | |
| Transmission Line | 39284.15 | 936.96 | 691.35 | 148.00 | 207.57 | 1983.87 | 41268.02 | 5.28% | 2098.94 | 2141.93 | 2164.08 | 2173.47 | |
| Sub Station | 1834.47 | 69.99 | 105.71 | 186.10 | - | 361.80 | 2196.27 | 5.28% | 98.71 | 103.35 | 111.05 | 115.96 | |
| PLCC | 143.16 | 4.99 | 10.61 | 19.65 | - | 35.25 | 178.41 | 6.33% | 9.22 | 9.71 | 10.67 | 11.29 | |
| Total | 41261.78 | 1011.93 | 807.67 | 353.75 | 207.57 | 2380.92 | 43642.70 | | 2206.87 | 2254.99 | 2285.81 | 2300.73 | |
| | | | | | | | | | Average Gross Block (₹ in lakh) | 41767.75 | 42677.55 | 43258.26 | 43538.92 |
| | | | | | | | | | Weighted Average Rate of Depreciation (in %) | 5.28% | 5.28% | 5.28% | 5.28% |

Asset-H

| 2014-19 Capital Expenditure | Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh) | ACE (₹ in lakh) | | | | Admitted Capital Cost as on 31.3.2019 (₹ in lakh) | Rate of Depreciation as per Regulations | Annual Depreciation as per Regulations (₹ in lakh) | | | |
|-----------------------------------|--|--------------------|---------------|---------------|----------------|---|--|--|-----------------|-----------------|-----------------|
| | | 2016-17 | 2017-18 | 2018-19 | Total | | | 2016-17 | 2017-18 | 2018-19 | |
| Transmission Line | 18364.76 | 372.93 | 487.21 | - | 860.14 | 19224.90 | 5.28% | 979.50 | 1002.21 | 1015.07 | |
| Sub Station | 1441.37 | 18.87 | 39.43 | 106.77 | 165.07 | 1606.45 | 5.28% | 76.60 | 78.14 | 82.00 | |
| PLCC | 162.10 | 2.08 | 0.27 | - | 2.34 | 164.44 | 6.33% | 10.33 | 10.40 | 10.41 | |
| IT Equipment (Incl. Software) | 18.45 | 0.24 | 0.03 | - | 0.27 | 18.72 | 5.28% | 0.98 | 0.99 | 0.99 | |
| Total | 19986.69 | 394.11 | 526.94 | 106.77 | 1027.82 | 21014.51 | | 1067.41 | 1091.74 | 1108.47 | |
| | | | | | | | | Average Gross Block (₹ in lakh) | 20183.74 | 20644.27 | 20961.12 |
| | | | | | | | | Weighted Average Rate of Depreciation (in %) | 5.29% | 5.29% | 5.29% |

Asset-I



| 2014-19 Capital Expenditure | Admitted Capital Cost as on 1.4.2014/CO D (₹ in lakh) | ACE (₹ in lakh) | | | | | | Admitted Capital Cost as on 31.3.2019 (₹ in lakh) | Rate of Depre- ciation as per Regulati ons | Annual Depreciation as per Regulations (₹ in lakh) | | | | | |
|-------------------------------------|--|--------------------|--------------|--------------|-------------|-------------|---------------|---|---|---|---------------|---------------|---------------|---------------|---------------|
| | | 2014- 15 | 2015- 16 | 2016- 17 | 2017- 18 | 2018- 19 | Total | | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | |
| Building Civil Works & Colony | 12.18 | - | - | - | - | - | - | 12.18 | 3.34% | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | |
| Sub Station | 692.14 | 57.21 | 18.32 | 47.85 | - | - | 123.38 | 815.52 | 5.28% | 38.06 | 40.05 | 41.80 | 43.06 | 43.06 | |
| Total | 704.32 | 57.21 | 18.32 | 47.85 | - | - | 123.38 | 827.70 | | 38.46 | 40.46 | 42.20 | 43.47 | 43.47 | |
| | | | | | | | | | | Average Gross Block (₹ in lakh) | 732.93 | 770.69 | 803.78 | 827.70 | 827.70 |
| | | | | | | | | | | Weighted Average Rate of Depreciation (in %) | 5.25% | 5.25% | 5.25% | 5.25% | 5.25% |

Asset-J

| 2014-19 Capital Expenditure | Admitted Capital Cost as on 1.4.2014/ COD (₹ in lakh) | ACE (₹ in lakh) | | | | | | Admitted Capital Cost as on 31.3.2019 (₹ in lakh) | Rate of Depre- ciation as per Regulati ons | Annual Depreciation as per Regulations (₹ in lakh) | | | | | |
|-----------------------------------|---|--------------------|--------------|---------------|---------------|-------------|----------------|--|---|---|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | 2014-15 | 2015- 16 | 2016- 17 | 2017- 18 | 2018 -19 | Total | | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | |
| Transmission Line | 35305.86 | 5327.56 | 86.18 | 589.70 | 861.00 | - | 6864.44 | 42170.30 | 5.28% | 2004.80 | 2147.72 | 2165.56 | 2203.86 | 2226.59 | |
| Total | 35305.86 | 5327.56 | 86.18 | 589.70 | 861.00 | - | 6864.44 | 42170.30 | | 2004.80 | 2147.72 | 2165.56 | 2203.86 | 2226.59 | |
| | | | | | | | | | | Average Gross Block (₹ in lakh) | 37969.94 | 40676.51 | 41014.45 | 41739.80 | 42170.30 |



| | | | | | |
|---|--------------|--------------|--------------|--------------|--------------|
| Weighted Average Rate of Depreciation (in %) | 5.28% | 5.28% | 5.28% | 5.28% | 5.28% |
|---|--------------|--------------|--------------|--------------|--------------|

Asset-K

| 2014-19 Capital Expenditure | Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh) | ACE (₹ in lakh) | | | | | | Admitted Capital Cost as on 31.3.2019 (₹ in lakh) | Rate of Depreciation as per Regulations | Annual Depreciation as per Regulations (₹ in lakh) | | | | | |
|--------------------------------|--|-----------------|----------|----------|----------|----------|--------------|---|---|---|---------------|---------------|---------------|---------------|---------------|
| | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | Total | | | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | |
| Transmission Line | 498.80 | 96.64 | - | - | - | - | 96.64 | 595.44 | 5.28% | 28.89 | 31.44 | 31.44 | 31.44 | 31.44 | |
| Total | 498.80 | 96.64 | - | - | - | - | 96.64 | 595.44 | | 28.89 | 31.44 | 31.44 | 31.44 | 31.44 | |
| | | | | | | | | | | Average Gross Block (₹ in lakh) | 547.12 | 595.44 | 595.44 | 595.44 | 595.44 |
| | | | | | | | | | | Weighted Average Rate of Depreciation (in %) | 5.28% | 5.28% | 5.28% | 5.28% | 5.28% |

Annexure-II



| 2019-24 Capital Expenditure | Admitted Capital Cost as on 1.4.2019 (₹ in lakh) | Projected ACE (₹ in lakh) | | | | | | Admitted Capital Cost as on 31.3.2024 (₹ in lakh) | Rate of Depreci- ation as per Regulat- ions | Annual Depreciation as per Regulations (₹ in lakh) | | | | |
|---|--|------------------------------|---------------|----------|----------|----------|----------------|---|--|---|------------------|------------------|------------------|------------------|
| | | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Total | | | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Land – Freehold | 1307.31 | - | - | - | - | - | - | 1307.31 | - | - | - | - | - | - |
| Building Civil Works & Colony | 1961.19 | - | - | - | - | - | - | 1961.19 | 3.34% | 65.50 | 65.50 | 65.50 | 65.50 | 102.67 |
| Transmission Line | 129213.71 | 1085.28 | 150.00 | - | - | - | 1235.28 | 130448.99 | 5.28% | 6851.14 | 6883.75 | 6887.71 | 6887.71 | 6829.09 |
| Sub Station | 40533.98 | 932.06 | - | - | - | - | 932.06 | 41466.04 | 5.28% | 2164.80 | 2189.41 | 2189.41 | 2189.41 | 2170.77 |
| PLCC | 534.77 | 24.00 | - | - | - | - | 24.00 | 558.77 | 6.33% | 34.61 | 35.37 | 35.37 | 35.37 | 29.25 |
| IT Equipment (Incl. Software) | 201.66 | 26.00 | - | - | - | - | 26.00 | 227.66 | 15.00% | 32.20 | 34.15 | 34.15 | 34.15 | 34.15 |
| Total | 173752.62 | 2067.34 | 150.00 | - | - | - | 2217.34 | 175969.96 | | 9148.25 | 9208.18 | 9212.14 | 9212.14 | 9212.14 |
| Average Gross Block (₹ in lakh) | | | | | | | | | | 174786.29 | 175894.96 | 175969.96 | 175969.96 | 175969.96 |
| Weighted Average Rate of Depreciation (in %) | | | | | | | | | | 5.23% | 5.24% | 5.24% | 5.24% | 5.24% |

