

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 732/TT/2020

Coram:

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

Date of Order: 10.03.2023

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 for **Combined Asset-1 to 5:** 125 MVAR Bus Reactor at Lucknow (Existing) 400/220 kV Sub-station; 125 MVAR Bus Reactor at Balia; Combined Asset of: 765/400 kV, 1500 MVA ICT II at Lucknow Sub-station along with associated bays & 765/400 kV, 1500 MVA ICT II at Balia Sub-station along with associated bays; Combined asset of: 765/400 kV, 1500 MVA ICT I at Fatehpur Sub-station along with associated bays, 1500 MVA ICT II at Fatehpur Sub-station along with associated Bays & 765 kV Sasaram-Fatehpur S/C Transmission Line bays at Fatehpur Sub-station; LILO of 400 kV Allahabad-Mainpuri Transmission Line along with associated bays at Fatehpur; **Combined Asset-6 to 11:** 765 kV, 240 (3x80) MVAR Bus reactor II along with associated bays at 765/400 kV Balia Sub-station; 765 kV 330 MVAR (3x110) Bus Reactor along with associated bays at 765/400/220 kV Fatehpur Sub-station; 765 kV 3x80 MVAR Bus Reactor at Lucknow along with associated bays; 400 kV 125 MVAR Bus Reactor III along with associated bays at 765/400 kV Agra (Augmentation) Sub-Station; 400 kV 125 MVAR Bus Reactor II along with associated bays at 765/400 kV Agra (Augmentation) Sub-Station; 400 kV 125 MVAR Bus Reactor III at Balia Sub-station along with associated bays (Augmentation of 400 kV to 765 kV); **Combined Asset-12 to 20:** Combined of: 125 MVAR Bus Reactor-I at Fatehpur Sub-station along with associated bay & 125 MVAR Bus Reactor-II at Fatehpur Sub-station along with associated bay, 125 MVAR Bus Reactor-II at Balia Sub-station, 1500 MVA ICT-1 at Agra Sub-station along with associated bays, 125 MVAR 765/400 kV Bus Reactor-I at Sasaram along-with associated Bays & Associated Line bays of 765 kV S/C Fatehpur-Agra Transmission Line at Fatehpur and Agra Sub-station; 1500 MVA ICT-2 at Agra Sub-station along with associated bays; 125 MVAR Bus Reactor along with associated bays at Lucknow; Combined of: 125 MVAR 400 kV Bus Reactor-II at Sasaram along-with associated bays & 02 no. 50 MVAR Bus Reactor at 400 kV Maithan Sub-station and associated bays (Maithan-Gaya line); 02 nos. of 400 kV Bays at Maithon Sub-station for 400 kV D/C Maithon-Mejia Transmission Line; LILO of Barh-Balia 400 kV D/C Transmission Line at Patna 400 kV Sub-station along-with associated bays; 1500 MVA, 765/400



kV ICT-I at Sasaram Sub-station along with associated bays; **Combined Asset-21 to 28:** 765 kV, 240 MVAR Bus Reactor at Balia Sub-station; 765 kV Line bays at Sasaram Sub-station (for 765 kV Sasaram-Fatehpur Transmission Line under SASAN Project), 765 kV, 3X110 MVAR Bus Reactor along with associated bays at Sasaram Sub-station, 400 kV D/C (Quad) Ranchi (New)-Ranchi (Old)-I CKT I Transmission Line and associated 400 kV line bays at Ranchi (New) Sub-station & Ranchi (Old) Sub-station, 765 / 415 kV, 3x500 MVA ICT-II at Ranchi along with associated bays at 765 kV Ranchi (New) Sub-station, Combined Asset of: 765 kV 3x80 MVAR Bus Reactor II along with associated bays at Ranchi 765 kV Sub-station, 400 kV 125 MVAR Bus Reactor I along with associated bays at Ranchi 765 kV Sub-station, 400 kV 125 MVAR Bus Reactor II along with associated bays at Ranchi 765 kV Sub-station, 240 MVAR Switchable line Reactor along with associated bays at Bilaspur Pooling Station, 240 MVAR Bus Reactor at Agra Sub-station; **Combined Asset-29 to 49:** 765/400 kV, 1500 MVA ICT-I at Gaya Sub-station along with associated Bays, 765/400 kV, 1500 MVA ICT-II at Gaya Sub-station along with associated Bays, 765/400 kV, 1500 MVA ICT-III at Gaya Sub-station along with associated Bays, 400 kV S/C Biharsharif-Gaya (part of Gaya Balia Transmission Line charged under contingency arrangement) including Koderma I bay at Gaya, 400 kV S/C Sasaram-Balia (part of Gaya Balia Transmission Line charged under contingency arrangement), 01 Nos of 765 kV Line bay for 765 kV Gaya-Balia Line along with 240 MVAR switchable line reactor (Charged as Bus reactor) at Balia Sub-station, 765 kV S/C Gaya-Sasaram Transmission Line along with associated bays at GayaSub-station , 400 kV D/C Quad Maithon-Gaya Transmission Line and associated bays at both ends (Part of Maithon-Koderma), 400 kV 2X50 MVAR Bus Reactor along with associated bays at Gaya Sub-station, 765 kV, 3x80 MVAR Bus Reactor-I along with associated bays at Gaya Sub-station, 765 kV, 3x80 MVAR Bus Reactor-II along with associated bays at Gaya Sub-station, 400 kV, 1x125 MVAR Bus Reactor-I along with associated bays at Gaya Sub-station, 400 kV, 1x125 MVAR Bus Reactor-II along with associated bays at Gaya Sub-station, 400 kV D/C Lucknow (New)- Lucknow (Old) line with associated bays at both ends, 765 kV S/C Balia- Lucknow line along with associated bays at both ends, 765/400 kV 1500 MVA ICT-I at Balia Sub-station along with associated bays, 765/400 kV 1500 MVA ICT-I at Lucknow Sub-station along with associated bays, One no. 400 kV line bay at Biharsharif Sub-station with 50 MVAR reactor and one no. 400 kV line bay at Sasaram with 400 kV Biharsharif-Sasaram Ckt-III, one no. 400 kV line bay at Biharsharif Sub-station with 50 MVAR reactor associated with 400 kV S/C Biharsharif-Gaya transmission line, one no. 400 kV bay at Sasaram Sub-station associated with 400 kV S/C Sasaram- Balia transmission line, 2x50 MVAR Bus reactor at Sasaram; **Asset-50:** Combined assets of: Ranchi: 400 kV D/C (Quad) Ranchi (old)-Ranchi (New)-I Ckt II Transmission Line along with associated bays at Ranchi (old) and Ranchi (New), 400 kV D/C (Quad) Ranchi (old)-Ranchi (New)-II Transmission Line along with associated bays at Ranchi (old) and Ranchi (New) & 765/400 kV, 3x500 MVA ICT I at along with associated bays at 765 kV Ranchi; **Asset-51:** Balance Portion of 400 kV D/C (Quad) Maithon-Gaya Transmission Line CKT II including Multi Ckt portion; **Asset-52:** Balance Portion of 400 kV D/C (Quad) Maithon-Gaya Transmission Line CKT I including Multi Ckt portion; **Asset-53:** 01 no. 400 kV Line Bay at 765/400 kV Gaya Sub-station (Koderma II Bay); **Asset-54:** 01 no. 765 kV Bay at Gaya for Gaya- Balia 765 kV S/C Transmission Line; **Asset-55:** Ranchi-WR Pooling Station (Sipat) 765 kV S/C line; **Asset-56:** 765 kV 3x80 MVAR Bus Reactor



I along with associated bays at Ranchi 765 kV Sub-station; **Asset-57:** 02 Nos 400 kV line bays at Ranchi 400 kV Sub-station for Raghunathpur TPS*-Ranchi 400 kV D/C Transmission Line under “Common Scheme for 765 kV Pooling Station and Network for NR, Import by NR from ER and Common Scheme for network for WR and Import by WR from ER and from NER/SR/WR via ER” in Northern, Eastern & Western Region.

And in the matter of:

Power Grid Corporation of India Limited,
“Saudamini”, Plot No. 2,
Sector 29, Gurgaon-122001
Haryana.

....Petitioner

Vs.

1. Bihar State Power (Holding) Company Limited,
(Formerly Bihar State Electricity Board -BSEB),
Vidyut Bhavan, Bailey Road, Patna-800001.
2. West Bengal State Electricity Distribution Company Limited,
Bidyut Bhawan, Bidhan Nagar,
Block DJ, Sector-II, Salt Lake City,
Calcutta-700091.
3. Grid Corporation of Orissa Limited,
Shahid Nagar, Bhubaneswar-751007.
4. Damodar Valley Corporation,
DVC Tower, Maniktala, Civic Centre,
VIP Road, Calcutta – 700054.
5. Power Department,
Government of Sikkim,
Gangtok-737101.
6. Jharkhand State Electricity Board,
In Front of Main Secretariat,
Doranda, Ranchi-834002.
7. Madhya Pradesh Power Management Company Limited,
Shakti Bhawan, Rampur,
Jabalpur-482008.
8. Maharashtra State Electricity Distribution Company Limited,
Prakashgad, 4th Floor,
Andheri (East), Mumbai-400052.
9. Gujarat Urja Vikas Nigam Limited,
Sardar Patel Vidyut Bhawan,



Race Course Road, Vadodara-390007.

10. Electricity Department,
Government of Goa,
Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa-403001.
11. Electricity Department,
Administration of Daman & Diu,
Daman-396210.
12. Electricity Department,
Administration of Dadra Nagar Haveli,
U.T., Silvassa-396230.
13. Chhattisgarh State Electricity Board,
P.O. Sunder Nagar, Dangania, Raipur,
Chhattisgarh-492013.
14. Madhya Pradesh Audyogik Kendra,
Vikas Nigam (Indore) Limited ,
3/54, Press Complex, Agra-Bombay Road,
Indore-452008.
15. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Vidyut Marg,
Jaipur-302005.
16. Ajmer Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
17. Jaipur Vidyut Vitran Nigam Limited ,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
18. Jodhpur Vidyut Vitran Nigam Limited ,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
19. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171004.
20. Punjab State Electricity Board,
The Mall, Patiala-147001.
21. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula (Haryana)-134109.



22. Power Development Department,
Government of Jammu & Kashmir,
Mini Secretariat, Jammu.
23. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board),
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226001.
24. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110002.
25. BSES Yamuna Power Limited,
BSES Bhawan, Nehru Place,
New Delhi.
26. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi.
27. TATA Power Delhi Distribution Limited,
33 kV Sub-station, Building,
Hudson Lane, Kingsway Camp,
North Delhi-110009.
28. Chandigarh Administration,
Sector-9, Chandigarh.
29. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road, Dehradun.
30. North Central Railway,
Allahabad.
31. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002.

...Respondents

For Petitioner : Shri S. S. Raju, PGCIL
Shri D. K. Biswal, PGCIL
Shri Ved Prakash Rastogi, PGCIL
Shri A. K. Verma, PGCIL

For Respondents : Shri Anindya Khare, MPPMCL



ORDER

Power Grid Corporation of India Limited, a deemed transmission licensee, has filed the instant petition for truing-up of the transmission tariff of the period from 1.4.2014 to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of transmission tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of the following assets (hereinafter referred to as “transmission assets/ Combined Asset”) under “Common Scheme for 765 kV Pooling Station and Network for NR, Import by NR from ER and Common Scheme for network for WR and Import by WR from ER and from NER/ SR/ WR via ER” in Northern, Eastern and Western Region (hereinafter referred to as “the transmission project”):

Combined Asset-1 to 5: Asset-1: 125 MVAR Bus Reactor at Lucknow (Existing) 400/220 kV Sub-station; Asset-2: 125 MVAR Bus Reactor at Balia; Asset-3: Combined Asset of: 765/400 kV, 1500 MVA ICT II at Lucknow Sub-station along with associated bays (Asset-3a) and 765/400 kV, 1500 MVA ICT II at Balia Sub-station along with associated bays (Asset-3b); Combined asset of: Asset-4: 765/400 kV, 1500 MVA ICT I at Fatehpur Sub-station along with associated bays (Asset-4a), 1500 MVA ICT II at Fatehpur Sub-station along with associated Bays (Asset-4b) and 765 kV Sasaram-Fatehpur S/C Transmission Line bays at Fatehpur Sub-station (Asset-4c); Asset-5: LILO of 400 kV Allahabad-Mainpuri Transmission Line along with associated bays at Fatehpur;

Combined Asset-6 to 11: Asset-6: 765 kV, 240 (3x80) MVAR Bus Reactor II along with associated bays at 765/400 kV Balia Sub-station; Asset-7: 765 kV 330 MVAR (3x110) Bus Reactor along with associated bays at 765/400/220



kV Fatehpur Sub-station; Asset-8: 765 kV 3x80 MVAR Bus Reactor at Lucknow along with associated bays; Asset-9: 400 kV 125 MVAR Bus Reactor III along with associated bays at 765/400 kV Agra (Augmentation) Sub-station; Asset-10: 400 kV 125 MVAR Bus Reactor II along with associated bays at 765/400 kV Agra (Augmentation) Sub-station; Asset-11: 400 kV 125 MVAR Bus Reactor III at Balia Sub-station along with associated bays (Augmentation of 400 kV to 765 kV);

Combined Asset-12 to 20: Combined asset of: Asset-12: 125 MVAR Bus Reactor-I at Fatehpur Sub-station along with associated bay (Asset-12a); and 125 MVAR Bus Reactor-II at Fatehpur Sub-station along with associated bay (Asset-12b), Asset-13: 125 MVAR Bus Reactor-II at Balia Sub-station, Combined Asset of: Asset-14: 1500 MVA ICT-1 at Agra Sub-station along with associated bays (Asset-14a), 125 MVAR 765/400 kV Bus Reactor-I at Sasaram alongwith associated Bays (Asset-14b); Associated Line bays of 765 kV S/C Fatehpur-Agra Transmission Line at Fatehpur and Agra Sub-station (Asset-14c); Asset-15: 1500 MVA ICT-2 at Agra Sub-station along with associated bays; Asset-16: 125 MVAR Bus Reactor along with associated bays at Lucknow; Asset-17: 125 MVAR 400 kV Bus Reactor-II at Sasaram along-with associated bays (Asset-17a) & 02 numbers 50 MVAR Bus Reactor at 400 kV Maithon Sub-station and associated bays (Maithon-Gaya line) (Asset-17b); Asset-18: 02 numbers of 400 kV Bays at Maithon Sub-station for 400 kV D/C Maithon-Mejia Transmission Line; Asset-19: LILO of Barh-Balia 400 kV D/C Transmission Line at Patna 400 kV Sub-station alongwith associated bays; Asset-20: 1500 MVA, 765/400 kV ICT-I at Sasaram Sub-station along with associated bays;

Combined Asset-21 to 28: Asset-21: 765 kV, 240 MVAR Bus Reactor at Balia Sub-station; Asset-22: 765 kV Line bays at Sasaram Sub-station (for 765 kV Sasaram-Fatehpur Transmission Line under Sanan Project), Asset-23: 765 kV, 3X110 MVAR Bus Reactor along with associated bays at Sasaram Sub-station, Asset-24: 400 kV D/C (Quad) Ranchi (New)-Ranchi (Old)-I CKT I Transmission Line and associated 400 kV line bays at Ranchi (New) Sub-station & Ranchi (Old) Sub-station, Asset-25: 765 / 415 kV, 3x500 MVA ICT-II at Ranchi along with associated bays at 765 kV Ranchi (New) Sub-station, Combined Asset of: Asset-26: 765 kV 3x80 MVAR Bus Reactor



II along with associated bays at Ranchi 765 kV Sub-station (Asset-26a), 400 kV 125 MVAR Bus Reactor I along with associated bays at Ranchi 765 kV Sub-station (Asset-26b), 400 kV 125 MVAR Bus Reactor II along with associated bays at Ranchi 765 kV Sub-station (Asset-26c); Asset-27: 240 MVAR Switchable line Reactor along with associated bays at Bilaspur Pooling Station, Asset-28: 240 MVAR Bus Reactor at Agra Sub-station;

Combined Asset-29 to 49: Asset-29: 765/400 kV, 1500 MVA ICT-I at Gaya Sub-station along with associated Bays, Asset-30: 765/400 kV, 1500 MVA ICT-II at Gaya Sub-station along with associated Bays, Asset-31: 765/400 kV, 1500 MVA ICT-III at Gaya Sub-station along with associated Bays, Asset-32: 400 kV S/C Biharsharif-Gaya (part of Gaya Balia Transmission Line charged under contingency arrangement) including Koderma I bay at Gaya, Asset-33: 400 kV S/C Sasaram-Balia (part of Gaya Balia Transmission Line charged under contingency arrangement), Asset-34: 1 Number of 765 kV Line bay for 765 kV Gaya-Balia Line along with 240 MVAR switchable line reactor (Charged as Bus reactor) at Balia Sub-station, Asset-35: 765 kV S/C Gaya-Sasaram Transmission Line along with associated bays at Gaya Sub-station, Asset-36: 400 kV D/C Quad Maithon-Gaya Transmission Line and associated bays at both ends (Part of Maithon-Koderma), Asset-37: 400 kV 2X50 MVAR Bus Reactor along with associated bays at Gaya Sub-station, Asset-38: 765 kV, 3x80 MVAR Bus Reactor-I along with associated bays at Gaya Sub-station, Asset-39: 765 kV, 3x80 MVAR Bus Reactor-II along with associated bays at Gaya Sub-station, Asset-40: 400 kV, 1x125 MVAR Bus Reactor-I along with associated bays at Gaya Sub-station, Asset-41: 400 kV, 1x125 MVAR Bus Reactor-II along with associated bays at Gaya Sub-station, Asset-42: 400 kV D/C Lucknow (New)- Lucknow (Old) line with associated bays at both ends, Asset-43: 765 kV S/C Balia-Lucknow line along with associated bays at both ends, Asset-44: 765/400 kV 1500 MVA ICT-I at Balia Sub-station along with associated bays, Asset-45: 765/400 kV 1500 MVA ICT-I at Lucknow Sub-station along with associated bays, Asset-46: One number 400 kV line bay at Biharsharif Sub-station with 50 MVAR reactor and one number 400 kV line bay at Sasaram with 400 kV Biharsharif-Sasaram Ckt-III, Asset-47: One number 400 kV line bay at Biharsharif Sub-station with 50 MVAR reactor associated with 400 kV S/C Biharsharif-Gaya Transmission Line,



Asset-48: One number 400 kV bay at Sasaram Sub-station associated with 400 kV S/C Sasaram-Balia Transmission Line, Asset-49: 2x50 MVAR Bus reactor at Sasaram;

Asset-50: Combined assets of: Asset-50: Ranchi: 400 kV D/C (Quad) Ranchi (old)-Ranchi (New)-I Ckt II Transmission Line along with associated bays at Ranchi(old) and Ranchi (New) (Asset-50a), 400 kV D/C (Quad) Ranchi (old)-Ranchi (New)-II Transmission Line along with associated bays at Ranchi (old) and Ranchi (New) (Asset-50b), and 765/400 kV, 3x500 MVA ICT I at along with associated bays at 765 kV Ranchi (Asset-50c);

Asset-51: Balance Portion of 400 kV D/C (Quad) Maithon-Gaya Transmission Line Ckt II including Multi Ckt portion;

Asset-52: Balance Portion of 400 kV D/C (Quad) Maithon-Gaya Transmission Line Ckt I including Multi Ckt portion;

Asset-53: 1 number 400 kV Line Bay at 765/400 kV Gaya Sub-station (Koderma II Bay);

Asset-54: 1 number 765 kV Bay at Gaya for Gaya- Balia 765 kV S/C Transmission Line;

Asset-55: Ranchi-WR Pooling Station (Sipat) 765 kV S/C Transmission Line;

Asset-56: 765 kV 3x80 MVAR Bus Reactor I along with associated bays at Ranchi 765 kV Sub-station;

Asset-57: 2 Numbers 400 kV line bays at Ranchi 400 kV Sub-station for Raghunathpur TPS*-Ranchi 400 kV D/C Transmission Line

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

"1) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 9.1 and 10.0 above.

2) Approve the Completion cost and additional capitalization incurred during 2014-19.

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 Regulation 2014 and Tariff regulations 2019 as per para 9.1 and 10.0 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 claim the capital spares at the end of tariff block as per actual.

8) Allow the petitioner to claimed initial spares project as whole.

9) Allow the petitioner to claimed IEDC as per actual expenditure.

10) 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 10.6 above.

11) 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.

12) The delay in filing of the petition is due to prevailing lockdown situation due to COVID-19 pandemic. However, Hon'ble commission vide order dated:06.04.2020 in petition 7/SM/2020 permit to file the tariff petition for 2019-24 period along with truing up petitions for 2014-19 period, by 30.6.2020.

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

Backdrop of the case

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

- a) The Investment Approval (IA) for the transmission project was accorded by the Board of Directors of the Petitioner's company in its 212th meeting held on 6.8.2008 and communicated vide Memorandum No. C/CP/DVC and Maithon RB Project dated 29.8.2008 at an estimated cost of ₹707533.00 lakh including Interest During Construction (IDC) of ₹71360.00 lakh based on 1st Quarter, 2008 price level.



- b) Further, the Revised Cost Estimate (RCE) of the transmission project was accorded by Board of Directors of Petitioner's company in its 326th meeting held on 9.3.2016 and communicated vide the Memorandum No. C/CP/RCE-DVC and Maithon RB Project dated 11.3.2016 at an estimated cost of ₹657054.00 lakh including IDC of ₹67714.00 lakh based on December, 2015 price level.
- c) The scope of work covered under the transmission project is as follows:

Transmission Lines:

1. Maithon-Gaya 400 kV Quad D/C line along with multi-circuit portion in common forest stretch
2. Gaya-Sasaram 765 kV S/C line
3. Gaya-Balia 765 kV S/C line
4. Balia-Lucknow-765 kV S/C line
5. Ranchi-WR Pooling Station 765 kV S/C line
6. Lucknow 765/400 kV new Sub-station-Lucknow 400/220 kV existing Sub-station 400 kV Quad D/C line.
7. Ranchi 765/400 kV new Sub-station-Ranchi 400/220 kV existing Sub-station 400 kV Quad 2 x D/C line.
8. LILO of both circuits of Allahabad-Mainpuri 400 kV D/C line at Fatehpur 765/400 kV Sub-station of Powergrid.
9. LILO of Barh-Balia 400 kV Quad D/C line at Patna

Sub-stations:

1. Augmentation of Maithon 400/220 kV Sub-station
 - > 2 numbers 400 kV line bays (for terminating Maithon-Gaya D/C line)
 - > 2 numbers 400 kV line bays (for terminating Mejia-Maithon D/C line)
2. New 765/400 kV sub-station at Gaya
 - > 3x1500 MVA, 765/400 kV transformer along-with associated bays.
 - > 2 numbers 765 kV line bays (for Gaya-Sasaram/Fatehpur and Gaya-Balia 765 kV lines)
 - > 4 numbers 400 kV line bays (for Maithon-Gaya line and Kodarma-Gaya line).
3. New 765/400 kV Sub-station at Sasaram:
 - >1 x 1500 MVA, 765/400 kV transformer along with associated bays



>2 numbers 400 kV bays (for Biharsharif-Sasaram 400 kV Quad D/C line).

4. Augmentation of Biharsharif 400/220 kV Sub-station

> 2 numbers 400 kV bays (for Biharsharif-Sasaram 400 kV Quad D/C line)

5. New 765/400 kV Sub-station at Fatehpur

> 2 x 1500 MVA, 765/400 kV transformer along with associated bays.

> 2 numbers 765 kV line bays (for Sasaram-Fatehpur and Fatehpur-Agra 765 kV lines).

> 4 numbers 400 kV line bays (for LILO of Allahabad-Mainpuri 400 kV D/C line).

6. Augmentation of 400 kV Agra Sub-station to 765 kV:

>2 x 1500 MVA, 765/400 kV transformer along with associated bays.

> 1 number 765 kV line bay (for Fatehpur-Agra 765 kV line).

7. Augmentation of 400 kV Balia Sub-station to 765 kV:

>2x1500 MVA, 765/400 kV transformer along with associated bays.

> 2 numbers 765 kV line bay (for Gaya-Balia and Balia-Lucknow 765 kV lines).

8. New 765/ 400 kV Sub-station at Lucknow:

>2 x 1500 MVA, 765/400 kV transformer along with associated bays.

> 1 number 765 kV line bay (for Balia-Lucknow 765 kV line)

>2 numbers 400 kV line bays (for Lucknow 765/400 kV new Sub-station-Lucknow 400/220 kV existing Sub-station 400 kV Quad D/C line).

9. Augmentation of existing Lucknow 400/ 220 kV Sub-station

>2 numbers 400 kV line bays (for Lucknow 765/400 kV new Sub-station Lucknow 400/220 kV existing Sub-station 400 kV Quad D/C line).

10. New 2 x 1500 MVA, 765/ 400 kV Sub-station at Ranchi:

>1 number 765 kV line bays (for Ranchi-WR Pooling 765 kV S/C line)

> 4 numbers 400 kV bays (for Ranchi 400 kV new Sub-station-Ranchi 400/220 kV existing Sub-station 400 kV Quad 2 x D/C line).



11. Augmentation of Ranchi 400/ 220 kV Sub-station:

> 6 numbers of 400 kV bays (4 numbers for Ranchi 765/400 kV new Sub-station-Ranchi 400/220 kV existing Sub-station 400 kV Quad 2 x D/C line and 2 numbers for Raghunathpur TPS-Ranchi line).

12. 765/400 kV WR Pooling Sub-station:

> 1 number 765 kV line bays (for Ranchi- WR Pooling 765 kV S/C line)

13. Augmentation of Patna 400/ 220 kV Sub-station

> 4 numbers 400 kV line bay (for LILO of Barh-Balia 400 kV Quad line)

- d) The entire scope of the work under the transmission project has been completed and is covered in the instant petition. The details of COD of the transmission assets under the transmission project are as follows:

Sl. No.	Nomenclature of the assets in the previous order	Previous order	Name of asset	COD	Nomenclature of the assets in the current petition
1.	Asset-I	Order dated 30.3.2016 in Petition No.119/TT/2015	125 MVAR Bus Reactor at Lucknow (Existing) 400/220 kV Sub-station	1.10.2011	Combined Asset-1 to 5
2.	Asset-II		125 MVAR Bus Reactor at Balia	1.11.2011	
3.	Asset-III		Combined Asset of: 765/400 kV, 1500 MVA ICT II at Lucknow Sub-station along with associated bays (Asset: 3a) & 765/400 kV, 1500 MVA ICT II at Balia Sub-station along with associated bays (Asset: 3b)	1.3.2012	
4.	Asset-IV		Combined asset of: 765/400 kV, 1500 MVA ICT I at Fatehpur Sub-station along with associated bays (Asset: 4a), 1500 MVA ICT II at Fatehpur Sub-station along with associated Bays (Asset: 4b) & 765 kV Sasaram-Fatehpur S/C Transmission Line bays at Fatehpur Sub-station (Asset: 4c)	1.4.2012	



5.	Asset-V		LILO of 400 kV Allahabad-Mainpuri Transmission Line along with associated bays at Fatehpur	1.8.2012	
Effective COD approved for Asset- 1 to 5 is 1.4.2012					
6.	Asset-I	Order dated 20.6.2016 in Petition No.32/TT/2016	765 kV, 240 (3x80) MVAR Bus reactor II along with associated bays at 765/400 kV Balia Sub-station	1.4.2012	Combined Asset-6 to11
7.	Asset-II		765 kV 330 MVAR (3x110) Bus reactor along with associated bays at 765/400/220 kV Fatehpur Sub-station	1.4.2012	
8.	Asset-III		765 kV 3x80 MVAR Bus Reactor at Lucknow along with associated bays	1.6.2012	
9.	Asset-IV		400 kV 125 MVAR Bus Reactor III along with associated bays at 765/400 kV Agra (Augmentation) Sub-Station	1.6.2012	
10.	Asset-V		400 kV 125 MVAR Bus Reactor II along with associated bays at 765/400 kV Agra (Augmentation) Sub-Station	1.6.2012	
11.	Asset-VI		400 kV 125 MVAR Bus reactor III at Balia Sub-station along with associated bays (Augmentation of 400 kV to 765 kV)	1.6.2012	
Effective COD approved for Asset-6 to 11 is 1.5.2012					
12.	Asset-I	Order dated 18.4.2016 in Petition No.70/TT/2015	Combined: 125 MVAR Bus Reactor-I at Fatehpur Sub-station along with associated bay (Asset-12a) & 125 MVAR Bus Reactor-II at Fatehpur Sub-station along with associated bay (Asset-12b)	1.1.2012	Combined Asset-12 to 20
13.	Asset-II		125 MVAR Bus Reactor-II at Balia Sub-station	1.2.2012	
14.	Asset-III		Combined Asset of: 1500 MVA ICT-1 at Agra Sub-station along with associated bays (Asset-14a) , 125 MVAR 765/400 kV Bus Reactor-I at Sasaram along-with associated Bays (Asset-14b) & Associated Line bays of 765 kV S/C Fatehpur-Agra Transmission	1.6.2012	



			Line at Fatehpur and Agra Sub-station (Asset-14c)		
15.	Asset-IV		1500 MVA ICT-2 at Agra Sub-station along with associated bays	1.9.2012	
16.	Asset-V		125 MVAR Bus Reactor along with associated bays at Lucknow	1.3.2012	
17.	Asset-VI		Combined of 125 MVAR 400 kV Bus Reactor-II at Sasaram along-with associated (Asset-17a) & 02 numbers 50 MVAR Bus Reactor at 400 kV Maithan Sub-station and associated bays (Maithan-Gaya line) (Asset-17b)	1.4.2012	
18.	Asset-VII		02 numbers of 400 kV Bays at Maithon Sub-station for 400 kV D/C Maithon-Mejia Transmission Line	1.12.2011	
19.	Asset-VIII		LILO of Barh-Balia 400 kV D/C Transmission Line at Patna 400 kV Sub-station along-with associated bays	1.12.2012	
20.	Asset-IX		1500 MVA, 765/400 kV ICT-I at Sasaram Sub-station along with associated bays	1.3.2013	
Effective COD approved for Asset-12 to 20 is 1.8.2012					
21.	Asset-1		765 kV, 240 MVAR Bus Reactor at Balia Sub-station	1.10.2012	
22.	Asset-2		765 kV Line bays at Sasaram Sub-station (for 765 kV Sasaram-Fatehpur Transmission Line under Sasan Project)	1.6.2013	
23.	Asset-3		765 kV, 3X110 MVAR Bus Reactor along with associated bays at Sasaram Sub-station	1.3.2013	
24.	Asset-4	Order dated 4.2.2020 in Petition No.1/TT/2019	400 kV D/C (Quad) Ranchi (New) - Ranchi (Old) - I CKT I Transmission line and associated 400 kV line bays at Ranchi (New) Sub-station & Ranchi (Old) Sub-station	1.2.2014	Combined Asset-21 to 28
25.	Asset-5		765 / 415 kV, 3x500 MVA ICT-II at Ranchi along with associated bays at 765 kV Ranchi (New) Sub-station	1.2.2014	
26.	Asset-6		Combined Asset of: 765 kV 3x80 MVAR Bus Reactor II along with associated bays at Ranchi	1.2.2014	



			765 kV Sub-station (Asset 26a), 400 kV 125 MVAR Bus Reactor I along with associated bays at Ranchi		
27.	Asset-7		765 kV Sub-station (Asset 26b) & 400 kV 125 MVAR Bus Reactor II along with associated bays at Ranchi	1.11.2012	
28.	Asset-8		765 kV Sub-station (Asset 26c)	1.1.2013	
			240 MVAR Switchable line Reactor along with associated bays at Bilaspur Pooling Station		
			240 MVAR Bus Reactor at Agra Sub-station		
Effective COD approved for Asset-21 to 28 is 13.8.2013					
29.	Asset-A		765/400 kV, 1500 MVA ICT-I at Gaya Sub-station along with associated Bays	1.6.2012	
30.	Asset-B		765/400 kV, 1500 MVA ICT-II at Gaya Sub-station along with associated Bays	1.4.2012	
31.	Asset-C		765/400 kV, 1500 MVA ICT-III at Gaya Sub-station along with associated Bays	1.4.2012	
32.	Asset-D(i)		400 kV S/C Biharsharif – Gaya (part of Gaya Balia Transmission Line charged under contingency arrangement) including Koderma I bay at Gay	1.2.2012	
33.	Asset-D(ii)	Order dated 6.12.2017 in Petition No. 185/TT/2016	400 kV S/C Sasaram - Balia (part of Gaya Balia Transmission Line charged under contingency arrangement)	1.3.2012	
34.	Asset-D(iii)		01 Numbers of 765 kV Line Bay for 765 kV Gaya-Balia Line along with 240 MVAR switchable line reactor (Charged as Bus reactor) at Balia Sub-station	1.10.2012	
35.	Asset-E		765 kV S/C Gaya-Sasaram Transmission Line along with associated bays at Gaya Sub-station	1.4.2012	
36.	Asset-F(i)		400 kV D/C Quad Maithon-Gaya Transmission Line and associated bays at both ends (Part of Maithon-Koderma)	1.2.2013	
37.	Asset-F(ii)		400 kV 2X50 MVAR Bus Reactor along with	1.10.2012	
Combined Asset-29 to 49					



			associated bays at Gaya Sub-station		
38.	Asset-G		765 kV, 3x80 MVAR Bus Reactor-I along with associated bays at Gaya Sub-station	1.6.2012	
39.	Asset-H		765 kV, 3x80 MVAR Bus Reactor-II along with associated bays at Gaya Sub-station	1.4.2012	
40.	Asset-I		400 kV, 1x125 MVAR Bus Reactor-I along with associated bays at Gaya Sub-station	1.3.2012	
41.	Asset-J		400 kV, 1x125 MVAR Bus Reactor-II along with associated bays at Gaya Sub-station	1.2.2012	
42.	Asset-K		400 kV D/C Lucknow (New)-Lucknow (Old) line with associated bays at both ends	1.3.2012	
43.	Asset-L		765 kV S/C Balia- Lucknow line along with associated bays at both ends	1.3.2012	
44.	Asset-M		765/400 kV 1500 MVA ICT-I at Balia Sub-station along with associated bays	1.3.2012	
45.	Asset-N		765/400 kV 1500 MVA ICT-I at Lucknow Sub-station along with associated bays	1.3.2012	
46.	Asset-O		One number 400 kV line bay at Biharsharif Sub-station with 50 MVAR reactor and one number 400 kV line bay at Sasaram with 400 kV Biharsharif- Sasaram Ckt-III	1.2.2012	
47.	Asset-P		One number 400 kV line bay at Biharsharif Sub-station with 50 MVAR reactor associated with 400 kV S/C Biharsharif- Gaya Transmission Line	1.2.2012	
48.	Asset-Q		One number 400 kV bay at Sasaram Sub-station associated with 400 kV S/C Sasaram- Balia Transmission Line	1.3.2012	
49.	Asset-R		2x50 MVAR Bus Reactor at Sasaram	1.4.2012	
Effective COD approved for Asset-29 to 49 is 9.5.2012					
50.	Asset 50	Order dated 21.3.2016 in	Combined assets of: Ranchi: 400 kV D/C (Quad) Ranchi (old) – Ranchi (New)-I Ckt II	1.4.2014	Asset-50



		Petition No.105/TT/2014	Transmission Line along with associated bays at Ranchi(old) and Ranchi (New) (Asset 50a) ; 400 kV D/C (Quad) Ranchi (old) – Ranchi (New)-II Transmission Line along with associated bays at Ranchi (old) and Ranchi (New) (Asset 50b) ; & 765/400 kV, 3x500 MVA ICT I along with associated bays at 765 kV Ranchi (Asset 50c)		
51.	Asset-I	Order dated 31.3.2016 in Petition No.280/TT/2015	Balance Portion of 400 kV D/C (Quad) Maithon-Gaya Transmission Line Ckt II including Multi Ckt portion	8.9.2014	Asset-51 to Asset-54
52.	Asset-II		Balance Portion of 400 kV D/C (Quad) Maithon-Gaya Transmission Line Ckt I including Multi Ckt portion	30.12.2014	
53.	Asset-III		01 number 400 kV Line Bay at 765/400 kV Gaya Sub-station (Koderma II Bay)	30.12.2014	
54.	Asset-IV		01 number 765 kV Bay at Gaya for Gaya- Balia 765 kV S/C Transmission Line	8.1.2015	
55.	Asset-I	Order dated 7.11.2016 in Petition No.27/TT/2016	Ranchi-WR Pooling Station (Sipat) 765 kV S/C line	1.4.2014	Asset-55 and Asset-56
56.	Asset-II		765 kV 3x80 MVAR Bus Reactor I along with associated bays at Ranchi 765 kV Sub-station	2.6.2014	
57.	-	Order dated 25.4.2019 in Petition No.162/TT/2018	02 Numbers 400 kV line bays at Ranchi 400 kV Sub-station for Raghunathpur TPS* – Ranchi 400 kV D/C Transmission Line	1.4.2014 (approved)/ 30.8.2017 (claimed)	Asset-57

- e) The transmission assets were scheduled to be put into commercial operation within 48 months from the date of the IA i.e. 6.8.2008. Accordingly, the scheduled date of commercial operation of the transmission assets was 28.8.2012.
- f) The details of the date of commercial operation (COD) and time over-run are as follows:



Sl. No.	Asset's nomenclature in previous order		COD	Asset's nomenclature under current petition	Time over-run	Time over-run condoned/ not condoned
1.	Asset-I	Order dated 30.3.2016 in Petition No.119/TT/2015	1.10.2011	Combined Asset 1 to 5	-	-
2.	Asset-II		1.11.2011			
3.	Asset-III		1.3.2012			
4.	Asset-IV		1.4.2012			
5.	Asset-V		1.8.2012			
6.	Asset-I	Order dated 20.6.2016 in Petition No.32/TT/2016	1.4.2012	Combined Asset 6 to 11	-	-
7.	Asset-II		1.4.2012			
8.	Asset-III		1.6.2012			
9.	Asset-IV		1.6.2012			
10.	Asset-V		1.6.2012			
11.	Asset-VI	Order dated 18.4.2016 in Petition No.70/TT/2015	1.6.2012	Combined Asset 12 to 20	-	-
12.	Asset-I		1.1.2012			
13.	Asset-II		1.2.2012			
14.	Asset-III		1.6.2012			
15.	Asset-IV		1.9.2012			
16.	Asset-V		1.3.2012			
17.	Asset-VI		1.4.2012			
18.	Asset-VII		1.12.2011			
19.	Asset-VIII		1.12.2012		3 months	Not condoned
20.	Asset-IX		1.3.2013		6 months	Not condoned
21.	Asset-1	Order dated 4.2.2020 in Petition No.1/TT/2019	1.10.2012	Combined Asset 21 to 28	-	-
22.	Asset-2		1.6.2013			
23.	Asset-3		1.3.2013		6 months	2 months not condoned (248TT2013)
24.	Asset-4		1.2.2014		-	-
25.	Asset-5		1.2.2014			
26.	Asset-6		1.2.2014		2 months	Not condoned (120TT2013)
27.	Asset-7		1.11.2012			
28.	Asset-8		1.1.2013		4 months	Not condoned (109TT2013)
29.	Asset-A	Order dated 6.12.2017 in Petition No.185/TT/2016	1.6.2012	Combined Asset 29 to 49	-	-
30.	Asset-B		1.4.2012			
31.	Asset-C		1.4.2012			
32.	Asset-D(i)		1.2.2012			
33.	Asset-D(ii)		1.3.2012		30 days	Fully condoned
34.	Asset-D(iii)		1.10.2012			
35.	Asset-E		1.4.2012		-	-
36.	Asset-F(i)		1.2.2013		154 days	Fully condoned
37.	Asset-F(ii)		1.10.2012		30 days	Fully condoned
38.	Asset-G		1.6.2012		-	-
39.	Asset-H		1.4.2012			
40.	Asset-I		1.3.2012			
41.	Asset-J		1.2.2012			
42.	Asset-K		1.3.2012			



43.	Asset-L		1.3.2012			
44.	Asset-M		1.3.2012			
45.	Asset-N		1.3.2012			
46.	Asset-O		1.2.2012			
47.	Asset-P		1.2.2012			
48.	Asset-Q		1.3.2012			
49.	Asset-R		1.4.2012			
50.	Asset 50A, Asset 50B and Asset 50C	Order dated 21.3.2016 in Petition No.105/TT/2014	1.4.2014	Asset-50	19 months	Fully Condoned
51.	Asset-I	Order dated 31.3.2016 in Petition No.280/TT/2015	8.9.2014	Asset-51 to Asset-54	24 months and 7 days	16 months condoned, 8 months and 7 days not condoned
52.	Asset-II		30.12.2014		28 months	16 months condoned; 12 months not condoned
53.	Asset-III		30.12.2014		28 months	16 months condoned; 12 months not condoned
54.	Asset-IV		8.01.2015		28 months	Fully Condoned
55.	Asset-I	Order dated 7.11.2016 in Petition No.27/TT/2016	1.4.2014	Asset-55 & Asset-56	582 days	Fully Condoned
56.	Asset-II		2.6.2014		644 days	Fully Condoned
57.		Order dated 25.4.2019 in Petition No.162/TT/2018	1.4.2014 (approved)/ 30.8.2017 (claimed)	Asset-57	238 days	Not condoned

- g) The Annual Fixed Charges (AFC) approved by the and trued up tariff claimed by the Petitioner in respect of the transmission assets for 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	Combined Asset-1 to 5				
	2014-15	2015-16	2016-17	2017-18	2018-19
AFC approved vide order dated 30.3.2016 in Petition No. 119/TT/2015	12570.60	12408.14	12117.19	11827.15	11539.07
AFC claimed by the Petitioner based on truing up in the instant petition	12542.52	12350.00	12077.48	11825.36	11586.65

(₹ in lakh)

Particulars	Combined Asset – 6 to 11				
	2014-15	2015-16	2016-17	2017-18	2018-19
AFC approved vide order dated 20.6.2016 in Petition No. 32/TT/2016	4244.32	4208.51	4158.10	4058.11	3959.07



Particulars	Combined Asset – 6 to 11				
	2014-15	2015-16	2016-17	2017-18	2018-19
AFC claimed by the Petitioner based on truing up in the instant petition	4336.02	4271.37	4203.02	4127.02	4043.10

(₹ in lakh)

Particulars	Combined Asset – 12 to 20				
	2014-15	2015-16	2016-17	2017-18	2018-19
AFC approved vide order dated 18.4.2016 in Petition No. 70/TT/2015	13769.77	13647.83	13364.14	13082.38	12804.03
AFC claimed by the Petitioner based on truing up in the instant petition	13596.75	13463.17	13285.07	13068.96	12816.26

(₹ in lakh)

Particulars	Combined Asset – 21 to 28				
	2014-15	2015-16	2016-17	2017-18	2018-19
AFC approved vide order dated 4.2.2020 in Petition No. 1/TT/2019	11030.20	11141.30	11104.58	11011.90	10818.80
AFC claimed by the Petitioner based on truing up in the instant petition	11073.73	11158.72	11107.28	10959.20	10779.64

(₹ in lakh)

Particulars	Combined Asset – 29 to 49				
	2014-15	2015-16	2016-17	2017-18	2018-19
AFC approved vide order dated 6.12.2017 in Petition No. 185/TT/2016	43802.93	43172.33	42491.04	41591.39	40521.12
AFC claimed by the Petitioner based on truing up in the instant petition	43881.04	43205.92	42276.43	41228.62	40259.86

(₹ in lakh)

Particulars	Asset – 50				
	2014-15	2015-16	2016-17	2017-18	2018-19
AFC approved vide order dated 21.3.2016 in Petition No. 105/TT/2014	7677.04	8095.84	7910.40	7723.88	7540.13
AFC claimed by the Petitioner based on truing up in the instant petition	7108.94	7278.22	7251.07	7095.11	6958.36

(₹ in lakh)

Particulars	Asset – 51				
	2014-15 (Pro-rata for 205 days)	2015-16	2016-17	2017-18	2018-19
AFC approved vide order dated 31.3.2016 in Petition No. 280/TT/2015	1200.02	2120.06	2097.84	2051.24	1989.77



Particulars	Asset – 51				
	2014-15 (Pro-rata for 205 days)	2015-16	2016-17	2017-18	2018-19
AFC claimed by the Petitioner based on truing up in the instant petition	1201.43	2117.29	2082.94	2017.68	1957.48

(₹ in lakh)

Particulars	Asset – 52				
	2014-15 (Pro-rata for 92 days)	2015-16	2016-17	2017-18	2018-19
AFC approved vide order dated 31.3.2016 in Petition No. 280/TT/2015	201.66	813.11	833.19	829.16	809.81
AFC claimed by the Petitioner based on truing up in the instant petition	211.23	852.73	867.18	855.46	837.83

(₹ in lakh)

Particulars	Asset – 53				
	2014-15 (Pro-rata for 92 days)	2015-16	2016-17	2017-18	2018-19
AFC approved vide order dated 31.3.2016 in Petition No. 280/TT/2015	46.09	184.38	187.43	188.97	187.81
AFC claimed by the Petitioner based on truing up in the instant petition	46.55	187.73	189.63	188.68	188.34

(₹ in lakh)

Particulars	Asset – 54				
	2014-15 (Pro-rata for 83 days)	2015-16	2016-17	2017-18	2018-19
AFC approved vide order dated 31.3.2016 in Petition No. 280/TT/2015	83.65	419.25	441.96	442.64	436.12
AFC claimed by the Petitioner based on truing up in the instant petition	82.08	429.55	451.69	444.69	437.98

(₹ in lakh)

Particulars	Asset – 55				
	2014-15	2015-16	2016-17	2017-18	2018-19
AFC approved vide order dated 7.11.2016 in Petition No. 27/TT/2016	13870.23	14151.58	14124.82	13861.01	13490.26
AFC claimed by the Petitioner based on truing up in the instant petition	13939.27	13959.90	13671.95	13298.40	12987.66



(₹ in lakh)

Particulars	Asset – 56				
	2014-15 (Pro-rata for 303 days)	2015-16	2016-17	2017-18	2018-19
AFC approved vide order dated 7.11.2016 in Petition No. 27/TT/2016	461.78	666.72	698.40	722.34	708.42
AFC claimed by the Petitioner based on truing up in the instant petition	466.33	673.41	697.66	709.99	700.09

(₹ in lakh)

Particulars	Asset – 57				
	2014-15	2015-16	2016-17	2017-18	2018-19
AFC approved vide order dated 25.4.2019 in Petition No. 162/TT/2018	230.11	235.58	239.41	241.64	244.55
AFC claimed by the Petitioner based on truing up in the instant petition	239.38	241.91	245.45	247.94	252.77

4. The Respondents are distribution licensees, power departments and transmission licensees, who are procuring transmission services from the Petitioner, mainly beneficiaries of the Northern, Eastern and Western 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 notices published in the newspapers by the Petitioner. Bihar State Power Holding Company Limited (BSPHCL) i.e. Respondent No. 1 has filed its reply vide affidavit dated 21.10.2021 and has raised issues like RLDC charging certificate and CEA certificate with respect to Asset-55, RoE, IDC and IEDC discharge, ACE, Initial Spares, GST, license fee, filing fee and publication fee. In response, the Petitioner has filed its rejoinder vide affidavit dated 1.11.2021. Madhya Pradesh Power Management Company Limited (MPPMCL) i.e. Respondent No. 7 has filed its reply vide affidavit



dated 23.2.2021 and has raised issue of MAT rates/ RoE, ACE and decapitalisation in 2014-19, ACE for 2019-24 and the effect of GST. In response, the Petitioner has filed its rejoinder vide affidavit dated 9.9.2021.

6. The hearing in this matter was held on 28.6.2022 through video conference and the order was reserved.

7. This order is issued considering the submissions made by the Petitioner in the petition and affidavit dated 16.7.2021, replies of MPPMCL and BSPHCL vide affidavit dated 23.2.2021 and 21.10.2021 respectively and the Petitioner's rejoinder vide affidavits dated 9.9.2021 and 1.11.2021 respectively thereto.

8. Having heard the representatives of the parties and after perusal of the materials on record, we proceed to dispose of the petition.

9. It is observed that MPPMCL has been raising the same issue of RoE and MAT rates in other petitions as well despite clear findings of the Commission rejecting the contentions of MPPMCL. The contentions of MPPMCL have been rejected by the Commission in other petitions including Petition No. 211/TT/2020. As MPPMCL has not challenged the findings, the same have attained finality. In view of this, the pleas raised by MPPMCL are rejected. Further, MPPMCL's submissions regarding RoE and MAT, the Petitioner's clarifications thereto and the Commission's findings on the said issues have not been repeated herein for the sake of brevity. Similarly, BSPHCL had raised the issue of RoE in Petition No. 476/TT/2019 and other petitions and the same was rejected. BSPHCL has not preferred any appeal regarding the rejection of its contention regarding RoE. Similarly, BSPHCL's submissions regarding license fee have been rejected by the



Commission in several petitions including in Petition No. 686/TT/2020 against which no appeal has been preferred and the same has attained finality. Hence, BSPHCL's submissions regarding RoE and filing fee, the Petitioner's clarifications thereto and the Commission's findings on the said issues have not been repeated herein for the sake of brevity.

10. The Commission vide order dated 7.11.2016 in Petition No. 27/TT/2016 has held as follows:

"7. The petitioner has claimed the date of commercial operation of the Assets I and Asset II as 1.4.2014 and 2.6.2014 respectively. In this regard, the petitioner vide letter dated 1.6.2014 and 31.3.2014 has submitted the self-declaration certificate and Energisation certificate respectively of Asset II. Further, the petitioner has also submitted the approval of CEA Certificate under Regulation 43 of CEA (measures Related to Safety & Electricity Supply) for Asset-II vide letter dated 5.6.2014, however the certificate in respect of Asset-I has not been submitted. The petitioner is directed to submit the said Energisation Certificate along with approval of CEA Certificate for Asset-I at the time of true up. Similarly, in support of the claim of the COD, the petitioner vide affidavit dated 5.7.2016 has submitted RLDC Certificate for Asset-II while the same has not been submitted for Asset-I. In this regard, the petitioner is directed to submit the RLDC Certificate with regard to Asset I at the time of true up."

11. As per the above direction, the Petitioner has submitted CEA charging certificate for the Asset-55. Further, the Petitioner has submitted that Asset-55 (COD: 1.4.2014) was completed and charged in the 2009-14 tariff period hence, there was provision for declaring the commercial operation w.e.f. 1st day of the following next month. Thus, its COD was declared w.e.f. 1.4.2014. Further, in 2009-14 tariff period, there is no provision regarding the requirement of charging certificate of an asset from respective RLDC. Thus, the RLDC charging certificate for the Asset-55 is not applicable in the present case.

12. BSPHCL has submitted that the Petitioner was required to submit the CEA and RLDC certificates in respect of Asset-55 and the Petitioner's contention that the same are not applicable to the said asset are erroneous.



13. In response, the Petitioner has submitted that CEA certificate for Asset-55 has been submitted along with the petition. Further, RLDC charging certificate is not applicable to the said asset as the COD of the said asset was declared w.e.f. 1.4.2014 and there was no statute/provision regarding the requirement of charging certificate from RLDC as on date.

14. We have considered the submissions of Petitioner and BSPHCL. The Commission has approved COD of Asset-55 as 1.4.2014 subject to furnishing of CEA and RLDC certificate at the time of truing up. Taking into consideration the CEA certificate and RLDC certificate, COD of Asset-55 is approved as 1.4.2014.

Truing-up of Annual Fixed Charges for 2014-19 Tariff Period

15. The details of the transmission charges claimed by the Petitioner for the transmission assets are as follows:

(₹ in lakh)

Combined Asset – 1 to 5					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	3579.69	3602.16	3607.96	3620.87	3633.73
Interest on Loan	3514.56	3220.52	2901.63	2586.28	2272.13
Return on Equity	3994.69	4039.20	4045.69	4060.15	4085.30
O&M Expenses	1135.60	1173.29	1212.27	1252.53	1294.03
Interest on Working Capital	317.98	314.83	309.93	305.53	301.46
Total	12542.52	12350.00	12077.48	11825.36	11586.65

(₹ in lakh)

Combined Asset –6 to 11					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1211.53	1218.76	1227.32	1234.10	1236.29
Interest on Loan	1206.76	1106.71	1006.38	901.84	795.10
Return on Equity	1372.33	1387.10	1396.68	1404.28	1410.43
O&M Expenses	434.16	448.56	463.47	478.86	494.73
Interest on Working Capital	111.24	110.24	109.17	107.94	106.55
Total	4336.02	4271.37	4203.02	4127.02	4043.10

(₹ in lakh)

Combined Asset –12 to 20					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	3653.64	3691.28	3724.49	3748.63	3754.75



Combined Asset –12 to 20					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Loan	3786.46	3499.25	3195.93	2872.71	2538.88
Return on Equity	4136.91	4199.06	4236.24	4263.28	4281.39
O&M Expenses	1661.48	1716.59	1773.63	1832.56	1893.24
Interest on Working Capital	358.26	356.99	354.78	351.78	348.00
Total	13596.75	13463.17	13285.07	13068.96	12816.26

(₹ in lakh)

Combined Asset –21 to 28					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	2993.26	3086.21	3148.44	3192.36	3204.43
Interest on Loan	3269.95	3095.95	2871.98	2591.44	2338.83
Return on Equity	3418.33	3544.47	3616.73	3668.06	3691.29
O&M Expenses	1108.13	1144.95	1182.95	1222.26	1262.77
Interest on Working Capital	284.06	287.14	287.18	285.08	282.32
Total	11073.73	11158.72	11107.28	10959.20	10779.64

(₹ in lakh)

Combined Asset –29 to 49					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	12677.22	12774.29	12820.94	12842.57	12863.26
Interest on Loan	12663.88	11614.17	10490.14	9299.81	8148.71
Return on Equity	14211.65	14392.97	14447.72	14473.29	14534.71
O&M Expenses	3238.94	3346.93	3457.50	3572.76	3691.06
Interest on Working Capital	1089.35	1077.56	1060.13	1040.19	1022.12
Total	43881.04	43205.92	42276.43	41228.62	40259.86

(₹ in lakh)

Asset –50					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1866.74	1968.83	2018.97	2038.77	2048.87
Interest on Loan	2275.35	2188.39	2030.82	1811.03	1625.62
Return on Equity	2148.69	2277.14	2335.55	2359.67	2377.25
O&M Expenses	638.11	659.33	681.13	703.83	727.15
Interest on Working Capital	180.05	184.53	184.60	181.81	179.47
Total	7108.94	7278.22	7251.07	7095.11	6958.36

(₹ in lakh)

Asset –51					
Particulars	2014-15 (Pro-rata for 205 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	349.55	641.59	651.77	654.51	654.51
Interest on Loan	415.87	709.69	654.54	584.94	524.17
Return on Equity	389.49	718.37	729.76	732.83	734.76
O&M Expenses	18.12	0.00	0.00	0.00	0.00
Interest on Working Capital	28.40	47.64	46.87	45.40	44.04
Total	1201.43	2117.29	2082.94	2017.68	1957.48



(₹ in lakh)

Asset –52					
Particulars	2014-15 (Pro-rata for 92 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	54.32	222.91	233.09	235.83	235.83
Interest on Loan	64.95	251.65	240.59	219.56	197.75
Return on Equity	60.52	249.59	260.98	264.05	264.75
O&M Expenses	25.87	106.05	109.56	113.21	116.96
Interest on Working Capital	5.57	22.53	22.96	22.81	22.54
Total	211.23	852.73	867.18	855.46	837.83

(₹ in lakh)

Asset –53					
Particulars	2014-15 (Pro-rata for 92 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	9.66	39.24	40.23	40.37	40.64
Interest on Loan	10.22	39.38	37.01	33.57	30.30
Return on Equity	9.94	40.62	41.72	41.89	42.29
O&M Expenses	15.20	62.30	64.37	66.51	68.71
Interest on Working Capital	1.53	6.19	6.30	6.34	6.40
Total	46.55	187.73	189.63	188.68	188.34

(₹ in lakh)

Asset – 54					
Particulars	2014-15 (Pro-rata for 83 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	18.88	104.25	112.85	113.17	113.17
Interest on Loan	21.15	111.76	112.16	101.56	91.48
Return on Equity	20.40	113.91	123.56	123.91	124.24
O&M Expenses	19.20	87.22	90.12	93.11	96.20
Interest on Working Capital	2.45	12.41	13.00	12.94	12.89
Total	82.08	429.55	451.69	444.69	437.98

(₹ in lakh)

Asset – 55					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	4104.57	4216.33	4242.98	4254.63	4255.79
Interest on Loan	4517.12	4263.03	3910.51	3505.32	3171.23
Return on Equity	4591.41	4739.87	4770.42	4783.99	4798.15
O&M Expenses	399.94	413.55	426.97	441.34	455.91
Interest on Working Capital	326.23	327.12	321.07	313.12	306.58
Total	13939.27	13959.90	13671.95	13298.40	12987.66

(₹ in lakh)

Asset – 56					
Particulars	2014-15 (Pro-rata for 303 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	111.30	170.78	182.42	191.48	192.65
Interest on Loan	138.71	193.58	189.01	178.26	162.31
Return on Equity	133.54	203.93	217.57	228.23	230.15



Asset – 56					
Particulars	2014-15 (Pro-rata for 303 days)	2015-16	2016-17	2017-18	2018-19
O&M Expenses	70.08	87.22	90.12	93.11	96.20
Interest on Working Capital	12.70	17.90	18.54	18.91	18.78
Total	466.33	673.41	697.66	709.99	700.09

(₹ in lakh)

Asset – 57					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	39.59	39.56	39.56	39.56	39.56
Interest on Loan	26.00	24.09	23.28	21.30	21.36
Return on Equity	44.01	44.29	44.29	44.29	44.41
O&M Expenses	120.60	124.60	128.74	133.02	137.42
Interest on Working Capital	9.18	9.37	9.58	9.77	10.02
Total	239.38	241.91	245.45	247.94	252.77

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

(₹ in lakh)

Combined Asset – 1 to 5					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	94.63	97.77	101.02	104.38	107.84
Maintenance Spares	170.34	175.99	181.84	187.88	194.10
Receivables	2090.42	2058.34	2012.91	1970.89	1931.11
Total Working Capital	2355.39	2332.10	2295.77	2263.15	2233.05
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	317.98	314.83	309.93	305.53	301.46

(₹ in lakh)

Combined Asset – 6 to 11					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	36.18	37.38	38.62	39.91	41.23
Maintenance Spares	65.12	67.28	69.52	71.83	74.21
Receivables	722.67	711.90	700.50	687.84	673.85
Total Working Capital	823.97	816.56	808.64	799.58	789.29
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	111.24	110.24	109.17	107.94	106.55

(₹ in lakh)

Combined Asset – 12 to 20					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	138.46	143.05	147.80	152.71	157.77
Maintenance Spares	249.22	257.49	266.04	274.88	283.99
Receivables	2266.13	2243.86	2214.18	2178.16	2136.05
Total Working Capital	2653.81	2644.40	2628.02	2605.75	2577.81
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	358.26	356.99	354.78	351.78	348.00



(₹ in lakh)

Combined Asset – 21 to 28					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	92.34	95.41	98.58	101.86	105.23
Maintenance Spares	166.22	171.74	177.44	183.34	189.42
Receivables	1845.62	1859.79	1851.21	1826.53	1796.61
Total Working Capital	2104.18	2126.94	2127.23	2111.73	2091.26
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	284.06	287.14	287.18	285.08	282.32

(₹ in lakh)

Combined Asset – 29 to 49					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	269.91	278.91	288.13	297.73	307.59
Maintenance Spares	485.84	502.04	518.63	535.91	553.66
Receivables	7313.51	7200.99	7046.07	6871.44	6709.98
Total Working Capital	8069.26	7981.94	7852.83	7705.08	7571.23
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	1089.35	1077.56	1060.13	1040.19	1022.12

(₹ in lakh)

Asset – 50					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	53.18	54.94	56.76	58.65	60.60
Maintenance Spares	95.72	98.90	102.17	105.57	109.07
Receivables	1184.82	1213.04	1208.51	1182.52	1159.73
Total Working Capital	1333.72	1366.88	1367.44	1346.74	1329.40
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	180.05	184.53	184.60	181.81	179.47

(₹ in lakh)

Asset – 51					
Particulars	2014-15 (Pro-rata for 205 days)	2015-16	2016-17	2017-18	2018-19
O&M Expenses	4.88	0.00	0.00	0.00	0.00
Maintenance Spares	8.78	0.00	0.00	0.00	0.00
Receivables	360.90	352.88	347.16	336.28	326.25
Total Working Capital	374.56	352.88	347.16	336.28	326.25
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	28.40	47.64	46.87	45.40	44.04

(₹ in lakh)

Asset – 52					
Particulars	2014-15 (Pro-rata for 92 days)	2015-16	2016-17	2017-18	2018-19
O&M Expenses	8.55	8.84	9.13	9.43	9.75
Maintenance Spares	15.40	15.91	16.43	16.98	17.54
Receivables	139.67	142.12	144.53	142.58	139.64
Total Working Capital	163.62	166.87	170.09	168.99	166.93
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50



Asset – 52					
Particulars	2014-15 (Pro-rata for 92 days)	2015-16	2016-17	2017-18	2018-19
Interest on Working Capital	5.57	22.53	22.96	22.81	22.54

(₹ in lakh)

Asset – 53					
Particulars	2014-15 (Pro-rata for 92 days)	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	30.78	31.29	31.61	31.45	31.39
Total Working Capital	44.86	45.83	46.63	46.97	47.43
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	1.53	6.19	6.30	6.34	6.40

(₹ in lakh)

Asset – 54					
Particulars	2014-15 (Pro-rata for 83 days)	2015-16	2016-17	2017-18	2018-19
O&M Expenses	7.04	7.27	7.51	7.76	8.02
Maintenance Spares	12.66	13.08	13.52	13.97	14.43
Receivables	60.16	71.59	75.28	74.12	73.00
Total Working Capital	79.86	91.94	96.31	95.85	95.45
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	2.45	12.41	13.00	12.94	12.89

(₹ in lakh)

Asset – 55					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	33.33	34.46	35.58	36.78	37.99
Maintenance Spares	59.99	62.03	64.05	66.20	68.39
Receivables	2323.21	2326.65	2278.66	2216.40	2164.61
Total Working Capital	2416.53	2423.14	2378.29	2319.38	2270.99
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	326.23	327.12	321.07	313.12	306.58

(₹ in lakh)

Asset – 56					
Particulars	2014-15 (Pro-rata for 303 days)	2015-16	2016-17	2017-18	2018-19
O&M Expenses	7.04	7.27	7.51	7.76	8.02
Maintenance Spares	12.66	13.08	13.52	13.97	14.43
Receivables	93.63	112.24	116.28	118.33	116.68
Total Working Capital	113.33	132.59	137.31	140.06	139.13
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	12.70	17.90	18.54	18.91	18.78



(₹ in lakh)

Asset – 57					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	10.05	10.38	10.73	11.09	11.45
Maintenance Spares	18.09	18.69	19.31	19.95	20.61
Receivables	39.88	40.32	40.91	41.32	42.13
Total Working Capital	68.02	69.39	70.95	72.36	74.19
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	9.18	9.37	9.58	9.77	10.02

Capital Cost

17. The Commission vide order dated 30.3.2016 in Petition No.119/TT/2015 in respect of Combined Asset-1 to 5, vide order dated 20.6.2016 in Petition No. 32/TT/2016 in respect of Combined Asset-6 to 11, vide order dated 18.4.2016 in Petition No. 70/TT/2015 in respect of Combined Asset-12 to 20, vide order dated 4.2.2020 in Petition No. 1/TT/2019 in respect of Combined Asset-21 to 28, vide order dated 6.12.2017 in Petition No. 185/TT/2016 in respect of Combined Asset-29 to 49, vide order dated 21.3.2016 in Petition No. 105/TT/2014 in respect of Asset-50, vide order dated 31.3.2016 in Petition No. 280/TT/2015 in respect of Asset-51 to Asset-54, vide order dated 7.11.2016 in Petition No. 27/TT/2016 in respect of Asset-55 and Asset-56 and vide order dated 25.4.2019 in Petition No. 162/TT/2018 in respect of Asset-57 has approved the following capital cost and ACE:

(₹ in lakh)

Assets	FR apportioned approved cost	RCE apportioned approved cost	Admitted cost as on COD	ACE					Admitted cost as on 31.3.2019
				2014-15	2015-16	2016-17	2017-18	2018-19	
Combined Asset-1 to 5	71820.77	77882.21	67543.61	1410.75	-	-	-	-	68954.36
Combined Asset-6 to 11	23031.09	25084.65	23615.35	150.32	560.10	-	-	-	24325.77
Combined Asset-12 to 20	72745.61	76832.83	70757.44	1772.79	-	-	-	-	72530.23
Combined Asset-21 to 28	70338.58	66130.68	56513.32	3001.70	854.12	1590.50	225.14	280.88	62465.66
Combined Asset-29 to 49	312472.81	257557.89	240298.59	2392.39	2377.48	1931.12	-	-	246999.58



Assets	FR apportioned approved cost	RCE apportioned approved cost	Admitted cost as on COD	ACE					Admitted cost as on 31.3.2019
				2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-50	38629.76	43092.09	36467.78	6624.31	-	-	-	-	43092.09
Asset-51	4380.21	13468.90	11564.07	446.66	262.39	172.47	-	-	12445.59
Asset-52	1978.18	4948.23	4081.18	-	262.39	172.47	-	-	4516.04
Asset-53	488.45	792.17	670.52	-	16.50	30.88	-	-	717.90
Asset-54	2428.27	2249.13	1279.59	489.86	244.93	81.64	-	-	2096.02
Asset-55	79015.04	83935.02	75232.78	4637.22	2699.66	1365.28	-	-	83934.94
Asset-56	5749.82	4194.69	2076.33	1315.97	75.88	429.99	-	-	3898.17
Asset-57	1195.04	885.73	705.13	-	-	-	8.91	0.40	714.44

18. Asset-1 to Asset-49 were put into commercial operation in 2009-14 tariff period and Asset-50 to Asset 57 were put into commercial operation in 2014-19 tariff period. The Petitioner vide Auditor's Certificates dated 22.6.2020 for Combined Asset-1 to 5, dated 22.6.2020 for Combined Asset-6 to 11, dated 22.6.2020, 31.7.2019 and 12.11.2014 for Combined Asset-12 to 20, dated 20.3.2018, 27.6.2018, 20.5.2020 and 22.6.2020 for Combined Asset-21 to 28, dated 31.7.2019, 22.6.2020 for Combined Asset-29 to 49, dated 29.11.2019 for Asset-50, dated 31.7.2019 for Asset-51, Asset-52, Asset-53, Asset-54, Asset-56 and Asset-57 and dated 3.8.2019 for Asset-55 has submitted the capital cost upto 31.3.2014 along with ACE up to 31.3.2019. The details of the apportioned approved capital cost, capital cost as on 31.3.2014 and ACE incurred upto 31.3.2019 claimed by the Petitioner in the instant true-up petition for the transmission assets are as follows:

Assets	FR apportioned approved cost	RCE apportioned approved cost	Capital cost as on 31.3.2014	ACE					Admitted cost as on 31.3.2019
				2014-15	2015-16	2016-17	2017-18	2018-19	
Combined Asset-1 to 5	71820.77	77882.21	67543.58	686.9	164.34	55.28	433.94	53.00	68937.04
Combined Asset-6 to 11	23031.09	25084.65	23617.94	150.32	124.48	199.72	57.12	25.54	24175.12
Combined Asset-12 to 20	72745.61	76832.83	70790.53	894.02	530.44	727.39	187.37	44.09	73173.84



Assets	FR apportioned approved cost	RCE apportioned approved cost	Capital cost as on 31.3.2014	ACE					Admitted cost as on 31.3.2019
				2014-15	2015-16	2016-17	2017-18	2018-19	
Combined Asset-21 to 28	70338.58	66130.68	57185.71	2853.22	854.11	1590.5	145.94	311.29	62940.77
Combined Asset-29 to 49	312472.81	257557.89	240319.84	2392.19	1412.74	439.59	425.53	358.05	245348.14
Asset-50	38629.76	43092.09	36467.78	1877.10	811.14	701.06	115.06	267.69	40239.83
Asset-51	4380.21	13468.90	0.00	12163.24	281.31	104.02	0.00	0.00	12548.57
Asset-52	1978.18	4948.23	0.00	4204.57	281.31	104.02	0.00	0.00	4589.90
Asset-53	488.45	792.17	0.00	700.66	33.00	4.36	1.18	8.84	748.04
Asset-54	2428.27	2249.13	1279.59	489.86	314.76	11.81	0.00	0.00	2096.02
Asset-55	79015.04	83935.02	76935.14	2934.86	612.82	420.76	38.48	13.20	80955.26
Asset-56	5749.82	4194.69	0.00	3392.30	114.31	347.18	13.80	30.58	3898.17
Asset-57	1195.04	885.73	749.15	50.40	57.83	26.03	2.32	0.00	885.73

Cost Over-Run

19. The total completion cost in respect of the transmission assets as on 31.3.2014 is ₹573609.67 lakh and including ACE as on 31.3.2019 is ₹620536.43 lakh and the approved Revised Cost Estimate (RCE) is ₹657054.00 lakh including IDC of ₹67714.00 lakh. Hence, the completion cost in respect of the transmission assets is within the approved RCE cost.

Land Cost Deduction

20. The Petitioner has submitted details of land usage in the instant petition as per the directions given vide order dated 20.5.2015 in Petition No. 109/TT/2013.

The relevant extract of the said order is as follows:

“24. As discussed at para 19, there was delay of one year in depositing requisite amount for land acquisition by the petitioner. During this period of one year, the circle rates were revised and as a result the petitioner had to pay additional amount of ₹1489.90 lakh on account of revaluation of land. The increase in land cost to the tune of ₹1489.90 lakh is attributable to the petitioner since it has been incurred due to delay in depositing of amount for land by the petitioner. Hence, we are not inclined to allow the additional land compensation of ₹1489.90 lakh and it is accordingly reduced from the capital cost of the assets involved in this petition and other concerned petitions. The petitioner has not submitted the land actually used for the asset considered in the instant petition, hence it is not possible to apportion the contribution of the instant asset towards the increase of ₹1489.90 lakh in the land cost. Accordingly, at present, the capital cost is being restricted to the



apportioned FR land cost. However, the petitioner is directed to submit actual land usage for the asset in the instant petition and all other assets of the project and the increase in land cost shall be deducted from the respective assets at the time of truing up."

21. The details of land usage and pro-rata deduction of additional land compensation submitted by the Petitioner is as follows:

(₹ in lakh)						
Sl. No.	Assets	COD	Final Petition No.	True up Petition No.	Land Cost as per Auditor's Certificate	Pro-rata land cost deducted/ to be deducted (in line with the Commission's order dated 20.5.2015 in Petition No. 109/TT/2013)
1	Asset-28: 240 MVAR Bus Reactor at Agra (Asset-8 in Petition No. 1/TT/2019, Originally covered in 109/TT/2013)	1.1.2013	1/TT/2019	Covered in the instant true up petition	397.51	189.74 *
2	Asset-9: 400 kV 125 MVAR Bus Reactor III along with associated bays at 765/400 kV Agra (Augmentation) Sub-Station (Asset-IV in Petition No. 32/TT/2016)	1.6.2012	207/TT/2012	32/TT/2016	397.51	183.60
3	Asset-10: 400 kV 125 MVAR Bus Reactor II along with associated bays at 765/400 kV Agra (Augmentation) Sub-station (Asset-V in Petition No. 32/TT/2016)	1.6.2012	207/TT/2012	32/TT/2016	397.51	183.60
4	Asset-14-a: 1500 MVA ICT-1 at Agra Sub-station along with associated bays (Asset-III A in Petition No. 70/TT/2017)	1.6.2012	90/TT/2012	70/TT/2015	795.03	367.21
5	Asset-14-c: bays of 765 kV S/C Fatehpur-Agra Transmission Line at Fatehpur and Agra Sub-station (Asset-III C in Petition No. 70/TT/2017)	1.6.2012	194/TT/2012	70/TT/2015	443.16	204.69
6	Asset-15: 1500 MVA ICT-2 at Agra Sub-station along with associated bays (Asset-IV in Petition No. 70/TT/2017)	1.9.2012	90/TT/2012	70/TT/2015	795.03	361.07



Sl. No.	Assets	COD	Final Petition No.	True up Petition No.	Land Cost as per Auditor's Certificate	Pro-rata land cost deducted/ to be deducted (in line with the Commission's order dated 20.5.2015 in Petition No. 109/TT/2013)
TOTAL					3225.75	1489.90

**Land cost at Sl.No.-1 has already been deducted vide order dated 4.2.2020 in its true up Petition No. 1/TT/2019. Further, in line with the directions given by the Commission in order dated 20.5.2015 in Petition No. 109/TT/2013, land cost for remaining assets (Assets at Sl. No. 2 to 6 in above table) is being deducted from its capital cost.*

22. The land cost of Asset-28 (240 MVAR Bus Reactor at Agra Sub-station), has already been deducted vide order dated 4.2.2020 in its true-up Petition No. 1/TT/2019, ₹183.60 lakh from its COD cost and ₹6.14 lakh from its 2013-14 ACE.

23. The Petitioner has also submitted that Appeal No. 80 of 2017 has been filed before APTEL against land cost deduction and IDC deduction w.r.t. Agra Sub-station, which is pending adjudication before the APTEL.

24. We have considered the submissions of the Petitioner and further deducted pro-rata land cost from the transmission assets as submitted by the Petitioner, subject to the outcome of the Appeal No. 80 of 2017 which is pending adjudication before the APTEL.

Time over-run

25. As per IA, the transmission assets were scheduled to be put under commercial operation within 48 months from the date of IA i.e. which is 29.8.2008. The scheduled date of commercial operation (SCOD) of the transmission assets, actual COD and time over-run of the transmission assets are as follows:

Particulars	SCOD	COD	Time over-run
Combined Asset-1 to 5	1.9.2012	1.4.2012 (E-COD)	-
Combined Asset-6 to 11		1.5.2012 (E-COD)	-



Combined Asset-12 to 20		1.8.2012 (E-COD)	-
Combined Asset-21 to 28		13.8.2013 (E-COD)	-
Combined Asset-29 to 49		9.5.2012 (E-COD)	-
Asset-50		1.4.2014	578 days (Fully condoned)
Asset-51		8.9.2014	24 months and 7 days (16 months condoned)
Asset-52		30.12.2014	28 months (16 months condoned)
Asset-53		30.12.2014	28 months (16 months condoned)
Asset-54		8.1.2015	28 months (Fully condoned)
Asset-55		1.4.2014	582 days (Fully condoned)
Asset-56		2.6.2014	644 days (Fully condoned)
Asset-57	6.8.2012	1.4.2014	238 days (Not condoned)

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

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

27. The allowable IDC has been worked out considering the information submitted by the Petitioner for the individual assets separately on cash basis. The loan details submitted in Form-9C for 2014-19 tariff period and IDC computation sheet have been considered for the purpose of IDC calculation on cash and accrued basis. The undischarged IDC as on COD has been considered as ACE during the year in which it has been discharged.

28. BSPHCL has submitted that the Petitioner has failed to submit the excel format of detailed IDC discharge statement for Asset-50 to Asset-57 along with the amount of drawl, rate of interest, interest against each drawl, date of drawl interest



payment date upto COD and interest payment after COD as per the directions of the Commission and without such bifurcation of actual IDC and IEDC discharged, it will be difficult to ascertain the correct amount payable by BSPHCL. The documents relied upon by the Petitioner are vague, ambiguous and incomplete. Therefore, the Petitioner may be directed to submit the detailed bifurcation of IDC and IEDC discharged for the transmission assets along with the supporting documents.

29. In response, the Petitioner has submitted that vide affidavit dated 16.7.2021, the Petitioner has submitted the IDC statement along with calculation in excel format and Form-12 A for Asset-50 to Asset-57 has also been submitted. The Petitioner has further submitted that IEDC has been discharged till respective CODs and has prayed to consider the information furnished vide affidavit dated 16.7.2021 and allow IDC and IEDC as claimed in the instant petition.

30. The Commission vide order dated 25.4.2019 in Petition No. 162/TT/2018 in case of Asset-57 has disallowed the time over-run from SCOD to 31.3.2013, however, has allowed the IDC and IEDC for the period from 1.4.2013 to 31.3.2014. The relevant portion of the said order is as follows:

“24. As stated above, the SCOD of the instant asset was 6.8.2012 and the instant asset was ready on 1.4.2013. However, the instant asset was prevented from declaration of COD on 1.4.2013 due to non declaration of COD of the associated transmission line, i.e 400 kV D/C Raghunathpur TPS-Ranchi Transmission Line, under the scope of DVC. The petitioner has not furnished any documentary evidence to show that the instant asset was ready before 1.4.2013. Accordingly, we are not inclined to condone the time over-run of 238 days i.e. from SCOD (6.8.2012) to 31.3.2013. As such, the IDC and IEDC for the same period is not capitalised for the purpose of tariff in the instant petition. However, IDC and IEDC for the period from 1.4.2013 to 31.3.2014 will be capitalised as decided in para no. 20 of this order.”

31. We have considered the submissions of the Petitioner and BSPHCL. The Commission has allowed IDC and IEDC in case of Asset-57 vide order dated



25.4.2019 in Petition No. 162/TT/2018. Accordingly, based on the information furnished by the Petitioner, IDC considered are as follows:

(₹ in lakh)

Assets	IDC as per Auditor's Certificate	IDC Admissible	IDC Discharge as on COD	IDC Undischarged as on COD	IDC Discharge during				
	A	B	C	D=B-C	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-50	5450.27	4956.84	4157.96	798.88	798.88	-	-	-	-
Asset-51	1128.02	1008.25	1008.25	0.00	-	-	-	-	-
Asset-52	748.28	536.74	536.74	0.00	-	-	-	-	-
Asset-53	178.92	153.77	153.77	0.00	-	-	-	-	-
Asset-54	144.63	144.63	144.63	0.00	-	-	-	-	-
Asset-55	14113.03	13732.55	12056.45	1676.10	1676.10	-	-	-	-
Asset-56	175.99	175.99	175.99	0.00	-	-	-	-	-
Asset-57	41.87	32.57	30.46	2.11	2.11	-	-	-	-

32. The Petitioner has claimed IEDC for the transmission assets and submitted Auditors' Certificate in support of the same. The Petitioner has also submitted that entire IEDC has been discharged as on COD in respect of the transmission assets. Accordingly, IEDC is allowed as claimed subject to adjustment as per condonation of time over-run. The details of IEDC claimed and allowed are as follows:

(₹ in lakh)

Assets	IEDC claimed as per Auditor's Certificate	IEDC disallowed due to time over-run	IEDC allowed as on COD
	1	2	3= (1-2)
Asset-50	486.25	0.00	486.25
Asset-51	308.34	32.74	275.60
Asset-52	91.40	13.43	77.97
Asset-53	26.16	3.85	22.31
Asset-54	67.37	0.00	67.37
Asset-55	2622.26	0.00	2622.26
Asset-56	73.58	0.00	73.58
Asset-57	23.57	2.15	21.42

Initial Spares

33. Asset-1 to Asset-49 have been put under commercial operation during 2009-14 tariff period. Initial Spares for Asset-1 to Asset-49 has already been allowed as per Regulation 8 of the 2009 Tariff Regulations in their respective orders.

34. The Petitioner has submitted that the Commission has restricted Initial



Spares of Asset-1, Asset-9, Asset-14b, Asset-16, Asset-17a, Asset-17b, Asset-18, Asset-22, Asset-23, Asset-24, Asset-32, Asset-33, Asset-35, Asset-36, Asset-42, Asset-46, Asset-47, Asset-48 and Asset-49 in their respective orders.

35. The Petitioner has claimed the Initial Spares in respect of the individual transmission assets and has prayed to revise the Initial Spares allowed earlier in the light of judgement of the APTEL dated 14.9.2019 in Appeal No. 74 of 2017.

36. BSPHCL has submitted that the claim of Initial Spares by the Petitioner has not satisfied the calculation of Initial Spares as it has failed to produce relevant documents to substantiate the calculation of Initial Spares for the overall project. BSPHCL has further submitted that the Commission in various orders including Petition No. 504/TT/2020, observed that as per APTEL's judgment dated 14.9.2019 in Appeal No. 74 of 2017, Initial Spares are to be allowed on overall project basis only when the transmission project is completed and the overall project cost of the transmission assets is arrived at. BSPHCL has further submitted that the amount of Initial Spares claimed by the Petitioner is wrongly calculated..

37. In response, the Petitioner has submitted that calculation of Initial Spares for overall project basis has been provided at Enclosure-5 of the Petition. The Petitioner has prayed to remove the restriction on initial spares considering the calculations provided by the Petitioner and the same may be allowed as claimed as per the methodology allowed by the APTEL in judgment dated 14.9.2019 in Appeal No. 74 of 2017.

38. We have considered the submission of the Petitioner. As per the APTEL's judgment dated 14.9.2019 in Appeal No. 74 of 2017, Initial Spares are to be allowed



as per the norms on overall project cost. The APTEL in judgement dated 14.9.2019 in Appeal No. 74 of 2017 has held as follows:

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

39. In terms of the above, Initial Spares are to be allowed as percentage of the project cost as a whole. The entire transmission project was completed during 2014-19 tariff period, the overall project cost of the transmission assets is arrived at only when all the assets are combined while claiming the tariff for 2019-24 tariff period. Therefore, the Initial Spares are allowed on the basis of the cost of the individual assets in 2009-14 and 2014-19 tariff periods and the Initial Spares are allowed on the basis of the overall project cost in 2019-24 tariff period.

40. Further, Initial Spares for the transmission assets put under commercial operation during 2009-14 tariff period have already been determined by the Commission in accordance with Regulation 8 of the 2009 Tariff Regulations. Accordingly, the details of Initial Spares allowed in respect of the transmission assets for 2009-14 tariff period for Asset-1 to Asset-49 in previous orders are as follows:

Sub-station

(₹ in lakh)					
Assets	Capital Cost/ P&M Cost as on cut-off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per 2009 Tariff Regulations (in %)	Initial Spares allowable as per the 2009 Tariff Regulations	Initial Spares allowed during 2009-14 period (₹ in lakh)
Asset-1	759.10	30.39	2.50	18.68	18.68
Asset-2	1355.15	15.24	2.50	34.36	15.24
Asset-3	27012.09	438.56	2.50	681.37	438.56



Asset-4	32684.78	591.36	2.50	822.91	591.36
Asset-5	3251.06	76.43	2.50	81.40	76.43
Asset-6	5008.82	84.96	2.50	126.25	84.96
Asset-7	6645.07	113.95	2.50	167.46	113.95
Asset-8	6511.77	123.79	2.50	163.79	123.79
Asset-9	2176.89	54.97	2.50	52.37	52.37
Asset-10	2449.93	57.33	2.50	61.35	57.33
Asset-11	1385.23	19.82	2.50	35.01	19.82
Asset-12	1524.89	21.21	2.50	38.56	21.21
	1524.89	21.21	2.50	38.56	21.21
Asset-13	1281.75	19.82	2.50	32.36	19.82
Asset-14	15018.21	270.59	2.50	378.14	270.59
	1221.75	35.00	2.50	30.43	30.43
	11461.71	179.18	2.50	289.30	179.18
Asset-15	15018.21	270.59	2.50	378.14	270.59
Asset-16	1644.21	44.21	2.50	41.02	41.02
Asset-17	1248.99	35.00	2.50	31.13	31.13
	2042.21	57.13	2.50	50.90	50.90
Asset-18	747.46	44.85	2.50	18.02	18.02
Asset-19	1452.60	27.36	2.50	36.54	27.36
Asset-20	14608.02	355.00	2.50	365.46	355.00
Asset-21	4927.38	84.96	2.50	84.96	84.96
Asset-22	5926.66	153.10	2.50	148.04	148.04
Asset-23	5125.07	134.31	2.50	127.97	127.97
Asset-24	2078.14	43.26	2.50	43.26	43.26
Asset-25	8053.09	192.54	2.50	192.54	192.54
Asset-26	9353.48	205.95	2.50	205.95	205.95
Asset-27	4556.02	103.48	2.50	103.48	103.48
Asset-28	6042.67	149.65	2.50	149.65	149.65
Asset-29	10919.23	264.65	2.50	273.19	264.65
Asset-30	11162.49	267.75	2.50	279.35	267.75
Asset-31	11167.18	270.12	2.50	279.41	270.12
Asset-32	946.46	20.75	2.50	23.74	20.75
Asset-34	4891.80	54.14	2.50	124.04	54.14
Asset-35	5321.44	127.00	2.50	133.19	127.00
Asset-37	3995.89	88.68	2.50	100.18	88.68
Asset-38	4346.17	103.04	2.50	108.80	103.04
Asset-39	4868.37	115.78	2.50	121.86	115.78
Asset-40	1815.92	39.84	2.50	45.54	39.84
Asset-41	1811.41	39.73	2.50	45.43	39.73
Asset-42	2587.14	81.06	2.50	64.26	64.26
Asset-43	6460.45	127.60	2.50	162.38	127.60
Asset-44	13515.79	175.22	2.50	342.07	175.22
Asset-45	13540.17	155.80	2.50	343.19	155.80
Asset-46	2000.98	57.52	2.50	49.83	49.83



Asset-47	1445.22	36.27	2.50	35.58	35.58
Asset-48	556.41	21.27	2.50	13.72	13.72
Asset-49	681.46	18.14	2.50	17.01	17.01

Transmission Line

Assets	Capital cost/ P&M cost as on cut-off date (₹ in lakh)	Initial Spares Claimed (₹ in lakh)	Norms as per the 2009Tariff Regulations (in %)	(₹ in lakh)	
				Initial Spares allowable as per 2009Tariff Regulations	Initial Spares Allowed during 2009- 14period (₹ in lakh)
Asset-5	4492.58	0.00	0.75%	33.95	0.00
Asset-19	3993.22	20.96	0.75%	30.02	20.96
Asset-24	16677.89	125.02	0.75%	122.56	122.56
Asset-32	10633.09	81.12	0.75%	79.74	79.74
Asset-33	24119.84	181.75	0.75%	180.89	180.89
Asset-35	21406.87	162.00	0.75%	160.54	160.54
Asset-36	36484.96	279.14	0.75%	273.60	273.60

41. Further, the Initial Spares for the transmission assets put under commercial operation for 2014-19 tariff period are allowable subject to the norm in Regulation 13(d) of the 2014 Tariff Regulations. Accordingly, the details of Initial Spares allowed in respect of the transmission assets put under commercial operation in 2014-19 tariff period are as follows:

Sub-station

Assets	P&M cost considered as on cut-off date	Initial Spares claimed	Norms as per the 2014 Tariff Regulations (in %)	Initial Spares allowable as per the 2014 Tariff Regulations	Initial Spares allowed	(₹ in lakh)			
						Discharge of Initial Spares			
						As on COD	2014-15	2017-18	2018-19
Asset-50	10508.21	410.00	6.00	644.57	410.00	410.00	-	-	-
Asset-53	532.94	22.03	4.00	21.29	21.29	21.29	-	-	-
Asset-54	1833.28	67.17	4.00	73.59	67.17	67.17	-	-	-
Asset-55	4573.51	177.36	4.00	184.71	177.36	177.36	-	-	-
Asset-56	3271.06	130.62	4.00	130.85	130.62	130.62	-	-	-
Asset-57	683.71	16.00	6.00	42.62	16.00	16.00	-	-	-

Transmission Line

Assets	P&M cost considered as on cut-off date	Initial Spares claimed	Norms as per the 2014 Tariff Regulations (in %)	Initial Spares allowable as per the 2014 Tariff Regulations	Initial Spares allowed	(₹ in lakh)			
						Discharge of Initial Spares			
						As on COD	2014-15	2017-18	2018-19
Asset-50	22302.32	214.00	1.00	223.11	214.00	214.00	-	-	-
Asset-51	11112.21	107.00	1.00	111.16	107.00	107.00	-	-	-



Assets	P&M cost considered as on cut-off date	Initial Spares claimed	Norms as per the 2014 Tariff Regulations (in %)	Initial Spares allowable as per the 2014 Tariff Regulations	Initial Spares allowed	Discharge of Initial Spares			
						As on COD	2014-15	2017-18	2018-19
Asset-52	3750.22	37.00	1.00	37.51	37.00	37.00	-	-	-
Asset-55	58823.53	446.22	1.00	589.67	446.22	446.22	-	-	-

Capital cost as on COD

42. The trued-up capital cost for the Combined Asset-1 to 5, Combined Asset-6 to 11, Combined Asset-12 to 20, Combined Asset-21 to 28 and Combined Asset-29 to 49 as approved by the Commission vide order dated 30.3.2016 in Petition No. 119/TT/2015, order dated 20.6.2016 in Petition No. 32/TT/2016, order dated 18.4.2016 in Petition No. 70/TT/2015, order dated 4.2.2020 in Petition No. 1/TT/2019 and order dated 6.12.2017 in Petition No. 185/TT/2016 respectively, has been considered as on 31.3.2014.

43. The land cost to be deducted as discussed in para 21, has been adjusted from the trued up capital cost as on 31.3.2014 from the Combined Asset-6 to 11, Combined Asset-12 to 20 and Combined Asset-21 to 28 as approved by the Commission vide order dated 20.6.2016 in Petition No. 32/TT/2016, order dated 18.4.2016 in Petition No. 70/TT/2015 and order dated 4.2.2020 in Petition No. 1/TT/2019 respectively.

44. Accordingly, the capital cost allowed as on 31.3.2014 or as on COD are as follows:



(₹ in lakh)

Assets	Capital cost as on 1.4.2014 or COD whichever is later as per Auditor's Certificate	Less: IDC as on COD due to			Less: IEDC disallowed as on COD due to time over-run	Excess Initial Spares as on COD	Capital cost considered as on 1.4.2014
		Time over-run	Computational difference	Un-discharged IDC			
	1	2		3	4=1-2-3	5	6=1-4-5
Combined Asset-1 to 5	67543.61	0.00	0.00	0.00	0.00	0.00	67543.61
Combined Asset-6 to 11	23248.15 (23615.35-367.20)*	0.00	0.00	0.00	0.00	0.00	23248.15
Combined Asset-12 to 20	69824.47 (70757.44-932.97)*	0.00	0.00	0.00	0.00	0.00	69824.47
Combined Asset-21 to 28	56513.32#	0.00	0.00	0.00	0.00	0.00	56513.32
Combined Asset-29 to 49	240298.59	0.00	0.00	0.00	0.00	0.00	240298.59
Asset-50	36467.78	0.00	493.43	798.88	0.00	0.00	35175.47
Asset-51	11716.58	119.77	0.00	0.00	32.74	0.00	11564.07
Asset-52	4204.57	211.54	0.00	0.00	13.43	0.00	3979.60
Asset-53	700.66	25.15	0.00	0.00	3.85	0.74	670.92
Asset-54	1279.59	0.00	0.00	0.00	0.00	0.00	1279.59
Asset-55	76395.14	0.00	380.48	1676.10	0.00	0.00	74878.56
Asset-56	2076.33	0.00	0.00	0.00	0.00	0.00	2076.33
Asset-57	749.15	9.30	0.00	2.11	2.15	0.00	735.59

* Pro-rata land cost is deducted as submitted by the Petitioner from the approved cost as on 31.3.2014 in the respective previous orders

#Land cost of Asset-28 (240 MVAR Bus Reactor at Agra Sub-station) has already been deducted vide order dated 4.2.2020 in its true up Petition No. 1/TT/2019, ₹183.60 lakh from its COD cost and ₹6.14 lakh from its 2013-14 ACE

Additional Capital Expenditure ("ACE")

45. The ACE approved for the transmission assets covered in the previous orders are as follows:

(₹ in lakh)

Particulars	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-1 to 5	1410.75	-	-	-	-
Combined Asset-6 to 11	150.32	560.10	-	-	-
Combined Asset-12 to 20	1772.79	-	-	-	-
Combined Asset-21 to 28	3001.70	854.12	1590.50	225.14	280.88
Combined Asset-29 to 49	2392.39	2377.48	1931.12	-	-
Asset-50	6624.31	-	-	-	-
Asset-51	446.66	262.39	172.47	-	-
Asset-52	-	262.39	172.47	-	-
Asset-53	-	16.50	30.88	-	-



Particulars	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-54	489.86	244.93	81.64	-	-
Asset-55	4637.22	2699.66	1365.28	-	-
Asset-56	1315.97	75.88	429.99	-	-
Asset-57	-	-	-	8.91	0.40

46. The Petitioner has submitted that ACE has been claimed under Regulations 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations and the same is within the cut-off date. The Petitioner has claimed the following ACE in respect of the transmission assets and has submitted Auditor's Certificate in support of its claim:

(₹ in lakh)

Particulars	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-1 to 5	686.90	164.34	55.28	433.94	53.00
Combined Asset-6 to 11	150.32	124.48	199.72	57.12	25.54
Combined Asset-12 to 20	894.02	530.44	727.39	187.37	44.09
Combined Asset-21 to 28	2853.22	854.11	1590.5	145.94	311.29
Combined Asset-29 to 49	2392.19	1412.74	439.59	425.53	358.05
Asset-50	1877.10	811.14	701.06	115.06	267.69
Asset-51	12163.24	281.31	104.02	0.00	0.00
Asset-52	4204.57	281.31	104.02	0.00	0.00
Asset-53	700.66	33.00	4.36	1.18	8.84
Asset-54	1769.45	314.76	11.81	0.00	0.00
Asset-55	2934.86	612.82	420.76	38.48	13.20
Asset-56	3392.30	114.31	347.18	13.80	30.58
Asset-57	50.40	57.83	26.03	2.32	0.00

47. Thus, ACE claimed includes the accrued IDC discharged during the 2014-19 tariff period. It is observed that the total estimated completion cost including ACE for the 2014-19 period is within the RCE approved cost.

48. BSPHCL has submitted that the documents pertaining to justification of future ACE are not enough to substantiate the claim made by the Petitioner and, hence, the same are denied.

49. In response, the Petitioner has submitted that the claim of ACE has been made in accordance with the relevant provisions of the 2014 Tariff Regulations and



ACE details/ liability flow statement has been submitted vide affidavit dated 16.7.2021, and the same may be allowed as claimed.

50. MPPMCL has submitted that the Petitioner has claimed ACE and de-capitalization of various equipment during the 2014-19 tariff period on the basis of Auditor's certificate and has not submitted any document demonstrating that the Petitioner has made the claim in a transparent manner. Further, while the Petitioner has supported its claim with Form-7, the claim is devoid of proper details and justification and, hence, the same may only be allowed after due prudence check.

51. In response, the Petitioner has submitted that the ACE claimed is as per the relevant provisions of the 2014 Tariff Regulations and has further reiterated its submissions.

52. We have considered the submissions of the Petitioner, MPPMCL and BSPHCL. ACE claimed by the Petitioner has been allowed under Regulation 14(1)(i) and Regulation 14(1)(ii) of the 2014 Tariff Regulations as it is towards balance and retention payments and works deferred for execution. The undischarged IDC as on COD has been allowed as ACE. The details of ACE allowed are as follows:

Combined Asset-1 to 5	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE to the extent of balance & retention payments	686.90	164.34	55.28	433.94	53.00
Work deferred for execution/ ACE to the extent of unexecuted work	-	-	-	-	-
IDC Discharged	-	-	-	-	-
Total ACE allowed	686.90	164.34	55.28	433.94	53.00

(₹ in lakh)



(₹ in lakh)

Combined Asset-6 to 11	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE to the extent of balance & retention payments	150.32	124.48	199.72	57.12	25.54
Work deferred for execution/ ACE to the extent of unexecuted work	-	-	-	-	-
IDC Discharged	-	-	-	-	-
Total ACE allowed	150.32	124.48	199.72	57.12	25.54

(₹ in lakh)

Combined Asset-12 to 20	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE to the extent of balance & retention payments	894.02	530.44	727.39	187.37	44.09
Work deferred for execution/ ACE to the extent of unexecuted work	-	-	-	-	-
IDC Discharged	-	-	-	-	-
Total ACE allowed	894.02	530.44	727.39	187.37	44.09

(₹ in lakh)

Combined Asset-21 to 28	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE to the extent of balance & retention payments	2853.22	854.11	1590.50	145.94	311.29
Work deferred for execution/ ACE to the extent of unexecuted work	-	-	-	-	-
IDC Discharged	-	-	-	-	-
Total ACE allowed	2853.22	854.11	1590.50	145.94	311.29

(₹ in lakh)

Combined Asset-29 to 49	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE to the extent of balance & retention payments	2373.62	1370.20	439.59	425.53	358.05
Work deferred for execution/ ACE to the extent of unexecuted work	18.77	42.54	-	-	-
IDC Discharged	-	-	-	-	-
Total ACE allowed	2392.39	1412.74	439.59	425.53	358.05

(₹ in lakh)

Asset-50	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE to the extent of balance & retention payments	1877.10	811.14	701.06	115.06	267.69
Work deferred for execution/ ACE to the extent of unexecuted work	-	-	-	-	-
IDC Discharged	798.88	-	-	-	-
Total ACE allowed	2675.98	811.14	701.06	115.06	267.69



(₹ in lakh)

Asset-51	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE to the extent of balance & retention payments	446.66	281.31	104.02	-	-
Work deferred for execution/ ACE to the extent of unexecuted work	-	-	-	-	-
IDC Discharged	-	-	-	-	-
Total ACE allowed	446.66	281.31	104.02	-	-

(₹ in lakh)

Asset-52	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE to the extent of balance & retention payments	-	281.31	104.02	-	-
Work deferred for execution/ ACE to the extent of unexecuted work	-	-	-	-	-
IDC Discharged	-	-	-	-	-
Total ACE allowed	-	281.31	104.02	-	-

(₹ in lakh)

Asset-53	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE to the extent of balance & retention payments	-	33.00	4.36	1.18	8.84
Work deferred for execution/ ACE to the extent of unexecuted work	-	-	-	-	-
IDC Discharged	-	-	-	-	-
Total ACE allowed	-	33.00	4.36	1.18	8.84

(₹ in lakh)

Asset-54	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE to the extent of balance & retention payments	489.96	314.76	11.81	-	-
Work deferred for execution/ ACE to the extent of unexecuted work	-	-	-	-	-
IDC Discharged	-	-	-	-	-
Total ACE allowed	489.96	314.76	11.81	-	-

(₹ in lakh)

Asset-55	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE to the extent of balance & retention payments	1137.44	354.54	420.76	38.48	13.20
Work deferred for execution/ ACE to the extent of unexecuted work	1797.41	258.28	-	-	-
IDC Discharged	1676.10	-	-	-	-
Total ACE allowed	4610.96	612.82	420.76	38.48	13.20



(₹ in lakh)

Asset-56	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE to the extent of balance & retention payments	1315.97	114.31	347.18	13.80	30.58
Work deferred for execution/ ACE to the extent of unexecuted work	-	-	-	-	-
IDC Discharged	-	-	-	-	-
Total ACE allowed	1315.97	114.31	347.18	13.80	30.58

(₹ in lakh)

Asset-57	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE to the extent of balance & retention payments	-	-	-	-	-
Work deferred for execution/ ACE to the extent of unexecuted work	-	-	-	-	-
IDC Discharged	2.11	-	-	-	-
Total ACE allowed	2.11	-	-	-	-

Capital Cost for 2014-19 tariff period

53. Accordingly, the capital cost of the transmission assets considered for 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	FR approved capital cost	RCE approved capital cost	Capital cost as on COD on cash basis	ACE					Total capital cost as on 31.3.2019
				2014-15	2015-16	2016-17	2017-18	2018-19	
Combined Asset-1 to 5	71820.77	77882.21	67543.61	686.90	164.34	55.28	433.94	53.00	68937.07
Combined Asset-6 to 11	23031.09	25084.65	23248.15	150.32	124.48	199.72	57.12	25.54	23805.33
Combined Asset-12 to 20	72745.61	76832.83	69824.47	894.02	530.44	727.39	187.37	44.09	72207.78
Combined Asset-21 to 28	70338.58	66130.68	56513.32	2853.22	854.11	1590.50	145.94	311.29	62268.38
Combined Asset-29 to 49	312472.81	257557.89	240298.59	2392.39	1412.74	439.59	425.53	358.05	245326.89
Asset-50	38629.76	43092.09	35175.47	2675.98	811.14	701.06	115.06	267.69	39746.40
Asset-51	4380.21	13468.90	11564.07	446.66	281.31	104.02	0.00	0.00	12396.06
Asset-52	1978.18	4948.23	3979.60	0.00	281.31	104.02	0.00	0.00	4364.93
Asset-53	488.45	792.17	670.92	0.00	33.00	4.36	1.18	8.84	718.30
Asset-54	2428.27	2249.13	1279.59	489.86	314.76	11.81	0.00	0.00	2096.02
Asset-55	79015.04	83935.02	74878.56	4610.96	612.82	420.76	38.48	13.20	80574.78
Asset-56	5749.82	4194.69	2076.33	1315.97	114.31	347.18	13.80	30.58	3898.17
Asset-57	1195.04	885.73	735.59	2.11	0.00	0.00	0.00	0.00	737.70



Debt-Equity Ratio

54. The Petitioner has considered debt-equity ratio of 70:30 as on COD and for ACE post COD. Debt-equity ratio of 70:30 has been considered for capital cost as on COD and ACE during the 2014-19 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 as on 31.3.2019 are as follows:

Combined Asset-1 to 5	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	47280.53	70.00	48255.95	70.00
Equity	20263.08	30.00	20681.12	30.00
Total	67543.61	100.00	68937.07	100.00
Combined Asset-6 to 11	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	16273.71	70.00	16663.73	70.00
Equity	6974.45	30.00	7141.60	30.00
Total	23248.15	100.00	23805.33	100.00
Combined Asset-12 to 20	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	48877.13	70.00	50545.45	70.00
Equity	20947.34	30.00	21662.33	30.00
Total	69824.47	100.00	72207.78	100.00
Combined Asset-21 to 28	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	39559.32	70.00	43587.87	70.00
Equity	16954.00	30.00	18680.51	30.00
Total	56513.32	100.00	62268.38	100.00
Combined Asset-29 to 49	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	168209.01	70.00	171728.82	70.00
Equity	72089.58	30.00	73598.07	30.00
Total	240298.59	100.00	245326.89	100.00
Asset-50	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ in lakh)		(₹ in lakh)	



Debt	24622.83	70.00	27822.82	70.00
Equity	10552.64	30.00	11923.82	30.00
Total	35175.47	100.00	39746.40	100.00
Asset-51	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	8094.85	70.00	8677.24	70.00
Equity	3469.22	30.00	3718.82	30.00
Total	11564.07	100.00	12396.06	100.00
Asset-52	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	2785.72	70.00	3055.45	70.00
Equity	1193.88	30.00	1309.48	30.00
Total	3979.60	100.00	4364.93	100.00
Asset-53	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	469.64	70.00	502.82	70.00
Equity	201.28	30.00	215.48	30.00
Total	670.92	100.00	718.30	100.00
Asset-54	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	895.71	70.00	1467.22	70.00
Equity	383.88	30.00	628.80	30.00
Total	1279.59	100.00	2096.02	100.00
Asset-55	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	52414.99	70.00	56402.36	70.00
Equity	22463.57	30.00	24172.43	30.00
Total	74878.56	100.00	80574.78	100.00
Asset-56	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	1453.43	70.00	2728.73	70.00
Equity	622.90	30.00	1169.44	30.00
Total	2076.33	100.00	3898.17	100.00
Asset-57	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	514.91	70.00	516.39	70.00
Equity	220.68	30.00	221.31	30.00
Total	735.59	100.00	737.70	100.00



Depreciation

55. The Petitioner's claim towards depreciation in the instant petition was found to be higher than the depreciation allowed in previous orders. The Petitioner has neither given any justification for claiming higher depreciation than that allowed earlier nor made any specific prayer for allowing higher depreciation in this petition. It is observed that in previous orders, depreciation for IT equipment was allowed @5.28%. The Petitioner now at the time of truing-up of the tariff of 2014-19 period has segregated the IT equipment cost from the sub-station cost and has considered depreciation rate for IT Equipment @15% and the salvage value for IT Equipment as NIL as per the 2014 Tariff Regulations. A similar issue had come up in some earlier petitions filed by the Petitioner. In this regard, the Commission in order dated 9.5.2020 in Petition No. 19/TT/2020 held 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 apart of the capital expenditure to "IT Equipment". The Petitioner has adopted similar methodology not only in this but in some of the other petitions listed along with the instant petition on 26.2.2020. It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @15% at the time of truing up of the tariff of 2014- 19 period. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the additional capital expenditure, incurred upto 31.3.2019, admitted by the Commission after prudence check. We are of the view that scope of truing up exercise is restricted to truing up of the capital expenditure already admitted and apportionment or reapportionment of the capital expenditure cannot be allowed at the time of truing up. Therefore, we are not inclined to consider the Petitioner's prayer for apportionment of capital expenditure towards IT Equipment and allowing depreciation @ 15% from 1.4.2014 onwards. Accordingly, the depreciation @ 5.28% has been considered for IT Equipment as part of the substation upto 31.3.2019 while



truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @ 15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations.”

56. In line with the above decision in order dated 9.5.2020 in Petition No. 19/TT/2020, depreciation has been considered for IT equipment @5.28% as part of the sub-station upto 31.3.2019 while truing up the capital expenditure for the 2014-19 period. However, for 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @15% for the balance depreciable value of the IT equipment in accordance with Regulation 33 of the 2019 Tariff Regulations. The gross block during 2014-19 tariff period has been depreciated at weighted average rate of depreciation (WAROD) and working of WAROD is placed at Annexure-I. WAROD has been worked out after considering the depreciation rates of the transmission assets as prescribed in the 2014 Tariff Regulations and depreciation allowed during 2014-19 tariff period are as follows:

(₹ in lakh)

Combined Asset-1 to 5						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Gross Block	67543.61	68230.51	68394.85	68450.13	68884.07
B	Addition during the year 2014-19	686.90	164.34	55.28	433.94	53.00
C	Closing Gross Block (A+B)	68230.51	68394.85	68450.13	68884.07	68937.07
D	Average Gross Block (A+C)/2	67887.06	68312.68	68422.49	68667.10	68910.57
E	Depreciable value(D*90%)	60661.96	61045.02	61143.85	61364.00	61583.12
F	Weighted average rate of Depreciation (WAROD) (in %)	5.27	5.27	5.27	5.27	5.27
G	Lapsed useful life at the beginning of the year (Year)	1.00	2.00	3.00	4.00	5.00
H	Balance useful life at the beginning of the year (Year)	24.00	23.00	22.00	21.00	20.00
I	Cumulative Depreciation at the beginning of the year	6785.95	10331.86	13900.24	17474.43	21061.52
J	Remaining Aggregate Depreciable Value at the beginning of the year (E-I)	53876.01	50713.16	47243.60	43889.57	40521.60
K	Depreciation during the year	3545.91	3568.38	3574.18	3587.10	3599.95
L	Cumulative Depreciation at the end of the year (I+K)	10331.86	13900.24	17474.43	21061.52	24661.47
M	Remaining Aggregate Depreciable Value at the end of the year (E-L)	50330.10	47144.78	43669.42	40302.48	36921.65



(₹ in lakh)

Combined Asset-6 to 11						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Gross Block	23248.15	23398.47	23522.95	23722.67	23779.79
B	Addition during the year 2014-19	150.32	124.48	199.72	57.12	25.54
C	Closing Gross Block (A+B)	23398.47	23522.95	23722.67	23779.79	23805.33
D	Average Gross Block (A+C)/2	23323.31	23460.71	23622.81	23751.23	23792.56
E	Depreciable value(D*90%)	20490.55	20614.21	20760.10	20875.68	20912.88
F	Weighted average rate of Depreciation (WAROD) (in %)	5.15	5.15	5.15	5.15	5.15
G	Lapsed useful life at the beginning of the year (Year)	2.00	3.00	4.00	5.00	6.00
H	Balance useful life at the beginning of the year (Year)	23.00	22.00	21.00	20.00	19.00
I	Cumulative Depreciation at the beginning of the year	1998.54	3199.32	4407.35	5623.93	6847.29
J	Remaining Aggregate Depreciable Value at the beginning of the year (E-I)	18492.01	17414.89	16352.76	15251.75	14065.59
K	Depreciation during the year	1200.78	1208.02	1216.58	1223.36	1225.54
L	Cumulative Depreciation at the end of the year (I+K)	3199.32	4407.35	5623.93	6847.29	8072.83
M	Remaining Aggregate Depreciable Value at the end of the year (E-L)	17291.23	16206.87	15136.18	14028.39	12840.05

(₹ in lakh)

Combined Asset-12 to 20						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Gross Block	69824.47	70718.49	71248.93	71976.32	72163.69
B	Addition during the year 2014-19	894.02	530.44	727.39	187.37	44.09
C	Closing Gross Block (A+B)	70718.49	71248.93	71976.32	72163.69	72207.78
D	Average Gross Block (A+C)/2	70271.48	70983.71	71612.63	72070.01	72185.74
E	Depreciable value(D*90%)	62097.54	62738.55	63304.57	63716.22	63820.37
F	Weighted average rate of Depreciation (WAROD) (in %)	5.18%	5.18%	5.18%	5.18%	5.18%
G	Lapsed useful life at the beginning of the year (Year)	2.00	3.00	4.00	5.00	6.00
H	Balance useful life at the beginning of the year (Year)	24.00	23.00	22.00	21.00	20.00
I	Cumulative Depreciation at the beginning of the year	5511.21	9150.38	12827.20	16537.22	20271.39
J	Remaining Aggregate Depreciable Value at the beginning of the year (E-I)	56586.33	53588.17	50477.38	47179.00	43548.99
K	Depreciation during the year	3639.17	3676.81	3710.02	3734.17	3740.28
L	Cumulative Depreciation at the end of the year (I+K)	9150.38	12827.20	16537.22	20271.39	24011.67
M	Remaining Aggregate Depreciable Value at the end of the year (E-L)	52947.16	49911.35	46767.36	43444.83	39808.71

(₹ in lakh)

Combined Asset-21 to 28						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Gross Block	56513.32	59366.54	60220.65	61811.15	61957.09



Combined Asset-21 to 28						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
B	Addition during the year 2014-19	2853.22	854.11	1590.50	145.94	311.29
C	Closing Gross Block (A+B)	59366.54	60220.65	61811.15	61957.09	62268.38
D	Average Gross Block (A+C)/2	57939.93	59793.60	61015.90	61884.12	62112.74
E	Depreciable value(D*90%)	50627.91	52228.44	53327.10	54108.50	54314.25
F	Weighted average rate of Depreciation (WAROD) (in %)	5.12	5.12	5.12	5.11	5.12
G	Lapsed useful life at the beginning of the year (Year)	0.00	1.00	2.00	3.00	4.00
H	Balance useful life at the beginning of the year (Year)	27.00	26.00	25.00	24.00	23.00
I	Cumulative Depreciation at the beginning of the year	1735.17	4701.42	7760.61	10882.03	14047.38
J	Remaining Aggregate Depreciable Value at the beginning of the year (E-I)	48892.74	47527.02	45566.49	43226.47	40266.87
K	Depreciation during the year	2966.25	3059.19	3121.42	3165.35	3177.42
L	Cumulative Depreciation at the end of the year (I+K)	4701.42	7760.61	10882.03	14047.38	17224.80
M	Remaining Aggregate Depreciable Value at the end of the year (E-L)	45926.49	44467.83	42445.07	40061.12	37089.45

(₹ in lakh)

Combined Asset-29 to 49						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Gross Block	240298.59	242690.98	244103.72	244543.31	244968.84
B	Addition during the year 2014-19	2392.39	1412.74	439.59	425.53	358.05
C	Closing Gross Block (A+B)	242690.98	244103.72	244543.31	244968.84	245326.89
D	Average Gross Block (A+C)/2	241494.79	243397.35	244323.52	244756.08	245147.87
E	Depreciable value(D*90%)	215441.19	217153.28	217986.83	218376.13	218728.74
F	Weighted average rate of Depreciation (WAROD) (in %)	5.22	5.22	5.22	5.22	5.22
G	Lapsed useful life at the beginning of the year (Year)	1.00	2.00	3.00	4.00	5.00
H	Balance useful life at the beginning of the year (Year)	30.00	29.00	28.00	27.00	26.00
I	Cumulative Depreciation at the beginning of the year	23039.62	35647.03	48351.51	61102.65	73875.42
J	Remaining Aggregate Depreciable Value at the beginning of the year (E-I)	192401.57	181506.24	169635.31	157273.48	144853.33
K	Depreciation during the year	12607.41	12704.48	12751.14	12772.76	12793.45
L	Cumulative Depreciation at the end of the year (I+K)	35647.03	48351.51	61102.65	73875.42	86668.87
M	Remaining Aggregate Depreciable Value at the end of the year (E-L)	179794.16	168801.76	156884.17	144500.71	132059.88

(₹ in lakh)

Asset-50						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Gross Block	35175.47	37851.45	38662.59	39363.65	39478.71
B	Addition during the year 2014-19	2675.98	811.14	701.06	115.06	267.69
C	Closing Gross Block (A+B)	37851.45	38662.59	39363.65	39478.71	39746.40



Asset-50						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
D	Average Gross Block (A+C)/2	36513.46	38257.02	39013.12	39421.18	39612.55
E	Depreciable value(D*90%)	35285.83	36979.33	37735.20	38143.26	38334.63
F	Weighted average rate of Depreciation (WAROD) (in %)	5.11	5.11	5.11	5.11	5.11
G	Lapsed useful life at the beginning of the year (Year)	0.00	1.00	2.00	3.00	4.00
H	Balance useful life at the beginning of the year (Year)	31.00	30.00	29.00	28.00	27.00
I	Cumulative Depreciation at the beginning of the year	0.00	1866.30	3821.43	5814.56	7827.48
J	Remaining Aggregate Depreciable Value at the beginning of the year (E-I)	31806.12	31464.77	30190.12	28564.25	26723.56
K	Depreciation during the year	1866.30	1955.14	1993.13	2012.92	2023.03
L	Cumulative Depreciation at the end of the year (I+K)	1866.30	3821.43	5814.56	7827.48	9850.51
M	Remaining Aggregate Depreciable Value at the end of the year (E-L)	29939.82	29509.63	28196.99	26551.32	24700.53

(₹ in lakh)

Asset-51						
	Particulars	2014-15 (Pro-rata for 205 days)	2015-16	2016-17	2017-18	2018-19
	Depreciation					
A	Opening Gross Block	11564.07	12010.73	12292.04	12396.06	12396.06
B	Addition during the year 2014-19	446.66	281.31	104.02	0.00	0.00
C	Closing Gross Block (A+B)	12010.73	12292.04	12396.06	12396.06	12396.06
D	Average Gross Block (A+C)/2	11787.40	12151.39	12344.05	12396.06	12396.06
E	Depreciable value(D*90%)	10608.66	10936.25	11109.65	11156.45	11156.45
F	Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28	5.28	5.28
G	Lapsed useful life at the beginning of the year (Year)	0.00	0.00	1.00	2.00	3.00
H	Balance useful life at the beginning of the year (Year)	35.00	35.00	34.00	33.00	32.00
I	Cumulative Depreciation at the beginning of the year	0.00	349.55	991.15	1642.91	2297.42
J	Remaining Aggregate Depreciable Value at the beginning of the year (E-I)	10608.66	10586.69	10118.50	9513.54	8859.03
K	Depreciation during the year	349.55	641.59	651.77	654.51	654.51
L	Cumulative Depreciation at the end of the year (I+K)	349.55	991.15	1642.91	2297.42	2951.94
M	Remaining Aggregate Depreciable Value at the end of the year (E-L)	10259.11	9945.10	9466.73	8859.03	8204.52



(₹ in lakh)

Asset-52						
	Particulars	2014-15 (Pro-rata for 92 days)	2015-16	2016-17	2017-18	2018-19
	Depreciation					
A	Opening Gross Block	3979.60	3979.60	4260.91	4364.93	4364.93
B	Addition during the year 2014-19	0.00	281.31	104.02	0.00	0.00
C	Closing Gross Block (A+B)	3979.60	4260.91	4364.93	4364.93	4364.93
D	Average Gross Block (A+C)/2	3979.60	4120.25	4312.92	4364.93	4364.93
E	Depreciable value(D*90%)	3979.60	4120.25	4312.92	4364.93	4364.93
F	Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28	5.28	5.28
G	Lapsed useful life at the beginning of the year (Year)	0.00	0.00	1.00	2.00	3.00
H	Balance useful life at the beginning of the year (Year)	35.00	35.00	34.00	33.00	32.00
I	Cumulative Depreciation at the beginning of the year	0.00	52.96	270.51	498.23	728.70
J	Remaining Aggregate Depreciable Value at the beginning of the year (E-I)	3581.64	3655.26	3611.11	3430.20	3199.73
K	Depreciation during the year	52.96	217.55	227.72	230.47	230.47
L	Cumulative Depreciation at the end of the year (I+K)	52.96	270.51	498.23	728.70	959.17
M	Remaining Aggregate Depreciable Value at the end of the year (E-L)	3528.67	3437.71	3383.39	3199.73	2969.26

(₹ in lakh)

Asset-53						
	Particulars	2014-15 (Pro-rata for 92 days)	2015-16	2016-17	2017-18	2018-19
	Depreciation					
A	Opening Gross Block	670.92	670.92	703.92	708.28	709.46
B	Addition during the year 2014-19	0.00	33.00	4.36	1.18	8.84
C	Closing Gross Block (A+B)	670.92	703.92	708.28	709.46	718.30
D	Average Gross Block (A+C)/2	670.92	687.42	706.10	708.87	713.88
E	Depreciable value(D*90%)	603.83	618.68	635.49	637.98	642.49
F	Weighted average rate of Depreciation (WAROD) (in %)	5.40	4.40	5.39	5.39	5.39
G	Lapsed useful life at the beginning of the year (Year)	0.00	0.00	1.00	2.00	3.00
H	Balance useful life at the beginning of the year (Year)	23.00	23.00	22.00	21.00	20.00
I	Cumulative Depreciation at the beginning of the year	0.00	9.13	46.22	84.29	122.51
J	Remaining Aggregate Depreciable Value at the beginning of the year (E-I)	603.83	609.55	589.27	553.69	519.98
K	Depreciation during the year	9.13	37.09	38.07	38.22	38.49
L	Cumulative Depreciation at the end of the year (I+K)	9.13	46.22	84.29	122.51	161.00
M	Remaining Aggregate Depreciable Value at the end of the year (E-L)	594.70	572.46	551.20	515.47	481.49



(₹ in lakh)

Asset-54						
	Particulars	2014-15 (Pro-rata for 83 days)	2015-16	2016-17	2017-18	2018-19
	Depreciation					
A	Opening Gross Block	1279.59	1769.45	2084.21	2096.02	2096.02
B	Addition during the year 2014-19	489.86	314.76	11.81	0.00	0.00
C	Closing Gross Block (A+B)	1769.45	2084.21	2096.02	2096.02	2096.02
D	Average Gross Block (A+C)/2	1524.52	1926.83	2090.12	2096.02	2096.02
E	Depreciable value(D*90%)	1375.45	1737.53	1884.49	1889.80	1889.80
F	Weighted average rate of Depreciation (WAROD) (in %)	5.23	5.24	5.24	5.24	5.24
G	Lapsed useful life at the beginning of the year (Year)	0.00	0.00	1.00	2.00	3.00
H	Balance useful life at the beginning of the year (Year)	24.00	24.00	23.00	22.00	21.00
I	Cumulative Depreciation at the beginning of the year	0.00	18.12	119.07	228.63	338.50
J	Remaining Aggregate Depreciable Value at the beginning of the year (E-I)	1375.45	1719.41	1765.42	1661.17	1551.30
K	Depreciation during the year	18.12	100.95	109.56	109.87	109.87
L	Cumulative Depreciation at the end of the year (I+K)	18.12	119.07	228.63	338.50	448.37
M	Remaining Aggregate Depreciable Value at the end of the year (E-L)	1357.33	1618.46	1655.86	1551.30	1441.43

(₹ in lakh)

Asset-55						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
	Depreciation					
A	Opening Gross Block	74878.56	79489.52	80102.34	80523.10	80561.58
B	Addition during the year 2014-19	4610.96	612.82	420.76	38.48	13.20
C	Closing Gross Block (A+B)	79489.52	80102.34	80523.10	80561.58	80574.78
D	Average Gross Block (A+C)/2	77184.04	79795.93	80312.72	80542.34	80568.18
E	Depreciable value(D*90%)	69201.11	71540.21	72005.32	72211.98	72235.24
F	Weighted average rate of Depreciation (WAROD) (in %)	5.26	5.26	5.26	5.26	5.26
G	Lapsed useful life at the beginning of the year (Year)	0.00	1.00	2.00	3.00	4.00
H	Balance useful life at the beginning of the year (Year)	34.00	33.00	32.00	31.00	30.00
I	Cumulative Depreciation at the beginning of the year	0.00	4059.28	8255.46	12478.30	16712.78
J	Remaining Aggregate Depreciable Value at the beginning of the year (E-I)	69201.11	67480.94	63749.86	59733.69	55522.46
K	Depreciation during the year	4059.28	4196.18	4222.84	4234.48	4235.64
L	Cumulative Depreciation at the end of the year (I+K)	4059.28	8255.46	12478.30	16712.78	20948.42
M	Remaining Aggregate Depreciable Value at the end of the year (E-L)	65141.83	63284.75	59527.03	55499.21	51286.82



(₹ in lakh)

Asset-56

	Particulars	2014-15 (Pro-rata for 303 days)	2015-16	2016-17	2017-18	2018-19
	Depreciation	2076.33	3392.30	3506.61	3853.79	3867.59
A	Opening Gross Block	1315.97	114.31	347.18	13.80	30.58
B	Addition during the year 2014-19	3392.30	3506.61	3853.79	3867.59	3898.17
C	Closing Gross Block (A+B)	2734.32	3449.46	3680.20	3860.69	3882.88
D	Average Gross Block (A+C)/2	2076.33	3392.30	3506.61	3853.79	3867.59
E	Depreciable value(D*90%)	2201.02	2830.35	3038.02	3200.46	3220.43
F	Weighted average rate of Depreciation (WAROD) (in %)	4.71	4.80	4.81	4.82	4.83
G	Elapsed useful life at the beginning of the year (Year)	0.00	0.00	1.00	2.00	3.00
H	Balance useful life at the beginning of the year (Year)	22.00	22.00	21.00	20.00	19.00
I	Cumulative Depreciation at the beginning of the year	0.00	106.94	272.46	449.61	635.84
J	Remaining Aggregate Depreciable Value at the beginning of the year (E-I)	2201.02	2723.41	2765.57	2750.85	2584.59
K	Depreciation during the year	106.94	165.51	177.16	186.23	187.40
L	Cumulative Depreciation at the end of the year (I+K)	106.94	272.46	449.61	635.84	823.24
M	Remaining Aggregate Depreciable Value at the end of the year (E-L)	2094.08	2557.90	2588.41	2564.62	2397.20

(₹ in lakh)

Asset-57

	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
	Depreciation					
A	Opening Gross Block	735.59	737.70	737.70	737.70	737.70
B	Addition during the year 2014-19	2.11	0.00	0.00	0.00	0.00
C	Closing Gross Block (A+B)	737.70	737.70	737.70	737.70	737.70
D	Average Gross Block (A+C)/2	736.64	737.70	737.70	737.70	737.70
E	Depreciable value(D*90%)	662.98	663.93	663.93	663.93	663.93
F	Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28	5.28	5.28
G	Lapsed useful life at the beginning of the year (Year)	0.00	1.00	2.00	3.00	4.00
H	Balance useful life at the beginning of the year (Year)	24.00	23.00	22.00	21.00	20.00
I	Cumulative Depreciation at the beginning of the year	0.00	38.89	77.85	116.80	155.75
J	Remaining Aggregate Depreciable Value at the beginning of the year (E-I)	662.98	625.03	586.08	547.13	508.18
K	Depreciation during the year	38.89	38.95	38.95	38.95	38.95
L	Cumulative Depreciation at the end of the year (I+K)	38.89	77.85	116.80	155.75	194.70
M	Remaining Aggregate Depreciable Value at the end of the year (E-L)	624.08	586.08	547.13	508.18	469.23



Interest on Loan ("IoL")

57. 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 are as follows:

(₹ in lakh)

Combined Asset-1 to 5						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Gross Normative Loan	47280.53	47761.36	47876.40	47915.09	48218.85
B	Cumulative Repayments upto Previous Year	6785.94	10331.85	13900.23	17474.42	21061.51
C	Net Loan-Opening (A-B)	40494.59	37429.51	33976.16	30440.68	27157.34
D	Addition due to ACE	480.83	115.04	38.70	303.76	37.10
E	Repayment during the year	3545.91	3568.38	3574.18	3587.10	3599.95
F	Net Loan-Closing (C+D-E)	37429.51	33976.16	30440.68	27157.34	23594.48
G	Average Loan (A+F)/2	38962.05	35702.83	32208.42	28799.01	25375.91
H	Weighted Average Rate of Interest on Loan (in %)	9.023	9.031	9.030	9.015	9.005
I	Interest on Loan (GxH)	3515.36	3224.36	2908.53	2596.19	2285.07

(₹ in lakh)

Combined Asset-6 to 11						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Gross Normative Loan	16273.71	16378.93	16466.07	16605.87	16645.85
B	Cumulative Repayments upto Previous Year	1998.54	3199.32	4407.35	5623.93	6847.29
C	Net Loan-Opening (A-B)	14275.17	13179.60	12058.72	10981.94	9798.57
D	Addition due to ACE	105.22	87.14	139.80	39.98	17.88
E	Repayment during the year	1200.78	1208.02	1216.58	1223.36	1225.54
F	Net Loan-Closing (C+D-E)	13179.60	12058.72	10981.94	9798.57	8590.90
G	Average Loan (A+F)/2	13727.38	12619.16	11520.33	10390.25	9194.73
H	Weighted Average Rate of Interest on Loan (in %)	8.793	8.780	8.755	8.710	8.691
I	Interest on Loan (GxH)	1207.08	1107.96	1008.57	904.96	799.14

(₹ in lakh)

Combined Asset-12 to 20						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Gross Normative Loan	48877.13	49502.94	49874.25	50383.42	50514.58
B	Cumulative Repayments upto Previous Year	5511.21	9150.38	12827.20	16537.22	20271.39
C	Net Loan-Opening (A-B)	43365.92	40352.56	37047.05	33846.21	30243.20
D	Addition due to Additional Capitalization	625.81	371.31	509.17	131.16	30.86
E	Repayment during the year	3639.17	3676.81	3710.02	3734.17	3740.28
F	Net Loan-Closing (C+D-E)	40352.56	37047.05	33846.21	30243.20	26533.78
G	Average Loan (A+F)/2	41859.24	38699.81	35446.63	32044.70	28388.49



Combined Asset-12 to 20						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
H	Weighted Average Rate of Interest on Loan (%)	9.041	9.040	9.017	8.970	8.954
I	Interest on Loan (GxH)	3784.29	3498.38	3196.36	2874.44	2541.91

(₹ in lakh)

Combined Asset-21 to 28						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Gross Normative Loan	39559.32	41556.58	42154.46	43267.81	43369.96
B	Cumulative Repayments upto Previous Year	1735.17	4701.42	7760.61	10882.03	14047.38
C	Net Loan-Opening (A-B)	37824.15	36855.16	34393.85	32385.78	29322.58
D	Addition due to ACE	1997.25	597.88	1113.35	102.16	217.90
E	Repayment during the year	2966.25	3059.19	3121.42	3165.35	3177.42
F	Net Loan-Closing (C+D-E)	36855.16	34393.85	32385.78	29322.58	26363.07
G	Average Loan (A+F)/2	37339.66	35624.50	33389.81	30854.18	27842.83
H	Weighted Average Rate of Interest on Loan (in %)	8.734	8.673	8.590	8.394	8.402
I	Interest on Loan (GxH)	3261.22	3089.60	2868.03	2589.84	2339.49

(₹ in lakh)

Combined Asset-29 to 49						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Gross Normative Loan	168209.01	169883.69	170872.60	171180.32	171478.19
B	Cumulative Repayments upto Previous Year	23039.62	35647.03	48351.51	61102.65	73875.42
C	Net Loan-Opening (A-B)	145169.39	134236.65	122521.09	110077.66	97602.77
D	Addition due to ACE	1674.67	988.92	307.71	297.87	250.64
E	Repayment during the year	12607.41	12704.48	12751.14	12772.76	12793.45
F	Net Loan-Closing (C+D-E)	134236.65	122521.09	110077.66	97602.77	85059.96
G	Average Loan (A+F)/2	139703.02	128378.87	116299.38	103840.22	91331.36
H	Weighted Average Rate of Interest on Loan (in %)	9.064	9.051	9.030	8.973	8.948
I	Interest on Loan (GxH)	12662.92	11619.59	10501.81	9317.72	8172.76

(₹ in lakh)

Asset-50						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Gross Normative Loan	24622.83	26496.01	27063.81	27554.55	27635.09
B	Cumulative Repayments upto Previous Year	0.00	1866.30	3821.43	5814.56	7827.48
C	Net Loan-Opening (A-B)	24622.83	24629.72	23242.38	21739.99	19807.61
D	Addition due to ACE	1873.18	567.80	490.74	80.54	187.38
E	Repayment during the year	1866.30	1955.14	1993.13	2012.92	2023.03
F	Net Loan-Closing (C+D-E)	24629.72	23242.38	21739.99	19807.61	17971.97
G	Average Loan (A+F)/2	24626.27	23936.05	22491.18	20773.80	18889.79
H	Weighted Average Rate of Interest on Loan (in %)	9.237	9.076	8.903	8.597	8.486
I	Interest on Loan (GxH)	2274.83	2172.44	2002.48	1785.88	1602.99



(₹ in lakh)

Asset-51						
	Particulars	2014-15 (Pro-rata for 205 days)	2015-16	2016-17	2017-18	2018-19
A	Gross Normative Loan	8094.85	8407.51	8604.43	8677.24	8677.24
B	Cumulative Repayments upto Previous Year	0.00	349.55	991.15	1642.91	2297.42
C	Net Loan-Opening (A-B)	8094.85	8057.96	7613.28	7034.33	6379.82
D	Addition due to ACE	312.66	196.92	72.81	0.00	0.00
E	Repayment during the year	349.55	641.59	651.77	654.51	654.51
F	Net Loan-Closing (C+D-E)	8057.96	7613.28	7034.33	6379.82	5725.31
G	Average Loan (A+F)/2	8076.40	7835.62	7323.81	6707.07	6052.56
H	Weighted Average Rate of Interest on Loan (in %)	9.1681	9.0572	8.9371	8.7213	8.6603
I	Interest on Loan (GxH)	415.87	709.69	654.54	584.95	524.17

(₹ in lakh)

Asset-52						
	Particulars	2014-15 (Pro-rata for 92 days)	2015-16	2016-17	2017-18	2018-19
A	Gross Normative Loan	2785.72	2785.72	2982.63	3055.45	3055.45
B	Cumulative Repayments upto Previous Year	0.00	52.96	270.51	498.23	728.70
C	Net Loan-Opening (A-B)	2785.72	2732.75	2712.12	2557.21	2326.75
D	Addition due to ACE	0.00	196.92	72.81	0.00	0.00
E	Repayment during the year	52.96	217.55	227.72	230.47	230.47
F	Net Loan-Closing (C+D-E)	2732.75	2712.12	2557.21	2326.75	2096.28
G	Average Loan (A+F)/2	2759.24	2722.44	2634.67	2441.98	2211.51
H	Weighted Average Rate of Interest on Loan (in %)	9.106	9.021	8.923	8.788	8.740
I	Interest on Loan (GxH)	63.33	245.60	235.08	214.60	193.29

(₹ in lakh)

Asset-53						
	Particulars	2014-15 (Pro-rata for 92 days)	2015-16	2016-17	2017-18	2018-19
A	Gross Normative Loan	469.64	469.64	492.74	495.80	496.63
B	Cumulative Repayments upto Previous Year	0.00	9.13	46.22	84.29	122.51
C	Net Loan-Opening (A-B)	469.64	460.52	446.53	411.50	374.11
D	Addition due to ACE	0.00	23.10	3.05	0.83	6.19
E	Repayment during the year	9.13	37.09	38.07	38.22	38.49
F	Net Loan-Closing (C+D-E)	460.52	446.53	411.50	374.11	341.82
G	Average Loan (A+F)/2	465.08	453.52	429.02	392.81	357.97
H	Weighted Average Rate of Interest on Loan (in %)	8.725	8.720	8.708	8.684	8.667
I	Interest on Loan (GxH)	10.23	39.55	37.36	34.11	31.03



(₹ in lakh)

Asset-54						
	Particulars	2014-15 (Pro-rata for 83 days)	2015-16	2016-17	2017-18	2018-19
A	Gross Normative Loan	895.71	1238.62	1458.95	1467.22	1467.22
B	Cumulative Repayments upto Previous Year	0.00	18.12	119.07	228.63	338.50
C	Net Loan-Opening (A-B)	895.71	1220.50	1339.88	1238.58	1128.72
D	Addition due to ACE	342.90	220.33	8.27	0.00	0.00
E	Repayment during the year	18.12	100.95	109.56	109.87	109.87
F	Net Loan-Closing (C+D-E)	1220.50	1339.88	1238.58	1128.72	1018.85
G	Average Loan (A+F)/2	1058.10	1280.19	1289.23	1183.65	1073.78
H	Weighted Average Rate of Interest on Loan (in %)	8.7916	8.7462	8.7384	8.6460	8.6183
I	Interest on Loan (GxH)	21.15	111.97	112.66	102.34	92.54

(₹ in lakh)

Asset-55						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Gross Normative Loan	52414.99	55642.67	56071.65	56366.18	56393.12
B	Cumulative Repayments upto Previous Year	0.00	4059.28	8255.46	12478.30	16712.78
C	Net Loan-Opening (A-B)	52414.99	51583.39	47816.19	43887.88	39680.34
D	Addition due to Additional Capitalization	3227.67	428.98	294.53	26.94	9.24
E	Repayment during the year	4059.28	4196.18	4222.84	4234.48	4235.64
F	Net Loan-Closing (C+D-E)	51583.39	47816.19	43887.88	39680.34	35453.94
G	Average Loan (A+F)/2	51999.19	49699.79	45852.04	41784.11	37567.14
H	Weighted Average Rate of Interest on Loan (%)	8.592	8.541	8.493	8.355	8.408
I	Interest on Loan (GxH)	4467.52	4245.02	3894.28	3491.08	3158.55

(₹ in lakh)

Asset-56						
	Particulars	2014-15 (Pro-rata for 303 days)	2015-16	2016-17	2017-18	2018-19
A	Gross Normative Loan	1453.43	2374.61	2454.63	2697.66	2707.32
B	Cumulative Repayments upto Previous Year	0.00	106.94	272.46	449.61	635.84
C	Net Loan-Opening (A-B)	1453.43	2267.67	2182.18	2248.05	2071.48
D	Addition due to ACE	921.18	80.02	243.03	9.66	21.41
E	Repayment during the year	106.94	165.51	177.16	186.23	187.40
F	Net Loan-Closing (C+D-E)	2267.67	2182.18	2248.05	2071.48	1905.50
G	Average Loan (A+F)/2	1860.55	2224.93	2215.11	2159.77	1988.49
H	Weighted Average Rate of Interest on Loan (in %)	8.991	8.728	8.580	8.321	8.257
I	Interest on Loan (GxH)	138.87	194.19	190.06	179.72	164.19



(₹ in lakh)

Asset-57						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Gross Normative Loan	514.91	516.39	516.39	516.39	516.39
B	Cumulative Repayments upto Previous Year	0.00	38.89	77.85	116.80	155.75
C	Net Loan-Opening (A-B)	514.91	477.49	438.54	399.59	360.64
D	Addition due to ACE	1.48	0.00	0.00	0.00	0.00
E	Repayment during the year	38.89	38.95	38.95	38.95	38.95
F	Net Loan-Closing (C+D-E)	477.49	438.54	399.59	360.64	321.69
G	Average Loan (A+F)/2	496.20	458.02	419.07	380.12	341.17
H	Weighted Average Rate of Interest on Loan (in %)	5.160	5.180	5.470	5.518	6.166
I	Interest on Loan (GxH)	25.60	23.72	22.92	20.98	21.04

Return on Equity (RoE)

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

Year	Claimed effective tax (in %)	Grossed-up RoE [(Base Rate)/(1-t)] (in %)
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

59. The Commission, vide order dated 27.4.2020 in Petition No. 274/TT/2019, had arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same is as follows:

Year	Notified MAT rates (inclusive of surcharge & cess) (in %)	Effective tax (in %)	Grossed up RoE [(Base Rate)/(1-t)] (in %)
2014-15	20.961	20.961	19.611
2015-16	21.342	21.342	19.706
2016-17	21.342	21.342	19.706
2017-18	21.342	21.342	19.706
2018-19	21.549	21.549	19.758



60. The same MAT rates are considered for the purpose of grossing up of the rate of RoE for truing up of the tariff of the 2014-19 period in terms of the provisions of the 2014 Tariff Regulations, which is 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

61. The Petitioner has claimed RoE for 2014-19 period after grossing up the RoE @ 15.50% with effective tax rates (based on MAT rates) each year. Trued-up RoE on the basis of the MAT rate applicable in the respective years and allowed for the transmission assets are as follows:

(₹ in lakh)

Combined Asset-1 to 5						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	20263.08	20469.15	20518.46	20535.04	20665.22
B	Additions	206.07	49.30	16.58	130.18	15.90
C	Closing Equity (A-B)	20469.15	20518.46	20535.04	20665.22	20681.12
D	Average Equity (A+B)/2	20366.12	20493.80	20526.75	20600.13	20673.17
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (in %)	19.610	19.705	19.705	19.705	19.758
H	Return on Equity (DxG)	3993.80	4038.30	4044.80	4059.26	4084.61

(₹ in lakh)

Combined Asset-6 to 11						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	6974.45	7019.54	7056.89	7116.80	7133.94
B	Additions	45.10	37.34	59.92	17.14	7.66
C	Closing Equity (A-B)	7019.54	7056.89	7116.80	7133.94	7141.60
D	Average Equity (A+B)/2	6996.99	7038.21	7086.84	7125.37	7137.77
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (in %)	19.610	19.705	19.705	19.705	19.758
H	Return on Equity (DxG)	1372.11	1386.88	1396.46	1404.05	1410.28



(₹ in lakh)

Combined Asset-12 to 20						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	20947.34	21215.55	21374.68	21592.90	21649.11
B	Additions	268.21	159.13	218.22	56.21	13.23
C	Closing Equity (A+B)	21215.55	21374.68	21592.90	21649.11	21662.33
D	Average Equity (A+B)/2	21081.44	21295.11	21483.79	21621.00	21655.72
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (in %)	19.610	19.705	19.705	19.705	19.758
H	Return on Equity (DxG)	4134.07	4196.20	4233.38	4260.42	4278.74

(₹ in lakh)

Combined Asset-21 to 28						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	16954.00	17809.96	18066.20	18543.35	18587.13
B	Additions	855.97	256.23	477.15	43.78	93.39
C	Closing Equity (A+B)	17809.96	18066.20	18543.35	18587.13	18680.51
D	Average Equity (A+B)/2	17381.98	17938.08	18304.77	18565.24	18633.82
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (in %)	19.610	19.705	19.705	19.705	19.758
H	Return on Equity (DxG)	3408.61	3534.70	3606.95	3658.28	3681.67

(₹ in lakh)

Combined Asset-29 to 49						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	72089.58	72807.29	73231.12	73362.99	73490.65
B	Additions	717.72	423.82	131.88	127.66	107.42
C	Closing Equity (A+B)	72807.29	73231.12	73362.99	73490.65	73598.07
D	Average Equity (A+B)/2	72448.44	73019.21	73297.05	73426.82	73544.36
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (in %)	19.610	19.705	19.705	19.705	19.758
H	Return on Equity (DxG)	14207.14	14388.43	14443.18	14468.76	14530.89

(₹ in lakh)

Asset-50						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	10552.64	11355.43	11598.78	11809.09	11843.61
B	Additions	802.79	243.34	210.32	34.52	80.31
C	Closing Equity (A+B)	11355.43	11598.78	11809.09	11843.61	11923.92
D	Average Equity (A+B)/2	10954.04	11477.10	11703.93	11826.35	11883.77
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (in %)	19.610	19.705	19.705	19.705	19.758
H	Return on Equity (DxG)	2148.09	2261.56	2306.26	2330.38	2347.99



(₹ in lakh)

Asset-51						
	Particulars	2014-15 (Pro-rata for 205 days)	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	3469.22	3603.22	3687.61	3718.82	3718.82
B	Additions	134.00	84.39	31.21	0.00	0.00
C	Closing Equity (A-B)	3603.22	3687.61	3718.82	3718.82	3718.82
D	Average Equity (A+B)/2	3536.22	3645.42	3703.22	3718.82	3718.82
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (in %)	19.610	19.705	19.705	19.705	19.758
H	Return on Equity (DxG)	389.47	718.33	729.72	732.79	734.76

(₹ in lakh)

Asset-52						
	Particulars	2014-15 (Pro-rata for 92 days)	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	1193.88	1193.88	1278.27	1309.48	1309.48
B	Additions	0.00	84.39	31.21	0.00	0.00
C	Closing Equity (A-B)	1193.88	1278.27	1309.48	1309.48	1309.48
D	Average Equity (A+B)/2	1193.88	1236.08	1293.87	1309.48	1309.48
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (in %)	19.610	19.705	19.705	19.705	19.758
H	Return on Equity (DxG)	59.01	243.57	254.96	258.03	258.73

(₹ in lakh)

Asset-53						
	Particulars	2014-15 (Pro-rata for 92 days)	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	201.28	201.28	211.18	212.48	212.83
B	Additions	0.00	9.90	1.31	0.35	2.65
C	Closing Equity (A-B)	201.28	211.18	212.48	212.83	215.48
D	Average Equity (A+B)/2	201.28	206.23	211.83	212.66	214.16
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (in %)	19.610	19.705	19.705	19.705	19.758
H	Return on Equity (DxG)	9.95	40.64	41.74	41.90	42.31

(₹ in lakh)

Asset-54						
	Particulars	2014-15 (Pro-rata for 83 days)	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	383.88	530.84	625.26	628.80	628.80
B	Additions	146.96	94.43	3.54	0.00	0.00
C	Closing Equity (A-B)	530.84	625.26	628.80	628.80	628.80
D	Average Equity (A+B)/2	457.36	578.05	627.03	628.80	628.80
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	20.961	21.342	21.342	21.342	21.549



Asset-54						
	Particulars	2014-15 (Pro-rata for 83 days)	2015-16	2016-17	2017-18	2018-19
G	Rate of Return on Equity (in %)	19.610	19.705	19.705	19.705	19.758
H	Return on Equity (DxG)	20.39	113.90	123.56	123.91	124.24

(₹ in lakh)

Asset-55						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	22463.57	23846.86	24030.70	24156.93	24168.47
B	Additions	1383.29	183.84	126.23	11.54	3.96
C	Closing Equity (A-B)	23846.86	24030.70	24156.93	24168.47	24172.43
D	Average Equity (A+B)/2	23155.21	23938.78	24093.81	24162.70	24170.45
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (in %)	19.610	19.705	19.705	19.705	19.758
H	Return on Equity (DxG)	4540.74	4717.14	4747.69	4761.26	4775.60

(₹ in lakh)

Asset-56						
	Particulars	2014-15 (Pro-rata for 303 days)	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	622.90	1017.69	1051.98	1156.13	1160.27
B	Additions	394.79	34.29	104.15	4.14	9.17
C	Closing Equity (A-B)	1017.69	1051.98	1156.13	1160.27	1169.44
D	Average Equity (A+B)/2	820.29	1034.83	1104.05	1158.20	1164.85
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (in %)	19.610	19.705	19.705	19.705	19.758
H	Return on Equity (DxG)	133.53	203.91	217.55	228.22	230.15

(₹ in lakh)

Asset-57						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	220.68	221.31	221.31	221.31	221.31
B	Additions	0.63	0.00	0.00	0.00	0.00
C	Closing Equity (A-B)	221.31	221.31	221.31	221.31	221.31
D	Average Equity (A+B)/2	220.99	221.31	221.31	221.31	221.31
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (in %)	19.610	19.705	19.705	19.705	19.758
H	Return on Equity (DxG)	43.34	43.61	43.61	43.61	43.73

Operation & Maintenance Expenses ("O&M Expenses")

62. O&M Expenses as claimed by the Petitioner are within norms specified under the 2014 Tariff Regulations. The allowable O&M Expenses are as follows:



Combined Asset-1 to 5					
Transmission Lines					
Sl. No.	Name of Line	Single Circuit / Double Circuit	No. of Sub-Conductors	Line length (in km)	
1	LILO of both Ckt of 400 kV D/C Allahabad-Mainpuri Line at Fatehpur	Double Circuit	2	36.890	
Sl. No.		400 kV Sub-station Bay			
1		Lucknow: 125 MVAR Bus Reactor II Bay at Lucknow			
2		Balial: Bus Reactor IV Bay at Balial			
3		Fatehpur: Allahabad I and II Bay at Fatehpur			
4		Fatehpur: Manipuri I and II Bay at Fatehpur			
5		Lucknow: ICT II Bay at Lucknow			
6		Balial: ICT II Bay at Balial			
7		Fatehpur: ICT-I Bay at Fatehpur			
8		Fatehpur: 1500 MVA ICT II Bay at Fatehpur			
Sl. No.		765 kV Sub-station Bay			
9		Lucknow: ICT II Bay at Lucknow			
10		Balial: ICT II Bay at Balial			
11		Fatehpur: ICT-I Bay			
12		Fatehpur: ICT II Bay at Fatehpur			
13		Fatehpur: 765 kV Sasaram Bay at Fatehpur			
14		Sasaram: 765 kV Fatehpur Bay at Sasaram			
O&M Expenses					
	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station					
400 kV					
Number of bays	10	10	10	10	10
765 kV					
Number of bays	6	6	6	6	6
Transmission Lines					
D/C Twin/Triple Conductor (km)	36.890	36.890	36.890	36.890	36.890
Norms (₹ lakh/bay)					
400 kV Sub-station	60.30	62.30	64.37	66.51	68.71
765 kV Sub-station	84.42	87.22	90.12	93.11	96.20
Norm (₹ lakh/km)					
Double Circuit (Twin & Triple Conductor)	0.71	0.73	0.76	0.78	0.81
Total O&M Expenses calculated	1135.60	1173.29	1212.27	1252.53	1294.03
O&M Expenses claimed	1135.60	1173.29	1212.27	1252.53	1294.03



Sl. No.	400 kV Sub-station Bay				
O&M Expenses allowed	1135.60	1173.29	1212.27	1252.53	1294.03

Combined Asset-6 to 11					
Sl. No.	400 kV Sub-station Bay				
1	Agra: 125 MVAR Bus Reactor-III at Agra				
2	Agra: 125 MVAR Bus Reactor-II at Agra				
3	Balial: 125 MVAR Bus Reactor-III at Ballia				
Sl. No.	765 kV Sub-station Bay				
4	Balial: Bus Reactor-II at Balial				
5	Fatehpur: 330 MVAR Bus Reactor at Fatehpur				
6	Lucknow: 240 MVAR Bus Reactor at Lucknow				
O&M Expenses					
	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station					
400 kV					
Number of bays	3	3	3	3	3
765 kV					
Number of bays	3	3	3	3	3
Norms (₹ lakh/bay)					
400 kV Sub-station	60.30	62.30	64.37	66.51	68.71
765 kV Sub-station	84.42	87.22	90.12	93.11	96.20
Total O&M Expense calculated	434.16	448.56	463.47	478.86	494.73
O&M Expenses claimed	434.16	448.56	463.47	478.86	494.73
O&M Expenses allowed	434.16	448.56	463.47	478.86	494.73

Combined Asset-12 to 20				
Transmission Lines				
Sl. No.	Name of Line	Single Circuit / Double Circuit	No. of Sub-Conductors	Line Length (in km)
1	LILO of Barh-Balia Line	Double Circuit	4	8.720
Sl. No.	400 kV Sub-station Bay			
1	Maithon: Mejia I Bay			
2	Maithon: Mejia II Bay			
3	Balial: Bus Reactor-II Bay			
4	Agra: ICT II Bay at Agra			
5	Maithon: Gaya I Bay			
6	Maithon: Gaya II Bay			
7	Maithon: Gaya-I Line Reactor Bay			
8	Maithon: Gaya-II Line Reactor Bay			
9	Lucknow: Bus Reactor Bay			
10	Sasaram: 400 kV 125 MVAR Bus Reactor II at Sasaram Sub-station			



Sl. No.	400 kV Sub-station Bay				
11	Patna: Barh/Balia Bay I and II				
12	Sasaram: ICT I Bay at Sasaram				
13	Sasaram: ICT I Bay at Sasaram				
14	Fatehpur: Bus Reactor-I Bay				
15	Fatehpur: Bus Reactor-II Bay at Fatehpur				
16	Sasaram: Bus Reactor I at Sasaram				
17	Agra: ICT-I Bay at Agra				
Sl. No.	765 kV Sub-station Bay				
18	Agra: ICT-II Bay at Agra				
19	Sasaram: ICT-I Bay at Sasaram				
20	Fatehpur: Agra Bay				
21	Agra: Fatehpur Bay				
22	Fatehpur: Line Reactor Bay				
23	Agra: ICT-I Bay at Agra				
O&M Expenses					
	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station					
400 kV					
Number of bays	19	19	19	19	19
765 kV					
Number of bays	6	6	6	6	6
Transmission Lines					
D/C 4 or more Conductor (km)	8.720	8.720	8.720	8.720	8.720
Norms (₹ lakh/bay)					
400 kV Sub-station	60.30	62.30	64.37	66.51	68.71
765 kV Sub-station	84.42	87.22	90.12	93.11	96.20
Norm (₹ lakh/km)					
Double Circuit (Bundled conductor with four or more sub-conductors)	1.062	1.097	1.133	1.171	1.210
Total O&M Expenses calculated	1661.48	1716.59	1773.63	1832.56	1893.24
O&M Expenses claimed	1661.48	1716.59	1773.63	1832.56	1893.24
O&M Expenses allowed	1661.48	1716.59	1773.63	1832.56	1893.24



Combined Asset-21 to 28						
Transmission lines						
Sl. No.	Name of Line	Single Circuit / Double Circuit	No. of Sub-Conductors	Line Length (in km)		
1	Ranchi (Old): Ranchi (New)	Single Circuit	4	77.311		
Sl. No.		400 kV Sub-station Bay				
1		Ranchi: New Ranchi Bay I				
2		Ranchi: New Ranchi Bay II				
3		New Ranchi: ICT-II Bay				
4		New Ranchi: Bus Reactor -I Bay				
5		New Ranchi: Bus Reactor -II Bay				
Sl. No.		765 kV Sub-station Bay				
6		Balial: 765 kV Bus Reactor-I Bay Balial				
7		Sasaram: Fatehpur Bay at Sasaram				
8		Sasaram: Fatehpur SLR Bay at Sasaram				
9		Sasaram: Bus Reactor -I Bay at Sasaram				
10		New Ranchi: ICT-II Bay				
11		New Ranchi: Bus Reactor -II Bay				
12		Bilaspur: SLR Bay				
13		Bilaspur: Bus Reactor Bay				
14		Agra: 765 kV Bus Reactor -I Bay				
O&M Expenses						
		2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station						
400 kV						
Number of bays		5	5	5	5	5
765 kV						
Number of bays		9	9	9	9	9
Transmission Lines						
D/C 4 or more Conductor (km)						
Norms (₹ lakh/bay)						
400 kV Sub-station		60.30	62.30	64.37	66.51	68.71
765 kV Sub-station		84.42	87.22	90.12	93.11	96.20
Norm (₹ lakh/km)						
Double Circuit (Bundled conductor with four or more sub-conductors)		1.062	1.097	1.133	1.171	1.210
Total O&M Expenses calculated		1108.13	1144.95	1182.95	1222.26	1262.77
O&M Expenses claimed		1108.13	1144.95	1182.95	1222.26	1262.77
O&M Expenses Allowed		1108.13	1144.95	1182.95	1222.26	1262.77



Combined Asset-29 to 49				
Transmission Lines				
Sl. No.	Name of Line	Single Circuit / Double Circuit	No. of Sub-Conductors	Line length (in km)
1	Lucknow (New) to Lucknow	Double Circuit	4	2.862
2	Lucknow Balia S/C Line	Single Circuit	4	318.905
3	400 kV Biharsharif-Gaya (Part of Gaya-Balia)	Single Circuit	4	69.300
4	400 kV Sasaram-Balia Line (Part of Gaya-Balia)	Single Circuit	4	158.764
5	Gaya-Sasaram Line	Single Circuit	4	147.807
6	Maithon-Koderma Line (Part of Maithon-Gaya)	Double Circuit	4	209.000
Sl. No.	400 kV Sub-station Bay			
1	Lucknow: 2 Line Bays each at Lucknow Old & New			
2	Lucknow: ICT-I 400 kV Bay			
3	Balial: ICT-I 400 kV Bay			
4	Sasaram: Line Bays for Biharsharif- Sasaram Line			
5	Biharsharif: Line Bays for Biharsharif- Sasaram Line			
6	Biharsharif: Line Bays for Biharsharif-Gaya Line			
7	Sasaram: Line Bays for Biharsharif-Balia Line			
8	Sasaram: 2x50 MVAR Reactor Bay			
9	Gaya: Line Bays for 400 kV D/C Maithon-Gaya Line			
10	Gaya: 2x50 MVAR SLR for 400 kV D/C Maithon-Gaya Line			
11	Gaya: ICT-I 400 kV Bay			
12	Gaya: ICT-II 400 kV Bay			
13	Gaya: ICT-III 400 kV Bay			
14	Gaya: Koderma I Line Bay for Biharsharif-Gaya Line			
15	Gaya: 125 MVAR Bus Reactor-I Bay			
16	Gaya: 125 MVAR Bus Reactor-II Bay			
Sl. No.	765 kV Substation Bay			
17	Lucknow: Line Bay for Lucknow-Balia Transmission Line			
18	Balial: Line Bay for Lucknow-Balia Transmission Line			
19	Lucknow: Line Bay for Lucknow-Balia Transmission Line			
20	Lucknow: SLR Bay for Lucknow-Balia Transmission Line			
21	Balial: SLR Bay for Lucknow-Balia Transmission Line			
22	Lucknow: ICT-I 765 kV Bay			
23	Balial: ICT-I 765 kV Bay			
24	Gaya: ICT-I 765 kV Bay			
25	Gaya: ICT-II 765 kV Bay			
26	Gaya: ICT-III 765 kV Bay			
27	Gaya: 240 Bus Reactor-I Bay			
28	Gaya: 240 Bus Reactor-II Bay			
29	Balial: Line Bay for 765 kV S/C Gaya Balial and 240 MVAR SLR Bay			



Sl. No.	400 kV Sub-station Bay				
30	Gaya: Sasaram/Fatehpur Line Bay & 240 MVAR SLR Bay for 765 kV S/C Gaya-Sasaram Transmission Line				
O&M Expenses					
	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station					
400 kV					
Number of bays	22	22	22	22	22
765 kV					
Number of bays	15	15	15	15	15
Transmission Lines					
D/C 4 or more Conductor (km)	211.862	211.862	211.862	211.862	211.862
S/C 4 or more Conductor (km)	694.776	694.776	694.776	694.776	694.776
Norms (₹ lakh/bay)					
400 kV Sub-station	60.30	62.30	64.37	66.51	68.71
765 kV Sub-station	84.42	87.22	90.12	93.11	96.20
Norm (₹ lakh/km)					
Double Circuit (Bundled conductor with four or more sub-conductors)	1.062	1.097	1.133	1.171	1.210
Single Circuit (Bundled conductor with four or more sub-conductors)	0.606	0.627	0.647	0.669	0.691
Total O&M Expenses calculated	3238.93	3346.94	3457.50	3572.77	3691.06
O&M Expenses claimed	3238.93	3346.94	3457.50	3572.77	3691.06
O&M Expenses allowed	3238.93	3346.94	3457.50	3572.77	3691.06

Asset-50				
Transmission Lines				
SI. No.	Name of Line	Single Circuit / Double Circuit	No. of Sub-Conductors	Line length (in km)
1	400 kV D/C Quad Ranchi (New)-Ranchi (Old)-Line I Ckt II	Single Circuit	4	76.404
2	400 kV D/C Quad Ranchi (New)-Ranchi (Old)-Line II	Double Circuit	4	78.716
3	400 kV D/C Quad Ranchi (New)-Ranchi (Old)-II	Multi Circuit	4	0.907
SI. No.	400 kV Sub-station Bay			
1	Ranchi: 400 kV Bay at Ranchi (New) for Line-I Ckt II			
2	Ranchi: 400 kV Bay at Ranchi (New) for Line-I Ckt II			
3	Ranchi: 2 Numbers Bay at Ranchi (New) for Line-II Ckt I & II			
4	Ranchi: 2 Numbers 400 kV Bays at Ranchi for Line-II Ckt I & II			
5	Ranchi: ICT I 400 kV Bay			
SI. No.	765 kV Sub-station Bay			
6	Ranchi: ICT I Bay			



Sl. No.	400 kV Sub-station Bay				
O&M Expenses					
	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station					
400 kV					
Number of bays	7	7	7	7	7
765 kV					
Number of bays	1	1	1	1	1
Transmission Lines					
D/C 4 or more conductor (km)	78.716	78.716	78.716	78.716	78.716
S/C 4 or more conductor (km)	76.404	76.404	76.404	76.404	76.404
M/C 4 or more conductor (km)	0.907	0.907	0.907	0.907	0.907
Norms (₹ lakh/bay)					
400 kV Sub-station	60.30	62.30	64.37	66.51	68.71
765 kV Sub-station	84.42	87.22	90.12	93.11	96.20
Norm (₹ lakh/km)					
Double Circuit (Bundled conductor with four or more sub-conductors)	1.062	1.097	1.133	1.171	1.210
Single Circuit (Bundled conductor with four or more sub-conductors)	0.606	0.627	0.647	0.669	0.691
Multi Circuit (Bundled conductor with four or more sub-conductors)	1.863	1.925	1.989	2.055	2.123
Total O&M Expense calculated	638.11	659.32	681.13	703.83	727.14
O&M Expenses claimed	638.11	659.32	681.13	703.83	727.14
O&M Expenses allowed	638.11	659.32	681.13	703.83	727.14

Asset-51					
Transmission lines					
Sl. No.	Name of Line	Single Circuit / Double Circuit	No. of Sub-Conductors	Line length (in km)	
1	Balance portion of 400 kV Maithon-Gaya D/C Quad Transmission Line Ckt II including MCKT	Single Circuit	4	22.943	
2	Balance portion of 400 kV Maithon-Gaya D/C Quad Transmission Line Ckt II including MCKT	Double Circuit	4	42.015	
O&M Expenses					
	2014-15 (Pro-rata for 205 days)	2015-16	2016-17	2017-18	2018-19
Transmission lines					
D/C 4 or more conductor (km)	42.015	42.015	42.015	42.015	42.015
S/C 4 or more conductor (km)	22.943	22.943	22.943	22.943	22.943
Norm (₹ lakh/km)					



O&M Expenses					
Double Circuit (Bundled conductor with four or more sub-conductors)	1.062	1.097	1.133	1.171	1.210
Single Circuit (Bundled conductor with four or more sub-conductors)	0.606	0.627	0.647	0.669	0.691
Total O&M Expenses calculated	18.28	0.00	0.00	0.00	0.00
O&M Expenses claimed	18.28	0.00	0.00	0.00	0.00
O&M Expenses allowed	18.28	0.00	0.00	0.00	0.00

Asset-52				
Transmission lines				
Sl. No.	Name of Line	Single Circuit / Double Circuit	No. of Sub-Conductors	Line length (in km)
1	Balance portion of 400 kV Maithon-Gaya Line including Multi-Circuit	Double Circuit	4	22.943
2	Balance portion of 400 kV Maithon-Gaya Line including Multi-Circuit	Multi Circuit	4	42.015

O&M Expenses					
	2014-15 (Pro-rata for 92 days)	2015-16	2016-17	2017-18	2018-19
Transmission lines					
D/C 4 or more conductor (km)	22.943	22.943	22.943	22.943	22.943
M/C 4 or more conductor (km)	42.015	42.015	42.015	42.015	42.015
Norm (₹ lakh/km)					
Double Circuit (Bundled conductor with four or more sub-conductors)	1.062	1.097	1.133	1.171	1.210
Multi Circuit (Bundled conductor with four or more sub-conductors)	1.863	1.925	1.989	2.055	2.123
Total O&M Expenses calculated	25.87	106.05	109.56	113.21	116.96
O&M Expenses claimed	25.87	106.05	109.56	113.21	116.96
O&M Expenses allowed	25.87	106.05	109.56	113.21	116.96

Asset-53					
Sl. No.	400 kV Sub-station Bay				
1	Gaya: 400 kV Line Koderma II Bay at Gaya Sub-station				
O&M Expenses					
	2014-15 (Pro-rata for 92 days)	2015-16	2016-17	2017-18	2018-19
Sub-station					
400 kV					



Asset-53					
Sl. No.	400 kV Sub-station Bay				
Number of bays	1	1	1	1	1
Norms (₹ lakh/bay)					
400 kV Sub-station	60.30	62.30	64.37	66.51	68.71
Total O&M Expenses calculated	15.20	62.30	64.37	66.51	68.71
O&M Expenses claimed	15.20	62.30	64.37	66.51	68.71
O&M Expenses allowed	15.20	62.30	64.37	66.51	68.71

Asset-54					
Sl. No.	765 kV Sub-station Bay				
1	Gaya: Balia 765 kV Bay at Gaya Sub-station				
O&M Expenses					
	2014-15 (Pro-rata for 83 days)	2015-16	2016-17	2017-18	2018-19
Sub-station					
765 kV					
Number of bays	1	1	1	1	1
Norms (₹ lakh/bay)					
765 kV Sub-station	84.42	87.22	90.12	93.11	96.20
Total O&M Expenses calculated	19.20	87.22	90.12	93.11	96.20
O&M Expenses claimed	19.20	87.22	90.12	93.11	96.20
O&M Expenses allowed	19.20	87.22	90.12	93.11	96.20

Asset-55						
Transmission Lines						
Sl. No.	Name of Line	Single Circuit / Double Circuit	No. of Sub-Conductors	Line length (in km)		
1	765 kV S/C Ranchi-WR Pooling Station (Sipat) Line	Single Circuit	4	381.350		
Sl. No.		765 kV Sub-station Bay				
1		Ranchi: Sipat 765 kV Bay				
2		Ranchi: 3x80 MVAR Switchable Line Reactor-1 Bay				
O&M Expenses						
		2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station						
765 kV						
Number of bays		2	2	2	2	2
Transmission lines						
S/C 4 or more conductor (km)		381.350	381.350	381.350	381.350	381.350
Norms (₹ lakh/bay)						
765 kV Sub-station		84.42	87.22	90.12	93.11	96.20
Norm (₹ lakh/km)						



Sl. No.	765 kV Sub-station Bay				
Single Circuit (Bundled conductor with four or more sub-conductors)	0.606	0.627	0.647	0.669	0.691
Total O&M Expenses calculated	399.94	413.55	426.97	441.34	455.91
O&M Expenses claimed	399.94	413.55	426.97	441.34	455.91
O&M Expenses allowed	399.94	413.55	426.97	441.34	455.91

Asset-56					
Sl. No.	765 kV Sub-station Bay				
1	Ranchi: 3x80 MVAR Bus Reactor-I				
O&M Expenses					
	2014-15 (Pro-rata for 303 days)	2015-16	2016-17	2017-18	2018-19
Sub-station					
765 kV					
Number of bays	1	1	1	1	1
Norms (₹ lakh/bay)					
765 kV Sub-station	84.42	87.22	90.12	93.11	96.20
Total O&M Expenses calculated	70.08	87.22	90.12	93.11	96.20
O&M Expenses claimed	70.08	87.22	90.12	93.11	96.20
O&M Expenses allowed	70.08	87.22	90.12	93.11	96.20

Asset-57					
Sl. No.	400 kV Sub-station Bay				
1	Ranchi: Raghunathpur Bay-II Ranchi				
2	Ranchi: Raghunathpur Bay-II Ranchi				
O&M Expenses					
	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station					
400 kV					
Number of bays	2	2	2	2	2
Norms (₹ lakh/bay)					
400 kV Sub-station	60.30	62.30	64.37	66.51	68.71
Total O&M Expenses	120.60	124.60	128.74	133.02	137.42
O&M Expenses claimed	120.60	124.60	128.74	133.02	137.42
O&M Expenses allowed	120.60	124.60	128.74	133.02	137.42



Interest on Working Capital ("IWC")

63. The Petitioner has claimed IWC as per Regulation 28(1)(c) of the 2014 Tariff

Regulations as follows:

i. Maintenance spares:

Maintenance spares have been worked out based on 15% of Operation and Maintenance Expenses specified in Regulation 28.

ii. O & M Expenses:

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

iii. Receivables:

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

iv. Rate of interest on working capital:

Rate of interest on working capital is considered on normative basis in accordance with Clause (3) of Regulation 28 of the 2014 Tariff Regulations.

64. IWC allowed for the transmission assets are as follows:

(₹ in lakh)

Combined Asset-1 to 5						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Working Capital for O&M Expenses (one month of O&M Expenses)	94.63	97.77	101.02	104.38	107.84
B	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M expenses)	170.34	175.99	181.84	187.88	194.11
C	Working Capital for Receivables (Receivable equivalent to two months of fixed cost)	2084.64	2053.08	2008.18	1966.67	1927.44
D	Total Working Capital (A+B+C)	2349.62	2326.84	2291.04	2258.93	2229.38
E	Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
F	Interest on Working Capital (DxE)	317.20	314.12	309.29	304.96	300.97

(₹ in lakh)

Combined Asset-6 to 11						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Working Capital for O&M Expenses (one month of O&M Expenses)	36.18	37.38	38.62	39.91	41.23
B	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M expenses)	65.12	67.28	69.52	71.83	74.21



Combined Asset-6 to 11						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
C	Working Capital for Receivables (Receivable equivalent to two months of fixed cost)	720.85	710.24	699.01	686.50	672.68
D	Total Working Capital (A+B+C)	822.16	814.90	807.15	798.23	788.12
E	Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
F	Interest on Working Capital (DxE)	110.99	110.01	108.97	107.76	106.40

(₹ in lakh)

Combined Asset-12 to 20						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Working Capital for O&M Expenses (one month of O&M Expenses)	138.46	143.05	147.80	152.71	157.77
B	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M expenses)	249.22	257.49	266.04	274.88	283.99
C	Working Capital for Receivables (Receivable equivalent to two months of fixed cost)	2262.80	2240.76	2211.30	2175.50	2133.64
D	Total Working Capital (A+B+C)	2650.48	2641.30	2625.15	2603.10	2575.40
E	Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
F	Interest on Working Capital (DxE)	357.82	356.57	354.39	351.42	347.68

(₹ in lakh)

Combined Asset-21 to 28						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Working Capital for O&M Expenses (one month of O&M Expenses)	92.34	95.41	98.58	101.86	105.23
B	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M expenses)	166.22	171.74	177.44	183.34	189.42
C	Working Capital for Receivables (Receivable equivalent to two months of fixed cost)	1837.87	1852.43	1844.27	1819.99	1790.47
D	Total Working Capital (A+B+C)	2096.43	2119.59	2120.29	2105.18	2085.12
E	Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
F	Interest on Working Capital (DxE)	283.02	286.14	286.24	284.20	281.49

(₹ in lakh)

Combined Asset-29 to 49						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Working Capital for O&M Expenses (one month of O&M Expenses)	269.91	278.91	288.12	297.73	307.59
B	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M expenses)	485.84	502.04	518.62	535.91	553.66
C	Working Capital for Receivables (Receivable equivalent to two months of fixed cost)	7300.67	7189.24	7035.39	6861.82	6701.52
D	Total Working Capital (A+B+C)	8056.42	7970.19	7842.14	7695.46	7562.77
E	Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
F	Interest on Working Capital (DxE)	1087.62	1075.98	1058.69	1038.89	1020.97



(₹ in lakh)

Asset-50						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Working Capital for O&M Expenses (one month of O&M Expenses)	53.18	54.94	56.76	58.65	60.59
B	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M expenses)	95.72	98.90	102.17	105.58	109.07
C	Working Capital for Receivables (Receivable equivalent to two months of fixed cost)	1184.56	1205.32	1194.28	1168.83	1146.47
D	Total Working Capital (A+B+C)	1333.45	1359.17	1353.21	1333.06	1316.14
E	Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
F	Interest on Working Capital (DxE)	180.02	183.49	182.68	179.96	177.68

(₹ in lakh)

Asset-51						
	Particulars	2014-15 (Pro-rata for 205 days)	2015-16	2016-17	2017-18	2018-19
A	Working Capital for O&M Expenses (one month of O&M Expenses)	4.88	0.00	0.00	0.00	0.00
B	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M expenses)	8.78	0.00	0.00	0.00	0.00
C	Working Capital for Receivables (Receivable equivalent to two months of fixed cost)	356.47	352.88	347.15	336.27	326.25
D	Total Working Capital (A+B+C)	370.12	352.88	347.15	336.27	326.25
E	Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
F	Interest on Working Capital (DxE)	28.06	47.64	46.86	45.40	44.04

(₹ in lakh)

Asset-52						
	Particulars	2014-15 (Pro-rata for 92 days)	2015-16	2016-17	2017-18	2018-19
A	Working Capital for O&M Expenses (one month of O&M Expenses)	8.55	8.84	9.13	9.43	9.75
B	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M expenses)	15.40	15.91	16.43	16.98	17.54
C	Working Capital for Receivables (Receivable equivalent to two months of fixed cost)	136.64	139.15	141.65	139.79	136.94
D	Total Working Capital (A+B+C)	160.58	163.89	167.21	166.21	164.23
E	Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
F	Interest on Working Capital (DxE)	5.46	22.13	22.57	22.44	22.17



(₹ in lakh)

Asset-53						
	Particulars	2014-15 (Pro-rata for 92 days)	2015-16	2016-17	2017-18	2018-19
A	Working Capital for O&M Expenses (one month of O&M Expenses)	5.03	5.19	5.36	5.54	5.73
B	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M expenses)	9.05	9.35	9.66	9.98	10.31
C	Working Capital for Receivables (Receivable equivalent to two months of fixed cost)	30.43	30.95	31.30	31.18	31.15
D	Total Working Capital (A+B+C)	44.50	45.49	46.32	46.69	47.18
E	Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
F	Interest on Working Capital (DxE)	1.51	6.14	6.25	6.30	6.37

(₹ in lakh)

Asset-54						
	Particulars	2014-15 (Pro-rata for 83 days)	2015-16	2016-17	2017-18	2018-19
A	Working Capital for O&M Expenses (one month of O&M Expenses)	7.04	7.27	7.51	7.76	8.02
B	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M expenses)	12.66	13.08	13.52	13.97	14.43
C	Working Capital for Receivables (Receivable equivalent to two months of fixed cost)	59.59	71.06	74.81	73.68	72.61
D	Total Working Capital (A+B+C)	79.28	91.42	95.83	95.41	95.06
E	Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
F	Interest on Working Capital (DxE)	2.43	12.34	12.94	12.88	12.83

(₹ in lakh)

Asset-55						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Working Capital for O&M Expenses (one month of O&M Expenses)	33.33	34.46	35.58	36.78	37.99
B	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M expenses)	59.99	62.03	64.05	66.20	68.39
C	Working Capital for Receivables (Receivable equivalent to two months of fixed cost)	2298.39	2316.27	2268.58	2206.66	2155.17
D	Total Working Capital (A+B+C)	2391.71	2412.76	2368.21	2309.64	2261.55
E	Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
F	Interest on Working Capital (DxE)	322.88	325.72	319.71	311.80	305.31



(₹ in lakh)

Asset-56						
	Particulars	2014-15 (Pro-rata for 303 days)	2015-16	2016-17	2017-18	2018-19
A	Working Capital for O&M Expenses (one month of O&M Expenses)	7.04	7.27	7.51	7.76	8.02
B	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M expenses)	12.66	13.08	13.52	13.97	14.43
C	Working Capital for Receivables (Receivable equivalent to two months of fixed cost)	92.76	111.44	115.56	117.68	116.11
D	Total Working Capital (A+B+C)	112.46	131.79	136.58	139.41	138.55
E	Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
F	Interest on Working Capital (DxE)	12.60	17.79	18.44	18.82	18.70

(₹ in lakh)

Asset-57						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Working Capital for O&M Expenses (one month of O&M Expenses)	10.05	10.38	10.73	11.09	11.45
B	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M expenses)	18.09	18.69	19.31	19.95	20.61
C	Working Capital for Receivables (Receivable equivalent to two months of fixed cost)	39.60	40.04	40.63	41.05	41.85
D	Total Working Capital (A+B+C)	67.74	69.11	70.67	72.09	73.92
E	Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
F	Interest on Working Capital (DxE)	9.14	9.33	9.54	9.73	9.98

Approved Annual Fixed Charges for 2014-19 Tariff Period

65. Accordingly, the Annual Fixed Charges (AFC) in respect of the transmission assets after truing-up for 2014-19 tariff period are as follows:

(₹ in lakh)

Combined Asset-1 to 5					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	3545.91	3568.38	3574.18	3587.10	3599.95
Interest on Loan	3515.36	3224.36	2908.53	2596.19	2285.07
Return on Equity	3993.80	4038.30	4044.80	4059.26	4084.61
O&M Expenses	1135.60	1173.29	1212.27	1252.53	1294.03
Interest on Working Capital	317.20	314.12	309.29	304.96	300.97
Total	12507.87	12318.45	12049.07	11800.04	11564.63

(₹ in lakh)

Combined Asset-6 to 11					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1200.78	1208.02	1216.58	1223.36	1225.54



Combined Asset-6 to 11					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Loan	1207.08	1107.96	1008.57	904.96	799.14
Return on Equity	1372.11	1386.88	1396.46	1404.05	1410.28
O&M Expenses	434.16	448.56	463.47	478.86	494.73
Interest on Working Capital	110.99	110.01	108.97	107.76	106.40
Total	4325.12	4261.43	4194.05	4118.99	4036.09

(₹ in lakh)

Combined Asset-12 to 20					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	3639.17	3676.81	3710.02	3734.17	3740.28
Interest on Loan	3784.29	3498.38	3196.36	2874.44	2541.91
Return on Equity	4134.07	4196.20	4233.38	4260.42	4278.74
O&M Expenses	1661.48	1716.59	1773.63	1832.56	1893.24
Interest on Working Capital	357.82	356.57	354.39	351.42	347.68
Total	13576.83	13444.55	13267.78	13053.01	12801.85

(₹ in lakh)

Combined Asset-21 to 28					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	2966.25	3059.19	3121.42	3165.35	3177.42
Interest on Loan	3261.22	3089.60	2868.03	2589.84	2339.49
Return on Equity	3408.61	3534.70	3606.95	3658.28	3681.67
O&M Expenses	1108.13	1144.95	1182.95	1222.26	1262.77
Interest on Working Capital	283.02	286.14	286.24	284.20	281.49
Total	11027.23	11114.58	11065.59	10919.93	10742.84

(₹ in lakh)

Combined Asset-29 to 49					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	12607.41	12704.48	12751.14	12772.76	12793.45
Interest on Loan	12662.92	11619.59	10501.81	9317.72	8172.76
Return on Equity	14207.14	14388.43	14443.18	14468.76	14530.89
O&M Expenses	3238.93	3346.94	3457.50	3572.77	3691.06
Interest on Working Capital	1087.62	1075.98	1058.69	1038.89	1020.97
Total	43804.02	43135.42	42212.32	41170.90	40209.13

(₹ in lakh)

Asset-50					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1866.30	1955.14	1993.13	2012.92	2023.03
Interest on Loan	2274.83	2172.44	2002.48	1785.88	1602.99
Return on Equity	2148.09	2261.56	2306.26	2330.38	2347.99
O&M Expenses	638.11	659.32	681.13	703.83	727.14
Interest on Working Capital	180.02	183.49	182.68	179.96	177.68
Total	7107.35	7231.95	7165.68	7012.97	6878.83



(₹ in lakh)

Asset-51					
Particulars	2014-15 (Pro-rata for 205 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	349.55	641.59	651.77	654.51	654.51
Interest on Loan	415.87	709.69	654.54	584.95	524.17
Return on Equity	389.47	718.33	729.72	732.79	734.76
O&M Expenses	18.28	0.00	0.00	0.00	0.00
Interest on Working Capital	28.06	47.64	46.86	45.40	44.04
Total	1201.23	2117.25	2082.89	2017.65	1957.48

(₹ in lakh)

Asset-52					
Particulars	2014-15 (Pro-rata for 92 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	52.96	217.55	227.72	230.47	230.47
Interest on Loan	63.33	245.60	235.08	214.60	193.29
Return on Equity	59.01	243.57	254.96	258.03	258.73
O&M Expenses	25.87	106.05	109.56	113.21	116.96
Interest on Working Capital	5.46	22.13	22.57	22.44	22.17
Total	206.63	834.9	849.89	838.75	821.62

(₹ in lakh)

Asset-53					
Particulars	2014-15 (Pro-rata for 92 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	9.13	37.11	38.10	38.25	38.51
Interest on Loan	10.23	39.57	37.38	34.13	31.05
Return on Equity	9.96	40.66	41.77	41.93	42.34
O&M Expenses	15.20	62.30	64.37	66.51	68.71
Interest on Working Capital	1.51	6.14	6.25	6.30	6.37
Total	46.03	185.78	187.87	187.12	186.98

(₹ in lakh)

Asset-54					
Particulars	2014-15 (Pro-rata for 83 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	18.12	100.95	109.56	109.87	109.87
Interest on Loan	21.15	111.97	112.66	102.34	92.54
Return on Equity	20.39	113.90	123.56	123.91	124.24
O&M Expenses	19.20	87.22	90.12	93.11	96.20
Interest on Working Capital	2.43	12.34	12.94	12.88	12.83
Total	81.29	426.38	448.84	442.11	435.68

(₹ in lakh)

Asset-55					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	4059.28	4196.18	4222.84	4234.48	4235.64
Interest on Loan	4467.52	4245.02	3894.28	3491.08	3158.55



Asset-55					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity	4540.74	4717.14	4747.69	4761.26	4775.60
O&M Expenses	399.94	413.55	426.97	441.34	455.91
Interest on Working Capital	322.88	325.72	319.71	311.80	305.31
Total	13790.36	13897.61	13611.49	13239.96	12931.01

(₹ in lakh)

Asset-56					
Particulars	2014-15 (Pro-rata for 303 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	106.94	165.51	177.16	186.23	187.40
Interest on Loan	138.87	194.19	190.06	179.72	164.19
Return on Equity	133.53	203.91	217.55	228.22	230.15
O&M Expenses	70.08	87.22	90.12	93.11	96.20
Interest on Working Capital	12.60	17.79	18.44	18.82	18.70
Total	462.02	668.62	693.33	706.1	696.64

(₹ in lakh)

Asset-57					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	38.89	38.95	38.95	38.95	38.95
Interest on Loan	25.60	23.72	22.92	20.98	21.04
Return on Equity	43.34	43.61	43.61	43.61	43.73
O&M Expenses	120.60	124.60	128.74	133.02	137.42
Interest on Working Capital	9.14	9.33	9.54	9.73	9.98
Total	237.57	240.21	243.76	246.29	251.12

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2019-24 TARIFF PERIOD

66. The Petitioner has submitted tariff forms combining the transmission assets- Combined Asset-1 to 5, Combined Asset-6 to 11, Combined Asset-12 to 20, Combined Asset-21 to 28, Combined Asset-29 to 49, Asset-50, Asset-51, Asset-52, Asset-53, Asset-54, Asset-55, Asset-56 and Asset-57 wherein the COD has been achieved prior to 1.4.2019, as a single asset. Accordingly, as per proviso (i) of Regulation 8(1) of the 2019 Tariff Regulations, single tariff for the Combined Asset has been worked out for 2019-24 tariff period.

67. 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	32331.74	32177.56	32138.66	32138.66	32138.66
Interest on Loan	19212.59	16406.86	13597.27	10772.69	7944.93
Return on Equity	34857.70	34888.08	34903.50	34903.50	34903.50
O&M Expenses	2029.52	2015.06	1999.04	1984.42	1966.13
Interest on Working Capital	16755.70	17337.59	17949.72	18591.01	19240.21
Total	105187.25	102825.15	100588.19	98390.28	96193.43

68. 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	1396.31	1444.80	1495.81	1549.25	1603.35
Maintenance Spares	2513.36	2600.64	2692.46	2788.65	2886.03
Receivables	12932.86	12677.07	12401.28	12130.31	11827.06
Total Working Capital	16842.53	16722.51	16589.55	16468.21	16316.44
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	2029.52	2015.06	1999.04	1984.42	1966.13

Effective Date of Commercial Operation ("E-COD")

69. The Petitioner has claimed E-COD of the Combined Asset as 17.12.2012. Accordingly, based on the trued-up admitted capital cost and actual COD of all the assets, E-COD has been worked out as follows:

Computation of E-COD					
Assets	Actual COD	Admitted capital cost as on 31.3.2019	Weight of the cost (in %)	No. of Days from last COD	Weighted Days
Combined Asset (1-5)	1.4.2012	68937.07	11.17	1825	203.88
Combined Asset (6-11)	1.5.2012	23805.33	3.86	1795	69.25
Combined Asset (12-20)	1.8.2012	72207.78	11.70	1703	199.28
Combined Asset (21-28)	13.8.2013	62268.38	10.09	1326	133.80
Combined Asset (29-49)	9.5.2012	245326.89	39.76	1787	710.44
Asset-50	1.4.2014	39746.40	6.44	1095	70.53
Asset-51	8.9.2014	12396.06	2.01	935	18.78
Asset-52	30.12.2014	4364.93	0.71	822	5.81
Asset-53	30.12.2014	718.30	0.12	822	0.96
Asset-54	8.1.2015	2096.02	0.34	813	2.76
Asset-55	31.3.2017	80574.78	13.06	0	0.00



Computation of E-COD					
Assets	Actual COD	Admitted capital cost as on 31.3.2019	Weight of the cost (in %)	No. of Days from last COD	Weighted Days
Asset-56	2.6.2014	3898.17	0.63	1033	6.53
Asset-57	1.4.2014	737.70	0.12	1095	1.31
Total		617077.81	100.00		1423.33
E-COD (Latest COD – Total weighted days) – 7.5.2013					

70. E-COD is used to determine the lapsed life of the project, which works out as (5) year as on 1.4.2019 (i.e., the number of completed years as on 1.4.2019 from E-COD).

Weighted Average Life (“WAL”)

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

72. 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.

73. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as stipulated in the 2019 Tariff Regulations. The element-wise life as defined in the 2014 Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. The life as defined in the 2019 Tariff Regulations has been considered for determination of WAL. Accordingly, WAL of the Combined Asset has been worked out as 29.63 years and is as follows:



Admitted Capital Cost as on 31.3.2019				
Particulars	Combined Asset cost (₹ in lakh) (1)	Life as per the 2019 Tariff Regulation (Years) (2)	Weighted cost (3) = (1)x(2)	WAL of asset (in years) (4) =(3)/(1)
Building	4429.63	25	110740.85	
Transmission Line	284598.20	35	9960937.11	
Sub-station	318012.40	25	7950310.09	
PLCC	1177.95	15	17669.23	
Leasehold Land	0.00	25	0.00	
IT Equipment and Software	831.06	7	5540.43	
Total	609049.25		18045197.71	29.63 years, rounded off to 30 years

74. WAL as on 1.4.2019 as determined above is applicable prospectively i.e. for the 2019-24 tariff period. No retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed, E-COD of the Combined Asset is 7.5.2013 and the lapsed life of the project as a whole, works out as five (5) years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 25 years.

Capital Cost

75. 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."

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

(₹ in lakh)								
Asset Details	RCE Apportioned approved cost	Expenditure considered up to 31.3.2019	ACE 2019-24					Estimated completion cost considered as on 31.3.2024
			(as per Auditor certificates)					
			2019-20	2020-21	2021-22	2022-23	2023-24	
Combined Asset-1 to 5	77882.21	68948.75	93.69	547.56	0.00	0.00	0.00	69590.00
Combined Asset-6 to 11	25084.65	23807.92	0.00	0.00	0.00	0.00	0.00	23807.92
Combined Asset-12 to 20	76832.83	72252.50	0.00	0.00	0.00	0.00	0.00	72252.50
Combined Asset-21 to 28	66130.68	62430.72	40.48	0.00	0.00	0.00	0.00	62471.20
Combined Asset-29 to 49	257557.89	240362.93	2392.39	1412.74	439.59	425.53	358.05	245391.23
Asset-50	43092.09	35174.21	2495.01	1486.80	701.06	115.06	267.69	40239.83



Asset-51	13468.90	11564.07	446.66	281.31	104.02	0.00	0.00	12396.06
Asset-52	4948.23	4081.18	0.00	281.31	104.02	0.00	0.00	4466.51
Asset-53	792.17	670.52	0.00	33.00	4.36	1.18	8.84	717.90
Asset-54	2249.13	1279.59	489.86	314.76	11.81	0.00	0.00	2096.02
Asset-55	83935.02	76219.50	3650.50	612.82	420.76	38.48	13.20	80955.26
Asset-56	4194.69	2076.33	1315.97	114.31	347.18	13.80	30.58	3898.17
Asset-57	885.73	770.79	0.00	0.00	0.00	0.00	0.00	770.79
Combined Assets under DVC Main	657054.00	599639.01	10924.56	5084.61	2132.80	594.05	678.36	619053.39

77. Against the overall RCE apportioned approved capital cost of ₹657054.00 lakh, the estimated completion cost is ₹619053.39 lakh. The individual capital cost of each transmission asset is also within the apportioned approved cost as per RCE.

78. The capital cost has been dealt in line with Regulation 19(3) of the 2019 Tariff Regulations. The element-wise capital cost (i.e., land, building, transmission line, Sub- station and PLCC) as admitted by the Commission as on 31.3.2019 in respect of the transmission assets and has been considered as capital cost of the Combined Asset as on 1.4.2019 as per the following details:

(₹ in lakh)

Elements	Combined Asset-1 to 5	Combined Asset-6 to 11	Combined Asset-12 to 20	Combined Asset-21 to 28	Combined Asset-29 to 49	Asset-50	Asset-51
Free hold Land	484.88	556.03	1274.21	1763.57	2115.93	1222.50	0.00
Building	722.58	69.37	338.04	485.92	2224.53	261.42	0.00
Transmission Line	4492.60	0.00	4200.27	16667.12	142882.47	26202.11	12396.06
Sub-station	62791.64	23070.84	66012.65	43312.68	97673.62	11899.85	0.00
PLCC	104.16	0.00	258.07	39.09	430.34	105.10	0.00
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT Equipment and Software	341.21	109.09	124.54	0.00	0.00	55.42	0.00
Total	68937.07	23805.33	72207.78	62268.38	245326.89	39746.40	12396.06

(₹ in lakh)

Elements	Asset-52	Asset-53	Asset-54	Asset-55	Asset-56	Asset-57	Capital cost for the Combined Asset as on 31.3.2019
Free hold Land	0.00	0.00	0.00	306.81	304.62	0.00	8028.55
Building	0.00	0.00	61.25	187.41	79.12	0.00	4429.63
Transmission Line	4364.93	0.00	0.00	73392.65	0.00	0.00	284598.20
Sub-station	0.00	620.48	1963.97	6493.25	3460.27	713.15	318012.40
PLCC	0.00	75.48	36.94	128.77	0.00	0.00	1177.95



Elements	Asset-52	Asset-53	Asset-54	Asset-55	Asset-56	Asset-57	Capital cost for the Combined Asset as on 31.3.2019
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT Equipment and Software	0.00	22.34	33.86	65.90	54.16	24.55	831.06
Total	4364.93	718.30	2096.02	80574.78	3898.17	737.70	617077.80

79. The Commission has worked out capital cost of ₹617077.80 lakh as on 31.3.2019 in preceding paragraphs and it has been considered as the opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

Initial Spares

80. As stated earlier in this order, Initial Spares are allowed for the 2009-14 and 2014-19 tariff periods on the basis of the cost of individual assets. The assets covered in the transmission project are combined during 2019-24 tariff period and, hence, the Initial Spares are allowed on the basis of the overall project cost as per the APTEL's judgement dated 14.9.2019 in Appeal No. 74 of 2017.

81. Accordingly, Initial Spares allowed for 2019-24 tariff period are as follows:

Sub-station:

(₹ in lakh)						
Assets	Capital Cost/ P&M cost as on cut-off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per the 2009/ 2014 Tariff Regulations (in %)	Initial Spares allowable as per the 2009/2014 Tariff Regulations	Initial Spares Allowed during 2009-14/ 2014-19 period (₹ in lakh)	Initial Spares allowed on Combined Asset (₹ in lakh)
Asset-1	759.10	30.39	2.50%	18.68	18.68	11.71
Asset-2	1355.15	15.24	2.50%	34.36	15.24	0.00
Asset-3	27012.09	438.56	2.50%	681.37	438.56	0.00
Asset-4	32684.78	591.36	2.50%	822.91	591.36	0.00
Asset-5	3251.06	76.43	2.50%	81.40	76.43	0.00



Assets	Capital Cost/ P&M cost as on cut-off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per the 2009/ 2014 Tariff Regulations (in %)	Initial Spares allowable as per the 2009/2014 Tariff Regulations	Initial Spares Allowed during 2009-14/ 2014-19 period (₹ in lakh)	Initial Spares allowed on Combined Asset (₹ in lakh)
Asset-6	5008.82	84.96	2.50%	126.25	84.96	0.00
Asset-7	6645.07	113.95	2.50%	167.46	113.95	0.00
Asset-8	6511.77	123.79	2.50%	163.79	123.79	0.00
Asset-9	2176.89	54.97	2.50%	52.37	52.37	2.60
Asset-10	2449.93	57.33	2.50%	61.35	57.33	0.00
Asset-11	1385.23	19.82	2.50%	35.01	19.82	0.00
Asset-12	1524.89	21.21	2.50%	38.56	21.21	0.00
	1524.89	21.21	2.50%	38.56	21.21	0.00
Asset-13	1281.75	19.82	2.50%	32.36	19.82	0.00
Asset-14	15018.21	270.59	2.50%	378.14	270.59	0.00
	1221.75	35.00	2.50%	30.43	30.43	4.57
	11461.71	179.18	2.50%	289.30	179.18	0.00
Asset-15	15018.21	270.59	2.50%	378.14	270.59	0.00
Asset-16	1644.21	44.21	2.50%	41.02	41.02	3.19
Asset-17	1248.99	35.00	2.50%	31.13	31.13	3.87
	2042.21	57.13	2.50%	50.90	50.90	6.23
Asset-18	747.46	44.85	2.50%	18.02	18.02	26.83
Asset-19	1452.60	27.36	2.50%	36.54	27.36	0.00
Asset-20	14608.02	355.00	2.50%	365.46	355.00	0.00
Asset-21	4927.38	84.96	2.50%	84.96	84.96	0.00
Asset-22	5926.66	153.10	2.50%	148.04	148.04	5.06
Asset-23	5125.07	134.31	2.50%	127.97	127.97	6.34
Asset-24	2078.14	43.26	2.50%	43.26	43.26	0.00
Asset-25	8053.09	192.54	2.50%	192.54	192.54	0.00
Asset-26	9353.48	205.95	2.50%	205.95	205.95	0.00
Asset-27	4556.02	103.48	2.50%	103.48	103.48	0.00
Asset-28	6042.67	149.65	2.50%	149.65	149.65	0.00
Asset-29	10919.23	264.65	2.50%	273.19	264.65	0.00
Asset-30	11162.49	267.75	2.50%	279.35	267.75	0.00
Asset-31	11167.18	270.12	2.50%	279.41	270.12	0.00
Asset-32	946.46	20.75	2.50%	23.74	20.75	0.00
Asset-34	4891.80	54.14	2.50%	124.04	54.14	0.00
Asset-35	5321.44	127.00	2.50%	133.19	127.00	0.00
Asset-37	3995.89	88.68	2.50%	100.18	88.68	0.00
Asset-38	4346.17	103.04	2.50%	108.80	103.04	0.00
Asset-39	4868.37	115.78	2.50%	121.86	115.78	0.00
Asset-40	1815.92	39.84	2.50%	45.54	39.84	0.00
Asset-41	1811.41	39.73	2.50%	45.43	39.73	0.00



Assets	Capital Cost/ P&M cost as on cut-off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per the 2009/ 2014 Tariff Regulations (in %)	Initial Spares allowable as per the 2009/2014 Tariff Regulations	Initial Spares Allowed during 2009-14/ 2014-19 period (₹ in lakh)	Initial Spares allowed on Combined Asset (₹ in lakh)
Asset-42	2587.14	81.06	2.50%	64.26	64.26	16.80
Asset-43	6460.45	127.60	2.50%	162.38	127.60	0.00
Asset-44	13515.79	175.22	2.50%	342.07	175.22	0.00
Asset-45	13540.17	155.80	2.50%	343.19	155.80	0.00
Asset-46	2000.98	57.52	2.50%	49.83	49.83	7.69
Asset-47	1445.22	36.27	2.50%	35.58	35.58	0.69
Asset-48	556.41	21.27	2.50%	13.72	13.72	7.55
Asset-49	681.46	18.14	2.50%	17.01	17.01	1.13
Asset-50	10508.21	410.00	6.00%	644.57	410.00	0.00
Asset-53	532.94	22.03	4.00%	21.29	21.29	0.74
Asset-54	1833.28	67.17	4.00%	73.59	67.17	0.00
Asset-55	4610.49	177.36	4.00%	184.71	177.36	0.00
Asset-56	3271.06	130.62	4.00%	130.85	130.62	0.00
Asset-57	683.71	16.00	6.00%	42.62	16.00	0.00
Total	759.10	6942.74		8689.77	6837.74	105.00

**Additional Initial Spares of (₹ 6942.74-₹6837.74= ₹105) lakhs are allowed for Sub-station of the Combined Asset*

Transmission Line

(₹ in lakh)

Assets	Capital cost/ P&M cost as on cut-off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per the 2009/ 2014 Tariff Regulations (in %)	Initial Spares allowable as per the 2009/2014 Tariff Regulations	Initial Spares allowed during 2009-14/ 2014-19 period (₹ in lakh)	Initial Spares allowed on Combined Asset (₹ in lakh)
Asset-5	4492.58	0.00	0.75%	33.95	0.00	0.00
Asset-19	3993.22	20.96	0.75%	30.02	20.96	0.00
Asset-24	16677.89	125.02	0.75%	122.56	122.56	2.46
Asset-32	10633.09	81.12	0.75%	79.74	79.74	1.38
Asset-33	24119.84	181.75	0.75%	180.89	180.89	0.86
Asset-35	21406.87	162.00	0.75%	160.54	160.54	1.46
Asset-36	36484.96	279.14	0.75%	273.60	273.60	5.54
Asset-50	22302.32	214.00	1.00%	223.11	214.00	0.00
Asset-51	11112.21	107.00	1.00%	111.16	107.00	0.00
Asset-52	3750.22	37.00	1.00%	37.51	37.00	0.00
Asset-55	58823.53	446.22	1.00%	589.67	446.22	0.00
Total	213796.73	1654.21		1842.75	1642.51	11.70



**Additional Initial Spares of (₹1654.21-₹1642.51=₹ 11.70) lakhs are allowed for Sub-station of the Combined Asset*

82. Accordingly, the capital cost allowed as on 1.4.2019 is as follows:

(₹ in lakh)		
Capital cost as on 31.3.2019	Initial Spares allowed as per APTEL's Judgement	Capital cost as on 1.4.2019
617077.80	116.70	617194.51

Additional Capital Expenditure ("ACE")

83. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provides as follows:

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

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

- (a) Undischarged liabilities recognized to be payable at a future date;*
- (b) Works deferred for execution;*
- (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;*
- (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;*
- (e) Change in law or compliance of any existing law; and*
- (f) Force Majeure events;*

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

(2) The generating company or the transmission licensee, as the case may be shall submit the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution."

"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; and*



(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.”

84. The Petitioner has claimed ACE in respect of Asset-4(a) and Asset-4(b) during 2019-20 and 2020-21 in account of work deferred for execution in accordance with Regulation 24(1)(b) of the 2019 Tariff Regulations. The Petitioner has submitted that ACE in case of Asset-4a and Asset-4b is beyond cut-off date and on account of work deferred for execution for colony construction. The colony at Fatehpur Sub-station could not be constructed due to implementation of National Transmission Asset Management Centre (NTAMC) *inter-alia* for remote operation of Sub-station and establishment of Maintenance Service Hub (MSH) concept. The Petitioner has further submitted that considering the challenges faced in maintenance through MSH, the Petitioner felt it appropriate to place maintenance and operation staff in sub-station, so that any contingency can be met immediately to avert any major breakdown. Accordingly, residential quarters for O&M staff at Fatehpur Sub-station are being constructed under the transmission project in which colony was originally provisioned in DPR. The Petitioner has prayed to allow the ACE on account of colony construction as the same is required for efficient operation of the Grid.

85. In case of all other assets, admissibility of ACE incurred after COD and upto to cut-off date is on account of balance and retention payments/ work deferred for execution and is to be dealt in accordance Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations and admissibility of ACE after the cut-off date is on account of balance and retention payments due to undischarged liability for works executed before cut-off date and is to be dealt Regulation 25(1)(d) of the 2019 Tariff Regulations.

86. The Petitioner has claimed ACE in respect of the transmission assets during 2019-24 in accordance with Regulation 24(1)(a), 24(1) (b) and 25(1)(d) of the 2019 Tariff Regulations as follows:

(₹ in lakh)

Asset Details	ACE 2019-24				
	(as per Auditor's certificates)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset-1 to 5	93.69	547.56	0.00	0.00	0.00
Combined Asset-6 to 11	0.00	0.00	0.00	0.00	0.00
Combined Asset-12 to 20	0.00	0.00	0.00	0.00	0.00
Combined Asset-21 to 28	40.48	0.00	0.00	0.00	0.00
Combined Asset-29 to 49	199.03	0.00	0.00	0.00	0.00
Asset-50	0.00	0.00	0.00	0.00	0.00
Asset-51	49.53	0.00	0.00	0.00	0.00
Asset-52	49.54	0.00	0.00	0.00	0.00
Asset-53	0.00	0.00	0.00	0.00	0.00
Asset-54	0.00	0.00	0.00	0.00	0.00
Asset-55	98.36	0.00	0.00	0.00	0.00
Asset-56	0.00	0.00	0.00	0.00	0.00
Asset-57	0.00	0.00	0.00	0.00	0.00
Total	530.63	547.56	0.00	0.00	0.00

87. BSPHCL has submitted that the admissibility of ACE incurred after COD and up to cut-off date is on account of balance and retention payments/ work deferred for execution and is to be dealt in accordance with Regulation 24 of the 2019 Tariff Regulations. As per Regulation 24(2) the 2019 Tariff Regulations, the Petitioner is



required to 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, which have not been provided properly by the Petitioner in the present petition. BSPHCL has further submitted that with respect to the ACE claimed by the Petitioner for Asset-4(a) and Asset-4(b) beyond cut-off date and on account of work deferred for execution of colony construction, the Petitioner has not provided the original DPR in which the residential quarters for operation and maintenance staff at Fatehpur Sub-station was provisioned. BSPHCL relying upon the Commission's order dated 9.8.2021 in Petition No. 269/TT/2020, has submitted that the Petitioner may be directed to submit the original DPR in which the residential quarters for operation and maintenance staff at Fatehpur Sub-station being constructed were provisioned in order to determine the actual ACE incurred by the Petitioner or to file a separate petition for the ACE towards "building and civil works" for consideration by the Commission. Further, as the Petitioner has not submitted the consent of beneficiaries/ Respondents to show the proposed ACE towards construction of colony, hence, the claim of the Petitioner for ACE may be rejected.

88. In response, the Petitioner has submitted that the ACE claimed for 2019-24 period for all the transmission assets incurred after COD and up to cut-off date and the admissibility of ACE incurred after cut-off date is to be dealt in accordance with the 2019 Tariff Regulations. The Petitioner has submitted that the ACE details/ liability flow statement has been submitted vide affidavit dated 16.7.2021. As regards the ACE claimed by the Petitioner for Asset-4(a) and Asset-4(b), the Petitioner has reiterated its submission regarding the execution of colony construction. The Petitioner has further submitted that the copy of DPR mentioning



the colony construction at Fatehpur has been enclosed along with the rejoinder to the BSPHCL and the same has been discussed with the SCMs and RPCs.

89. MPPMCL has submitted that the ACE for 2019-24 period has been claimed on the basis of Auditor's Certificate and detailed documents and justifications regarding the same have not been submitted. In response, the Petitioner has reiterated its submissions.

90. We have considered the submissions of the Petitioner, MPPMCL and BSPHCL. The asset wise ACE allowed/ not allowed for the 2019-24 tariff period are as follows:

Asset-3(a):

(a) The Petitioner has claimed an amount of ₹41.25 lakh for Asset-3(a) towards balance and retention payments towards liability for works executed prior to the cut-off date. We have considered the submissions of the Petitioner. The ACE of ₹41.25 lakh is allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations as it is towards balance and retention payments for Asset-3(a).

Asset-4(a) and Asset-4(b):

(a) The Petitioner has claimed an amount of ₹52.44 lakh in 2019-20 and ₹547.56 lakh in 2020-21 towards unexecuted work w.r.t. construction of colony at Fatehpur Sub-station. The construction work at Fatehpur Sub-station is delayed due to implementation of NTAMC inter-alia for remote operation of sub-station and establishment of MSH concept. The Petitioner while implementing the same has faced challenges in maintenance of the sub-station through MSH and the Petitioner has gone back and relied upon earlier concept of sub-station maintenance by placing maintenance staff at these sub-stations. The Petitioner, for operation purpose, intends to place some operation staff in sub-station so that any contingency can be met immediately to avert any major breakdown.



(b) We have considered the submissions of the Petitioner. ACE for Asset-4(a) and Asset-4(b) has been incurred after the cut-off date on account of works deferred for colony construction. The construction of colony at Fatehpur Sub-station could not be constructed earlier due to implementation of NTAMC, *inter alia*, for remote operation of sub-station and establishment of MSH concept. As pointed out by the Petitioner, it is better to place some operation and maintenance staff in the sub-station to meet any contingency and avert major breakdown. However, we are not inclined to allow the ACE after the cut-off date at this stage. The Petitioner is directed to discuss the same in the RPC and thereafter approach the Commission alongwith the details of actual expenditure incurred on construction of colony at the time of truing up of tariff for 2019-24 period for further consideration.

Asset-25:

a) The Petitioner has claimed an amount of ₹24.21 lakh for Asset-25 towards balance and retention payments towards liability for works executed prior to the cut-off date. We have considered the submissions of the Petitioner. ACE of ₹24.21 lakh is allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations as it is towards balance and retention payments for Asset-25.

Asset-26C:

a) The Petitioner has claimed an amount of ₹16.27 lakh for Asset-26C towards balance and retention payments towards liability for works executed prior to the cut-off date. We have considered the submissions of the Petitioner. ACE of ₹16.27 lakh is allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations as it is towards balance and retention payments for Asset-26C.

Asset-35:

a) The Petitioner has claimed an amount of ₹46.59 lakh for Asset-35 towards balance and retention payments towards liability for works executed prior to the cut-off date. We have considered the submissions of the Petitioner.



ACE of ₹46.59 lakh is allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations as it is towards balance and retention payments for Asset-35.

Asset-46:

- a) The Petitioner has claimed an amount of ₹152.44 lakh for Asset-46 towards balance and retention payments towards liability for works executed prior to the cut-off date. We have considered the submissions of the Petitioner. ACE of ₹152.44 lakh is allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations as it is towards balance and retention payments for Asset-46.

Asset-51:

- a) The Petitioner has claimed an amount of ₹49.53 lakh for Asset-51 towards balance and retention payments towards liability for works executed prior to the cut-off date. We have considered the submissions of the Petitioner. ACE of ₹49.53 lakh is allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations as it is towards balance and retention payments for Asset-51.

Asset-52:

- a) The Petitioner has claimed an amount of ₹49.54 lakh for Asset-52 towards balance and retention payments towards liability for works executed prior to the cut-off date. We have considered the submissions of the Petitioner. ACE of ₹49.54 lakh is allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations as it is towards balance and retention payments for Asset-52.

Asset-55:

- a) The Petitioner has claimed an amount of ₹98.36 lakh for Asset-55 towards balance and retention payments towards liability for works executed prior to the cut-off date. We have considered the submissions of the Petitioner. ACE of ₹98.36 lakh is allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations as it is towards balance and retention payments for Asset-55.

91. In view of the above, ACE allowed/ not allowed for 2019-24 tariff period are as follows:



Asset Name	2019-20	2020-21	Remarks	Allowed/ not allowed
Asset-3(a)	41.25	0.00	Balance and retention payment	Allowed under Regulation 25 (1)(d) of the 2019 Tariff Regulations
Asset-4(a)	26.22	273.78	Unexecuted work w.r.t. construction of colony at Fatehpur Sub-station	Not allowed.
Asset-4 (b)	26.22	273.78		
Asset-25	24.21	0.00	Balance and retention payment	Allowed under Regulation 25 (1)(d) of the 2019 Tariff Regulations.
Asset-26 C	16.27	0.00	Balance and retention payment	Allowed under Regulation 25 (1)(d) of the 2019 Tariff Regulations.
Asset-35	46.59	0.00	Balance and retention payment	Allowed under Regulation 25 (1)(d) of the 2019 Tariff Regulations.
Asset-46	152.44	0.00	Balance and retention payment	Allowed under Regulation 25 (1)(d) of the 2019 Tariff Regulations.
Asset-51	49.53	0.00	Balance and retention payment	Allowed under Regulation 25 (1)(d) of the 2019 Tariff Regulations.
Asset-52	49.54	0.00	Balance and retention payment	Allowed under Regulation 25 (1)(d) of the 2019 Tariff Regulations.
Asset-55	0.77	0.00	Balance and retention payment	Allowed under Regulation 25 (1)(d) of the 2019 Tariff Regulations.
	97.59	0.00	Balance and retention payment	Allowed under Regulation 25 (1)(d) of the 2019 Tariff Regulations.

92. The total ACE allowed in respect of the Combined Asset is as follows:

Particulars	(₹ in lakh)	
	ACE (2019-20)	ACE (2021-22)
ACE to the extent of balance & retention payments and work deferred for execution before cut-off date	478.19	0.00

Capital Cost for 2019-24 tariff period

93. Accordingly, the capital cost of the Combined Asset considered for the 2019-24 tariff period, subject to truing-up, is as follows:



(₹ in lakh)		
Capital cost (as on 1.4.2019)	ACE (2019-24)	Total estimated completion cost (up to 31.3.2024)
617194.51	478.19	617672.70

94. Against the overall RCE approved capital cost of ₹707533.00 lakh, the estimated project cost of the Combined Asset including ACE is ₹617672.70 lakh which is within the approved cost. Therefore, there is no cost over-run as per the RCE approved cost.

Debt-Equity Ratio

95. 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.”

96. The details of the debt-equity ratio considered for the purpose of tariff for 2019-24 tariff period are as follows:

Funding	Capital cost (as on 1.4.2019) (₹ in lakh)	(in %)	Capital cost (as on 31.3.2024) (₹ in lakh)	(in %)
Debt	432036.16	70.00	432370.89	70.00
Equity	185158.35	30.00	185301.81	30.00
Total	617194.51	100.00	617672.70	100.00

Depreciation

97. Regulation 33 of the 2019 Tariff Regulations provide 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 Asset-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 asset.

(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 up to 31.3.2019 from the gross depreciable value of the asset.

(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 asset 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.”

98. We have considered the submissions of the Petitioner. WAROD at Annexure-II has been worked out after considering the depreciation rates of the transmission assets as prescribed in the 2019 Tariff Regulations. Depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. Depreciation allowed for the Combined Asset is as follows:

(₹ in lakh)

Combined Asset						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Gross Block	617194.51	617672.70	617672.70	617672.70	617672.70
B	Addition during the year 2019-24 due to projected ACE	478.19	0.00	0.00	0.00	0.00
C	Closing Gross Block (A+B)	617672.70	617672.70	617672.70	617672.70	617672.70
D	Average Gross Block (A+C)/2	617433.60	617672.70	617672.70	617672.70	617672.70
E	Average Gross Block (90% depreciable assets)	608573.99	608813.08	608813.08	608813.08	608813.08
F	Average Gross Block (100% depreciable assets)	831.06	831.06	831.06	831.06	831.06



Combined Asset						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
G	Depreciable value (excluding IT equipment and software) (E*90%)	547716.59	547931.77	547931.77	547931.77	547931.77
H	Depreciable value of IT equipment and software	831.06	831.06	831.06	831.06	831.06
I	Total Depreciable Value (G+H)	548547.65	548762.84	548762.84	548762.84	548762.84
J	Weighted average rate of Depreciation (WAROD) (in %)	5.21	5.21	5.21	5.21	5.21
K	Lapsed useful life at the beginning of the year (Year)	5.00	6.00	7.00	8.00	9.00
L	Balance useful life at the beginning of the year (Year)	25.00	24.00	23.00	22.00	21.00
M	Depreciation during the year(D*J)	32183.79	32196.41	32196.41	32196.41	32196.41
N	Aggregate Cumulative Depreciation at the end of the year	229160.77	261357.18	293553.58	325749.99	357946.40
O	Remaining Aggregate Depreciable Value at the end of the year(I-N)	319386.89	287405.66	255209.25	223012.84	190816.44

Interest on Loan (“IoL”)

99. 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 asset, 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”.

100. 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 the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up.

101. We have considered the submissions of the Petitioner. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up. In view of above, the IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the Combined Asset is follows:

(₹ in lakh)

Combined Asset						
	Particular	2019-20	2020-21	2021-22	2022-23	2023-24
A	Gross Normative Loan	432036.15	432370.89	432370.89	432370.89	432370.89
B	Cumulative Repayments upto Previous Year	196976.97	229160.77	261357.18	293553.58	325749.99
C	Net Loan-Opening (A-B)	235059.18	203210.12	171013.71	138817.30	106620.89
D	Addition due to ACE	334.73	0.00	0.00	0.00	0.00
E	Repayment during the year	32183.79	32196.41	32196.41	32196.41	32196.41



F	Net Loan-Closing (C+D-E)	203210.12	171013.71	138817.30	106620.89	74424.48
G	Average Loan (C+F)/2	219134.65	187111.92	154915.51	122719.10	90522.69
H	Weighted Average Rate of Interest on Loan (%)	8.782	8.779	8.777	8.774	8.765
I	Interest on Loan (G*H)	19245.06	16426.56	13596.78	10767.13	7934.31

Return on Equity ("RoE")

102. 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.”

103. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. We have considered the submissions of the Petitioner. The 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 under Regulation 30 of the 2019 Tariff Regulations and the same is as follows:

(₹ in lakh)						
Combined Asset						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Equity	185158.35	185301.81	185301.81	185301.81	185301.81
B	Addition due to ACE	143.46	0.00	0.00	0.00	0.00
C	Closing Equity (A+B)	185301.81	185301.81	185301.81	185301.81	185301.81
D	Average Equity (A+C)/2	185230.08	185301.81	185301.81	185301.81	185301.81
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
H	Return on Equity (Pre-tax) (D*G)	34789.91	34803.39	34803.39	34803.39	34803.39

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

104. O&M Expenses claimed by the Petitioner for the Combined Asset are as follows:

Combined Asset				
Transmission Lines				
Sl. No.	Name of Line	Single Circuit / Double Circuit	No of Sub-Conductors	Line Length km
1	LILO of both Ckt of 400 kV D/C Allahabad-Mainpuri Line at Fatehpur	Double circuit	2	36.890
2	LILO of Barh-Balia Line	Double circuit	4	8.720
3	Ranchi (old)-Ranchi (New)	Single circuit	4	77.311
4	Lucknow (New)-To Lucknow	Double circuit	4	2.862
5	Lucknow-Balia S/C Line	Single circuit	4	318.905
6	400 kV Biharsharif-Gaya Line (Part of Gaya-Balia)	Single circuit	4	69.300
7	400 kV Sasaram-Balia Line (Part of Gaya-Balia)	Single circuit	4	158.764



8	Gaya-Sasaram Line	Double circuit	4	147.807
9	Maithon-Koderma Line (Part of Maithon - Gaya)	Single circuit	4	209.000
10	400 kV D/C Quad Ranchi (New)- Ranchi (Old)- Line I Ckt II	Single circuit	4	76.404
11	400 kV D/C Quad Ranchi (New)- Ranchi (Old)- Line - II	Double circuit	4	78.716
12	400 kV D/C Quad Ranchi (New)- Ranchi (Old)- II	Single circuit	4	0.907
13	Balance Portion of 400 kV Maithon - Gaya D/C Quad Transmission Line Ckt II including MCKT	Double circuit	4	22.943
14	Balance Portion of 400 kV Maithon - Gaya D/C Quad Transmission Line Ckt II including MCKT	Multi Circuit	4	42.015
15	Balance Portion of 400 kV D/C Maithon-Gaya Line including Multi-Circuit	Single circuit	4	22.943
16	Balance Portion of 400 kV D/C Maithon-Gaya Line including Multi-Circuit	Double circuit	4	42.015
17	765 kV S/C Ranchi - WR Pooling Station (Sipat) Line	Double circuit	4	381.350

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Lines (km)					
Double circuit with Two conductors (km)	36.89	36.89	36.89	36.89	36.89
Single circuit with four sub-conductors (km)	1229.841	1229.841	1229.841	1229.841	1229.841
Double circuit with four sub-conductors (km)	322.241	322.241	322.241	322.241	322.241
Multi circuit with four sub-conductors (km)	42.922	42.922	42.922	42.922	42.922
Norm (₹ lakh/km)					
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four or more sub-conductors)	0.755	0.781	0.809	0.837	0.867
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Multi Circuit with four or more sub-conductors	2.319	2.401	2.485	2.572	2.662
Total Transmission Line O&M Expenses (A)	1486.56	1538.02	1592.70	1648.20	1706.65

Sub-station	
Sl. No.	400 kV Sub-station bay
1	Lucknow:125 MVAR Bus Reactor II Bay at Lucknow
2	Balia:Bus Reactor IV bay at Balia
3	Fatehpur-Allahabad I and II Bay at Fatehpur
4	Fatehpur-Mainpuri I and II Bay at Fatehpur
5	Lucknow:ICT II Bay at Lucknow
6	Balia:ICT II Bay at Balia
7	Fatehpur-ICT I Bay at Fatehpur
8	Fatehpur:1500 MVA ICT I Bay at Fatehpur
9	Agra:125 MVAR Bus Reactor III at Agra
10	Agra:125 MVAR Bus Reactor II at Agra
11	Balia:125 MVAR Bus Reactor III bay at Balia
12	Maithon:Mejia I Bay
13	Maithon: Mejia II Bay



14	Balia:Bus Reactor-II Bay
15	Agra:ICT II Bay at Agra
16	Maithon:Gaya -I Bay
17	Maithon: Gaya -II Bay
18	Maithon:Gaya -I Line Reactor Bay
19	Maithon: Gaya -II Line Reactor Bay
20	Lucknow:Bus Reactor Bay
21	Sasaram:400 kV 125 MVAR Bus Reactor II at Sasaram Sub-station
22	Patna:Patna:Barh/Balia Bay I and II
23	Sasaram:ICT-I Bay at Sasaram
24	Fatehpur:Bus Reactor-I Bay
25	Fatehpur:Bus Reactor II Bay at Fatehpur
26	Sasaram:Bus Reactor I at Sasaram
27	Agra:ICT-I Bay at Agra
28	Ranchi:New Ranchi Bay- I-Ranchi Ranchi
29	Ranchi: New Ranchi Bay – II-Ranchi Ranchi
30	New Ranchi:ICT-II Bay (765/400)-New Ranchi Ranchi (New) (765 kV)
31	New Ranchi:Bus Reactor-I Bay-New Ranchi Ranchi (New) (765 kV)
32	New Ranchi:Bus Reactor-II Bay-New Ranchi Ranchi (New) (765 kV)
33	Lucknow:02 Line Bays each at Lucknow Old and New
34	Lucknow:ICT-I 400 kV Bay
35	Balia:ICT-I 400 kV Bay
36	Sasaram:Line Bays for Biharsharif-Sasaram Line
37	Biharsharif: Line Bays for Biharsharif-Sasaram Line
38	Biharsharif: Line Bays for Biharsharif-Gaya Line
39	Sasaram: Line Bays for Sasaram-Balia Line
40	Sasaram:2X50 MVAR Reactor Bay
41	Gaya:Line Bays for 400 kV D/C Maithon-Gaya Line
42	Gaya:2X50 MVAR SLR for 400 kV D/C Maithon-Gaya Line
43	Gaya:ICT-I 400 kV Bay
44	Gaya:ICT-II 400 kV Bay
45	Gaya:ICT-III 400 kV Bay
46	Gaya:Koderma I Line Bay for Biharsharif-Gaya Line
47	Gaya:125 MVAR Bus Reactor-I Bay
48	Gaya:125 MVAR Bus Reactor-II Bay
49	Ranchi:400 kV Bay at Ranchi (New) for Line-I Ckt.-II
50	Ranchi:400 kV Bay at Ranchi for Line -I Ckt.-II
51	Ranchi:02 Numbers 400 kV Bays at Ranchi (New) for Line -II Ckt.-I & II
52	Ranchi:02 Numbers 400 kV Bays at Ranchi for Line -II Ckt.-I & II
53	Ranchi:ICT I 400 kV Bay
54	Gaya:400 kV Line Koderma II Bay at Gaya Sub-station
55	Ranchi:Raghunathpur Bay- II-Ranchi-Ranchi
56	Ranchi: Raghunathpur Bay - II- Ranchi-Ranchi
Sl. No.	765 kV Sub-station bay
1	Lucknow:ICT II Bay at Lucknow
2	Balia:ICT II Bay at Balia
3	Fatehpur:ICT-I Bay
4	Fatehpur:ICT-II Bay at Fatehpur
5	Fatehpur:765 kV Sasaram Bay at Fatehpur
6	Sasaram:765 kV Fatehpur Bay at Sasaram
7	Balia:Bus Reactor-II at Balia
8	Fatehpur:330 MVAR Bus reactor at Fatehpur



9	Lucknow:240 MVAR Bus reactor at Lucknow					
10	Agra:ICT II Bay at Agra					
11	Sasaram:ICT-I Bay at Sasaram					
12	Fatehpur:Agra Bay					
13	Agra: Fatehpur Bay					
14	Fatehpur:Line Reactor Bay					
15	Agra:ICT-I Bay at Agra					
16	Balia:765 kV Bus Reactor-I Bay at Balia-Balia(765 kV)					
17	Sasaram: Fatehpur Bay Sasaram-Sasaram (765 kV)					
18	Sasaram: Fatehpur SLR Bay Sasaram Sasaram (765 kV)					
19	Sasaram:Bus Reactor-I Bay Sasaram Sasaram (765 kV)					
20	New Ranchi:ICT-II Bay (765/400)-New Ranchi Ranchi (New)(765 kV)					
21	New Ranchi:Bus Reactor-II Bay New Ranchi Ranchi (New) (765 kV)					
22	Bilaspur:SLR Bay					
23	Bilaspur:Bus Reactor Bay					
24	Agra:765 kV Bus Reactor-I Bay Agra Agra					
25	Lucknow:Line Bay for Lucknow-Balia Transmission Line					
26	Balia: Line Bay for Lucknow-Balia Transmission Line					
27	Lucknow:SLR Bay for Lucknow-Balia Transmission Line					
28	Balia:SLR Bay for Lucknow-Balia Transmission Line					
29	Lucknow:ICT-I 765 kV Bay					
30	Balia:ICT-I 765 kV Bay					
31	Gaya:ICT-I 765 kV Bay					
32	Gaya:ICT-II 765 kV Bay					
33	Gaya:ICT-III 765 kV Bay					
34	Gaya:240 Bus Reactor-I Bay					
35	Gaya:240 Bus Reactor-II Bay					
36	Balia:Line Bay for 765 kV S/C Gaya-Balia and 240 MVAR SLR Bay					
37	Gaya:Sasaram/ Fatehpur Line Bay and 240 MVAR SLR Bay for 765 kV S/C Gaya-Sasaram Transmission Line					
38	Ranchi:ICT I Bay					
39	Gaya:Balia 765 kV Bay at Gaya Sub-station					
40	Ranchi:Sipat 765 kV Bay					
41	Ranchi:3X80 MVAR Switchable Line Reactor 1 Bay					
42	Ranchi:3X80 MVAR Bus Reactor - I					
Sl. No.	765 kV Sub-station ICT					
1	Fatehpur:1500 MVA 2 Numbers ICTS at Fatehpur					
2	Balia:1500 MVA ICT-II at Balia Sub-station					
3	Lucknow:1500 MVA ICT-II at Lucknow Sub-station					
4	Agra:1500 MVA ICT-I & II at Agra Sub-station					
5	Sasaram:1500 MVA ICT at Sasaram					
6	New Ranchi:Ranchi ICT I					
7	Ranchi:1500 MVA ICT at Ranchi					
8	Lucknow:ICT-I at Lucknow					
9	Balia:ICT-I at Balia					
10	Gaya:ICT-I					
11	Gaya:ICT-II					
12	Gaya:ICT-III					
13	Ranchi:3X500 MVA ICT-I at Ranchi (New)					
Particulars		2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station (Number of bays)						
400 kV		69	69	69	69	69



765 kV	44	44	44	44	44
765 kV ICT	27	27	27	27	27
Norms (₹ lakh/bay)					
400 kV Sub-station	32.15	33.28	34.45	35.66	36.91
765 kV Sub-station	22.51	23.30	24.12	24.96	25.84
765 kV Sub-station ICT	0.358	0.371	0.384	0.398	0.411
Total Sub-station O&M Expenses (B)	15246.29	15776.72	16334.17	16919.96	17510.71
Communication System					
PLCC (₹ in lakh)	1142.29	1142.29	1142.29	1142.29	1142.29
Norms (in %)	2	2	2	2	2
Total Communication System (C)	22.85	22.85	22.85	22.85	22.85
Total O&M Expenses D= (A)+(B)+(C)	16755.70	17337.59	17949.72	18591.01	19240.21

105. Regulation 35(3)(a) and Regulation 35(4) of the 2019 Tariff Regulations

provides as follows:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<i>Norms for sub-station Bays (₹ lakh per bay)</i>					
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
<i>Norms for Transformers (₹ lakh per MVA)</i>					
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
<i>Norms for AC and HVDC lines (₹ lakh per km)</i>					
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



<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
<i>Norms for HVDC stations</i>					
<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 (₹ 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 (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);*
- iv. the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;*
- v. the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and*



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

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

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

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

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

106. The Petitioner has claimed O&M Expenses separately for PLCC under Regulation 35(4) of the 2019 @2% of its original project cost in the instant petition and 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 2019 Tariff Regulations and the norms for sub-station has 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.

107. O&M Expenses allowed for the Combined Asset are as follows:



Combined Asset						
Transmission Lines						
Sl. No.	Name of Line	Single Circuit / Double Circuit	No of Sub-Conductors	Line kength km		
1	LILO of both Ckt of 400 kV D/C Allahabad Mainpuri Line at Fatehpur	Double circuit	2	36.890		
2	LILO of Barh-Balia Line	Double circuit	4	8.720		
3	Ranchi (old)-Ranchi (New)	Single circuit	4	77.311		
4	Lucknow (New) to Lucknow	Double circuit	4	2.862		
5	Lucknow-Balia S/C Line	Single circuit	4	318.905		
6	400 kV Biharsharif-Gaya Line (Part of Gaya-Balia)	Single circuit	4	69.300		
7	400 kV Sasaram-Balia Line (Part of Gaya-Balia)	Single circuit	4	158.764		
8	GAya-Sasaram Line	Double circuit	4	147.807		
9	Maithon-Koderma Line (Part of Maithon-Gaya)	Single circuit	4	209.000		
10	400 kV D/C Quad Ranchi (New)-Ranchi (Old)-I Ckt II	Single circuit	4	76.404		
11	400 kV D/C - Quad Ranchi (New)-Ranchi (Old) Line-II	Double circuit	4	78.716		
12	400 kV D/C Quad Ranchi (New)-Ranchi (Old)-II	Single circuit	4	0.907		
13	Balance portion of 400 kV –Maithon-Gaya D/C Quad Transmission Line Ckt II including MCKt	Double circuit	4	22.943		
14	Balance portion of 400 kV-Maithon-Gaya D/C Quad Transmission Line Ckt II including MCKt	Multi Circuit	4	42.015		
15	Balance portion of 400 kV D/C Maithon-Gaya Line including Multi Circuit	Single circuit	4	22.943		
16	Balance portion of 400 kV D/C Maithon-Gaya Line including Multi Circuit	Double circuit	4	42.015		
17	765 kV S/C Ranchi - WR Pooling Station (Sipat) Line	Double circuit	4	381.350		
Particulars		2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Lines (km)						
Double circuit with two conductors (km)		36.89	36.89	36.89	36.89	36.89
Single circuit with four sub-conductors (km)		1229.841	1229.841	1229.841	1229.841	1229.841
Double circuit with four sub-conductors (km)		322.241	322.241	322.241	322.241	322.241
Multi circuit with four sub-conductors (km)		42.922	42.922	42.922	42.922	42.922
Norm (₹ lakh/km)						
Double Circuit (Twin & Triple Conductor)		0.881	0.912	0.944	0.977	1.011



Single Circuit (Bundled conductor with four or more sub-conductors)	0.755	0.781	0.809	0.837	0.867
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Multi Circuit with four or more sub-conductors	2.319	2.401	2.485	2.572	2.662
Total Transmission Line O&M Expenses (A)	1486.56	1538.02	1592.70	1648.20	1706.65

Sub-station

Sl. No.	400 kV Sub-station bay
1	Lucknow:125 MVAR Bus Reactor-II Bay at Lucknow
2	Balia:Bus Reactor IV Bay at Balia
3	Fatehpur:Allahabad I and II Bay at Fatehpur
4	Fatehpur:Mainpuri I and II Bay at Fatehpur
5	Lucknow:ICT II Bay at Lucknow
6	Balia:ICT II Bay at Balia
7	Fatehpur:ICT I Bay at Fatehpur
8	Fatehpur:1500 MVA ICT II Bay at Fatehpur
9	Agra:125 MVAR Bus Reactor III at Agra
10	Agra:125 MVAR Bus Reactor II at Agra
11	Balia:125 MVAR Bus Reactor III Bay at Balia
12	Maithon:Mejia I Bay
13	Maithon: Mejia II Bay
14	Balia: Bus Reactor II Bay
15	Agra:ICT II Bay at Agra
16	Maithon:Gaya -I Bay
17	Maithon:Gaya -II Bay
18	Maithon:Gaya-I Line Reactor Bay
19	Maithon: Gaya-II Line Reactor Bay
20	Lucknow:Bus Reactor Bay
21	Sasaram:400 kV 125 MVAR Bus Reactor II at Sasaram Sub-station
22	Patna:Patna-Barh/Balia Bay I and II
23	Sasaram:ICT-I Bay at Sasaram
24	Fatehpur:Bus Reactor I Bay
25	Fatehpur:Bus Reactor II Bay at Fatehpur
26	Sasaram:Bus Reactor I at Sasaram
27	Agra:ICT-I Bay at Agra
28	Ranchi:New Ranchi Bay I Ranch Ranchi
29	Ranchi:New Ranchi Bay II Ranchi Ranchi
30	New Ranchi:ICT-II Bay (765/400)-New Ranchi Ranchi (New) (765 kV)
31	New Ranchi:Bus Reactor-I Bay New Ranchi Ranchi (New) (765kV)
32	New Ranchi:Bus Reactor-II Bay New Ranchi Ranchi (New) (765kV)
33	Lucknow:02 Line Bays each at Lucknow old and New
34	Lucknow:ICT-I 400 kV Bay
35	Balia:ICT-I 400 kV Bay
36	Sasaram:Line Bays for Biharsharif-Sasaram Line
37	Biharsharif: Line Bays for Biharsharif-Sasaram Line
38	Biharsharif: Line Bays for Biharsharif-Gaya Line
39	Sasaram: Line Bays for Sasaram -Balia Line
40	Sasaram:2X50 MVAR Reactor Bay
41	Gaya:Line Bays for 400 kV D/C Maithon-Gaya Line



42	Gaya:2X50 MVAR SLR for 400 kV D/C Maithon-Gaya Line
43	Gaya:ICT-I 400 kV Bay
44	Gaya:ICT-II 400 kV Bay
45	Gaya:ICT-III 400 kV Bay
46	Gaya:Koderma I Line Bay for Biharsharif-Gaya Line
47	Gaya:125 MVAR Bus Reactor-I Bay
48	Gaya:125 MVAR Bus Reactor-II Bay
49	Ranchi:400 kV Bay at Ranchi (New) for Line I Ckt-II
50	Ranchi:400 kV Bay at Ranchi for Line I Ckt-II
51	Ranchi:02 Numbers 400 kV Bays at Ranchi (New) for Line II Ckt-I and II
52	Ranchi:02 Numbers 400 kV Bays at Ranchi for Line II Ckt-I and II
53	Ranchi:ICT I 400 kV Bay
54	Gaya:400 kV Line Koderma II Bay at Gaya Sub-station
55	Ranchi:Raghunathpur Bay-II-Ranchi-Ranchi
56	Ranchi: Raghunathpur Bay-II-Ranchi-Ranchi
Srl. No.	765 kV Sub-station bay
1	Lucknow:ICT II Bay at Lucknow
2	Balia:ICT II Bay at Balia
3	Fatehpur:ICT-I-Bay
4	Fatehpur:ICT-II-Bay at Fatehpur
5	Fatehpur: 765 kV Sasaram Bay at Fatehpur
6	Sasaram:765 kV Fatehpur Bay at Sasaram
7	Balia:Bus Reactor-II at Balia
8	Fatehpur:30 MVAR Bus reactor at Fatehpur
9	Lucknow:240 MVAR Bus Reactor at Lucknow
10	Agra:ICT II Bay at Agra
11	Sasaram:ICT-I Bay at Sasaram
12	Fatehpur-Agra Bay
13	Agra: Fatehpur Bay
14	Fatehpur: Line Reactor Bay
15	Agra:ICT-I Bay at Agra
16	Balia:765 kV Bus Reactor-I Bay-Balia-Balia (765 kV)
17	Sasaram: Fatehpur-Bay-Sasaram-Sasaram (765 kV)
18	Sasaram: Fatehpur-SLR-Bay-Sasaram-Sasaram (765 kV)
19	Sasaram:Bus Reactor-I Bay-Sasaram-Sasaram (765 kV)
20	New Ranchi:ICT-II Bay (765/400)-New-Ranchi-Ranchi (New) (765 kV)
21	New Ranchi:Bus Reactor-II Bay-New-Ranchi-Ranchi (New) (765 kV)
22	Bilaspur:SLR Bay
23	Bilaspur:Bus Reactor Bay
24	Agra:765 kV Bus Reactor-I Bay-Agra-Agra
25	Lucknow:Line Bay for Lucknow-Balia Transmission Line
26	Balia: Line Bay for Lucknow-Balia Transmission Line
27	Lucknow:SLR Bay for Lucknow-Balia Transmission Line
28	Balia:SLR Bay for Lucknow-Balia Transmission Line
29	Lucknow:ICT-I 765 kV Bay
30	Balia:ICT-I 765 kV Bay
31	Gaya:ICT-I 765 kV Bay
32	Gaya:ICT-II 765 kV Bay
33	Gaya:ICT-III 765 kV Bay
34	Gaya:240 Bus Reactor-I Bay
35	Gaya:240 Bus Reactor-II Bay
36	Balia:Line Bay for 765 kV S/C Gaya-Balia and 240 MVAR SLR Bay



37	Gaya:Sasaram/Fatehpur Line Bay and 240 MVAR SLR Bay for 765 kV S/C Gaya-Sasaram Transmission Line					
38	Ranchi:ICT I Bay					
39	Gaya:Balua 765 kV Bay at Gaya Sub-station					
40	Ranchi:Sipat 765 kV Bay					
41	Ranchi:3X80 MVAR Switchable Line Reaactor-1 Bay					
42	Ranchi:3X80 MVAR Bus Reactor-I					
Sl. No.	765 kV Sub-station ICT					
1	Fatehpur:1500 MVA 2 Numbers ICTs at Fatehpur					
2	Balua:1500 MVA ICT-II at Balua Sub-station					
3	Lucknow:1500 MVA ICT-II at Lucknow Sub-station					
4	Agra:1500 MVA ICT-I & II at Agra Sub-station					
5	Sasaram:1500 MVA ICT at Sasaram					
6	New Ranchi:Ranchi ICT I					
7	Ranchi:1500 MVA ICT at Ranchi					
8	Lucknow:ICT-I at Lucknow					
9	Balua:ICT-I at Balua					
10	Gaya:ICT-I					
11	Gaya:ICT-II					
12	Gaya:ICT-III					
13	Ranchi:3X500 MVA ICT-I at Ranchi (New)					
Particulars		2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station (Number of bays)						
400 kV		69	69	69	69	69
765 kV		44	44	44	44	44
765 kV ICT		27	27	27	27	27
Norms (₹ lakh/bay)						
400 kV Sub-station		32.15	33.28	34.45	35.66	36.91
765 kV Sub-station		22.51	23.30	24.12	24.96	25.84
765 kV Sub-station ICT		0.358	0.371	0.384	0.398	0.411
Total Sub-station O&M Expenses (B)		15246.29	15776.72	16334.17	16919.96	17510.71
Total O&M Expenses calculated D= (A)+(B)+(C)		16732.86	17314.75	17926.89	18568.18	19217.38
O&M Expenses claimed		16755.70	17337.59	17949.72	18591.01	19240.21
O&M Expenses allowed		16732.86	17314.75	17926.89	18568.18	19217.38

Interest on Working Capital ("IWC")

108. 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.

- (2) The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined:*

Provided that in case of new generating station, the cost of fuel for the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) and gross calorific value of the fuel as per actual weighted average for three months, as used for infirm power, preceding date of commercial operation for which tariff is to be determined.

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

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

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

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

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

109. The Petitioner has submitted that it has computed the IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-21, 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of



7.00% plus 350 basis points) for 2021-24 onwards. The components of the working capital and interest allowed thereon are as follows:

(₹ in lakh)						
Combined Asset						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Working Capital for O&M Expenses (Equivalent to annualized O&M Expenses for one month)	1394.40	1442.90	1493.91	1547.35	1601.45
B	Working Capital for Maintenance Spares (Equivalent to 15% of O&M Expenses)	2509.93	2597.21	2689.03	2785.23	2882.61
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	12907.06	12651.65	12360.89	12089.52	11786.05
D	Total Working Capital (A+B+C)	16811.39	16691.76	16543.83	16422.09	16270.10
E	Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
F	Interest on Working Capital (DxE)	2025.77	1877.82	1737.10	1724.32	1708.36

Annual Fixed Charges for 2019-24 Tariff Period

110. The various components of the Annual Fixed Charges for the Combined Asset for 2019-24 tariff period is as follows:

(₹ in lakh)					
Combined Asset					
Particulars	2019-20	2020-21	201-22	2022-23	2023-24
Depreciation	32183.79	32196.41	32196.41	32196.41	32196.41
Interest on Loan	19245.06	16426.56	13596.78	10767.13	7934.31
Return on Equity	34789.91	34803.39	34803.39	34803.39	34803.39
O&M Expenses	16732.86	17314.75	17926.89	18568.18	19217.38
Interest on Working Capital	2025.77	1877.82	1737.10	1724.32	1708.36
Total	104977.39	102618.93	100260.57	98059.43	95859.85

Filing Fee and Publication Expenses

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



Licence Fee & RLDC Fees and Charges

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

Good and Service Tax

113. The Petitioner has submitted that, if GST 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 Respondents 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.

114. MPPMCL have submitted that as GST is not levied upon transmission service at present, hence, the same need not be considered.

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

Security Expenses

116. The Petitioner has submitted that security expenses in respect of 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.



117. We have considered the above submissions of 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, security expenses will be shared in terms of the order dated 3.8.2021 in Petition No. 260/MP/2020. Accordingly, 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.

Capital Spares

118. 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

119. The Petitioner has submitted that the transmission charges for the transmission assets (except Asset-57) for 2014-19 and 2019-24 tariff period will be governed, as provided in Regulation 43 of the 2014 Tariff Regulations and Regulation 57 of the 2019 Tariff Regulations respectively, by the applicable 2010 Sharing Regulations and the 2020 Sharing Regulations. The Petitioner has further submitted that the transmission charges of Asset-57 from approved COD i.e. 1.4.2014 till the COD of the associated transmission line of DVC i.e. 29.8.2017 shall be borne by DVC and thereafter will be shared on monthly basis in accordance with the applicable Sharing Regulations.



120. We have considered the submissions of the Petitioner. The transmission charges approved for Assets-1 to 56 in this order for the 2014-19 tariff period and 2019-24 tariff period shall be governed, as provided in Regulation 43 of the 2014 Tariff Regulations and 57 of the 2019 Tariff Regulations respectively, by the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, upto 31.10.2011 and with effect from 1.11.2020 by Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020. The transmission charges approved for Asset-57 for the period from 1.4.2014 till the COD of the associated transmission line of DVC i.e. upto 29.8.2017 shall be borne by DVC, as held in order dated 25.4.2019 in Petition No. 162/TT/2018. Thereafter, the transmission charges of Asset-57, from 30.8.2017 shall be governed as per the provisions of the applicable Sharing Regulations, as amended from time to time.

121. To summarise:

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

(₹ in lakh)

Combined Asset-1 to 5					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	12507.87	12318.45	12049.07	11800.04	11564.63

(₹ in lakh)

Combined Asset-6 to 11					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	4325.12	4261.43	4194.05	4118.99	4036.09

(₹ in lakh)

Combined Asset-12 to 20					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	13576.83	13444.55	13267.78	13053.01	12801.85



(₹ in lakh)

Combined Asset-21 to 28					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	11027.23	11114.58	11065.59	10919.93	10742.84

(₹ in lakh)

Combined Asset-29 to 49					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	43804.02	43135.42	42212.32	41170.90	40209.13

(₹ in lakh)

Asset-50					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	7107.35	7231.95	7165.68	7012.97	6878.83

(₹ in lakh)

Asset-51					
Particulars	2014-15 Pro-rata for 205 days	2015-16	2016-17	2017-18	2018-19
AFC	1201.23	2117.25	2082.89	2017.65	1957.48

(₹ in lakh)

Asset-52					
Particulars	2014-15 Pro-rata for 92 days	2015-16	2016-17	2017-18	2018-19
AFC	206.63	834.9	849.89	838.75	821.62

(₹ in lakh)

Asset-53					
Particulars	2014-15 Pro-rata for 92 days	2015-16	2016-17	2017-18	2018-19
AFC	46.03	185.78	187.87	187.12	186.98

(₹ in lakh)

Asset-54					
Particulars	2014-15 Pro-rata for 83 days	2015-16	2016-17	2017-18	2018-19
AFC	81.29	426.38	448.84	442.11	435.68

(₹ in lakh)

Asset-55					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	13790.36	13897.61	13611.49	13239.96	12931.01



(₹ in lakh)

Asset-56					
Particulars	2014-15 Pro-rata for 303 days	2015-16	2016-17	2017-18	2018-19
AFC	462.02	668.62	693.33	706.1	696.64

(₹ in lakh)

Asset-57					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	237.57	240.21	243.76	246.29	251.12

b) AFC allowed for the Combined Asset for 2019-24 tariff period in the instant order are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset	104977.39	102618.93	100260.57	98059.43	95859.85

122. Annexure-I and Annexure-II given hereinafter form part of the order.

123. This order disposes of Petition No. 732/TT/2020 in terms of the above discussion and findings.

sd/-
(P. K. Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(I. S. Jha)
Member



2014-19

Annexure-I

Combined Asset-1 to 5

(₹ lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	484.88	0.00	0.00	0.00	0.00	0.00	484.88	0.00%	0.00	0.00	0.00	0.00	0.00
Building	722.58	0.00	0.00	0.00	0.00	0.00	722.58	3.34%	24.13	24.13	24.13	24.13	24.13
Transmission Line	4492.60	0.00	0.00	0.00	0.00	0.00	4492.60	5.28%	237.21	237.21	237.21	237.21	237.21
Sub Station	61398.18	686.90	164.34	55.28	433.94	53.00	62791.64	5.28%	3259.96	3282.43	3288.23	3301.14	3314.00
PLCC	104.16	0.00	0.00	0.00	0.00	0.00	104.16	6.33%	6.59	6.59	6.59	6.59	6.59
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment & Software	341.21	0.00	0.00	0.00	0.00	0.00	341.21	5.28%	18.02	18.02	18.02	18.02	18.02
Total	67543.61	686.90	164.34	55.28	433.94	53.00	68937.07		3545.91	3568.38	3574.18	3587.10	3599.95
Weighted Average Rate of Depreciation (in %)									5.22%	5.22%	5.22%	5.22%	5.22%
Average Gross Block (₹ in lakh)									67887.06	68312.68	68422.49	68667.10	68910.57



2014-19

Annexure-I

Combined Asset-6 to 11

(₹ lakh)

Particulars	Admitted capital cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19					Admitted capital cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	556.03	0.00	0.00	0.00	0.00	0.00	556.03	0.00%	0.00	0.00	0.00	0.00	0.00
Building	67.56	1.81	0.00	0.00	0.00	0.00	69.37	3.34%	2.29	2.32	2.32	2.32	2.32
Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00
Sub Station	22515.47	148.51	124.48	199.72	57.12	25.54	23070.84	5.28%	1192.74	1199.94	1208.50	1215.28	1217.47
PLCC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.33%	0.00	0.00	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment & Software	109.09	0.00	0.00	0.00	0.00	0.00	109.09	5.28%	5.76	5.76	5.76	5.76	5.76
Total	23248.15	150.32	124.48	199.72	57.12	25.54	23805.33		1200.78	1208.02	1216.58	1223.36	1225.54
Weighted Average Rate of Depreciation (in %)									5.15%	5.15%	5.15%	5.15%	5.15%
Average Gross Block (₹ in lakh)									23323.31	23460.71	23622.81	23751.23	23792.56



Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	1274.21	0.00	0.00	0.00	0.00	0.00	1274.21	0.00%	0.00	0.00	0.00	0.00	0.00
Building	338.04	0.00	0.00	0.00	0.00	0.00	338.04	3.34%	11.29	11.29	11.29	11.29	11.29
Transmission Line	3829.93	192.90	177.44	0.00	0.00	0.00	4200.27	5.28%	207.31	217.09	221.77	221.77	221.77
Sub Station	64006.30	694.50	353.00	727.39	187.37	44.09	66012.65	5.28%	3397.87	3425.52	3454.04	3478.19	3484.30
PLCC	251.45	6.62	0.00	0.00	0.00	0.00	258.07	6.33%	16.13	16.34	16.34	16.34	16.34
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment & Software	124.54	0.00	0.00	0.00	0.00	0.00	124.54	5.28%	6.58	6.58	6.58	6.58	6.58
Total	69824.47	894.02	530.44	727.39	187.37	44.09	72207.78		3639.17	3676.81	3710.02	3734.17	3740.28
Weighted Average Rate of Depreciation (in %)									5.18%	5.18%	5.18%	5.18%	5.18%
Average Gross Block (₹ in lakh)									70271.48	70983.71	71612.63	72070.01	72185.74



Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	1612.97	147.46	3.14	0.00	0.00	0.00	1763.57	0.00%	0.00	0.00	0.00	0.00	0.00
Building	189.71	67.24	31.45	197.52	0.00	0.00	485.92	3.34%	7.46	9.11	12.93	16.23	16.23
Transmission Line	16175.11	0.00	166.66	0.00	81.87	243.48	16667.12	5.28%	854.05	858.45	862.85	865.01	873.60
Sub Station	38496.44	2638.52	652.86	1392.98	64.07	67.81	43312.68	5.28%	2102.27	2189.16	2243.17	2281.64	2285.12
PLCC	39.09	0.00	0.00	0.00	0.00	0.00	39.09	6.33%	2.47	2.47	2.47	2.47	2.47
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment & Software	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00
Total	56513.32	2853.22	854.11	1590.50	145.94	311.29	62268.38		2966.25	3059.19	3121.42	3165.35	3177.42
Weighted Average Rate of Depreciation (in %)									5.12%	5.12%	5.12%	5.11%	5.12%
Average Gross Block (₹ in lakh)									57939.93	59793.60	61015.90	61884.12	62112.74



2014-19

Annexure-I

Combined Asset-29 to 49

(₹ lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	2115.43	0.50	0.00	0.00	0.00	0.00	2115.93	0.00%	0.00	0.00	0.00	0.00	0.00
Building	1750.70	242.92	105.43	125.48	0.00	0.00	2224.53	3.34%	62.53	68.35	72.20	74.30	74.30
Transmission Line	141624.01	136.70	595.26	4.52	310.42	211.56	142882.47	5.28%	7481.36	7500.68	7516.51	7524.83	7538.61
Sub Station	94378.21	2012.17	712.05	309.59	115.11	146.49	97673.62	5.28%	5036.29	5108.21	5135.18	5146.39	5153.30
PLCC	430.24	0.10	0.00	0.00	0.00	0.00	430.34	6.33%	27.24	27.24	27.24	27.24	27.24
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment & Software	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00
Total	240298.59	2392.39	1412.74	439.59	425.53	358.05	245326.89		12607.41	12704.48	12751.14	12772.76	12793.45
Weighted Average Rate of Depreciation (in %)									5.22%	5.22%	5.22%	5.22%	5.22%
Average Gross Block (₹ in lakh)									241494.79	243397.35	244323.52	244756.08	245147.87



2014-19

Annexure-I

Asset-50

(₹ lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	1124.15	98.35	0.00	0.00	0.00	0.00	1222.50	0.00%	0.00	0.00	0.00	0.00	0.00
Building	14.56	47.62	18.45	180.79	0.00	0.00	261.42	3.34%	1.28	2.38	5.71	8.73	8.73
Transmission Line	24702.00	660.91	476.59	36.30	58.61	267.69	26202.11	5.28%	1321.71	1351.74	1365.28	1367.79	1376.40
Sub Station	9179.37	1865.31	314.76	483.97	56.45	0.00	11899.85	5.28%	533.91	591.47	612.55	626.82	628.31
PLCC	101.75	2.47	0.88	0.00	0.00	0.00	105.10	6.33%	6.52	6.62	6.65	6.65	6.65
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment & Software	53.64	1.31	0.46	0.00	0.00	0.00	55.42	5.28%	2.87	2.91	2.93	2.93	2.93
Total	35175.47	2675.98	811.14	701.06	115.06	267.69	39746.40		1866.30	1955.14	1993.13	2012.92	2023.03
Weighted Average Rate of Depreciation (in %)									5.11%	5.11%	5.11%	5.11%	5.11%
Average Gross Block (₹ in lakh)									36513.46	38257.02	39013.12	39421.18	39612.55



2014-19

Annexure-I

Asset-51

(₹ lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
Transmission Line	11564.07	446.66	281.31	104.02	0.00	0.00	12396.06	5.28%	622.37	641.59	651.77	654.51	654.51
Sub Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00
PLCC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.33%	0.00	0.00	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment & Software	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00
Total	11564.07	446.66	281.31	104.02	0.00	0.00	12396.06		622.37	641.59	651.77	654.51	654.51
Weighted Average Rate of Depreciation (in %)									5.28%	5.28%	5.28%	5.28%	5.28%
Average Gross Block (₹ in lakh)									11787.40	12151.39	12344.05	12396.06	12396.06



2014-19

Annexure-I

Asset 52

(₹ lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
Transmission Line	3979.60	0.00	281.31	104.02	0.00	0.00	4364.93	5.28%	210.12	217.55	227.72	230.47	230.47
Sub Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00
PLCC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.33%	0.00	0.00	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment & Software	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00
Total	3979.60	0.00	281.31	104.02	0.00	0.00	4364.93		210.12	217.55	227.72	230.47	230.47
Weighted Average Rate of Depreciation (in %)									5.28%	5.28%	5.28%	5.28%	5.28%
Average Gross Block (₹ in lakh)									3979.60	4120.25	4312.92	4364.93	4364.93



2014-19

Annexure-I

Asset-53

(₹ lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00
Sub Station	573.10	0.00	33.00	4.36	1.18	8.84	620.48	5.28%	30.26	31.13	32.12	32.26	32.53
PLCC	75.48	0.00	0.00	0.00	0.00	0.00	75.48	6.33%	4.78	4.78	4.78	4.78	4.78
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment & Software	22.34	0.00	0.00	0.00	0.00	0.00	22.34	5.28%	1.18	1.18	1.18	1.18	1.18
Total	670.92	0.00	33.00	4.36	1.18	8.84	718.30		36.22	37.09	38.07	38.22	38.49
Weighted Average Rate of Depreciation (in %)									5.40%	5.40%	5.39%	5.39%	5.39%
Average Gross Block (₹ in lakh)									670.92	687.42	706.10	708.87	713.88



2014-19

Asset-54

Annexure-I

(₹ lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
Building	58.06	1.91	0.96	0.32	0.00	0.00	61.25	3.34%	1.97	2.02	2.04	2.05	2.05
Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00
Sub Station	1161.24	477.44	313.80	11.49	0.00	0.00	1963.97	5.28%	73.92	94.81	103.39	103.70	103.70
PLCC	26.43	10.51	0.00	0.00	0.00	0.00	36.94	6.33%	2.01	2.34	2.34	2.34	2.34
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment & Software	33.86	0.00	0.00	0.00	0.00	0.00	33.86	5.28%	1.79	1.79	1.79	1.79	1.79
Total	1279.59	489.86	314.76	11.81	0.00	0.00	2096.02		79.68	100.95	109.56	109.87	109.87
Weighted Average Rate of Depreciation (in %)									5.23%	5.24%	5.24%	5.24%	5.24%
Average Gross Block (₹ in lakh)									1524.52	1926.83	2090.12	2096.02	2096.02



2014-19
Asset-55

Annexure-I
(₹ lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19					Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	281.04	25.77	0.00	0.00	0.00	0.00	306.81	0.00%	0.00	0.00	0.00	0.00	0.00
Building	81.51	19.99	23.29	41.96	7.46	13.20	187.41	3.34%	3.06	3.78	4.87	5.69	6.04
Transmission Line	69152.44	3486.89	524.89	197.41	31.02	0.00	73392.65	5.28%	3743.30	3849.21	3868.28	3874.31	3875.13
Sub Station	5187.82	1059.40	64.64	181.39	0.00	0.00	6493.25	5.28%	301.88	331.56	338.05	342.84	342.84
PLCC	109.85	18.91	0.00	0.00	0.00	0.00	128.77	6.33%	7.55	8.15	8.15	8.15	8.15
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment & Software	65.90	0.00	0.00	0.00	0.00	0.00	65.90	5.28%	3.48	3.48	3.48	3.48	3.48
Total	74878.56	4610.96	612.82	420.76	38.48	13.20	80574.78		4059.28	4196.18	4222.84	4234.48	4235.64
Weighted Average Rate of Depreciation (in %)									5.26%	5.26%	5.26%	5.26%	5.26%
Average Gross Block (₹ in lakh)									77184.04	79795.93	80312.72	80542.34	80568.18



2014-19

Asset-56

Annexure-I

(₹ lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	272.86	31.76	0.00	0.00	0.00	0.00	304.62	0.00%	0.00	0.00	0.00	0.00	0.00
Building	7.47	16.23	7.61	47.81	0.00	0.00	79.12	3.34%	0.52	0.92	1.84	2.64	2.64
Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00
Sub Station	1741.84	1267.98	106.70	299.37	13.80	30.58	3460.27	5.28%	125.44	161.74	172.46	180.72	181.89
PLCC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.33%	0.00	0.00	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment & Software	54.16	0.00	0.00	0.00	0.00	0.00	54.16	5.28%	2.86	2.86	2.86	2.86	2.86
Total	2076.33	1315.97	114.31	347.18	13.80	30.58	3898.17		128.82	165.51	177.16	186.23	187.40
Weighted Average Rate of Depreciation (in %)									4.71%	4.80%	4.81%	4.82%	4.83%
Average Gross Block (₹ in lakh)									2734.32	3449.46	3680.20	3860.69	3882.88



2014-19

Annexure-I

Asset-57

(₹ lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19					Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00
Sub Station	711.12	2.03	0.00	0.00	0.00	0.00	713.15	5.28%	37.60	37.65	37.65	37.65	37.65
PLCC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.33%	0.00	0.00	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment & Software	24.47	0.08	0.00	0.00	0.00	0.00	24.55	5.28%	1.29	1.30	1.30	1.30	1.30
Total	735.59	2.11	0.00	0.00	0.00	0.00	737.70		38.89	38.95	38.95	38.95	38.95
Weighted Average Rate of Depreciation (in %)									5.28%	5.28%	5.28%	5.28%	5.28%
Average Gross Block (₹ in lakh)									736.64	737.70	737.70	737.70	737.70



2019-24

Combined Asset

Annexure-II

(₹ lakh)

Particulars	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE 2019-24					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations (₹ in lakh)				
		2019-20	2020-21	2021-22	2022-23	2023-24			2019-20	2020-21	2021-22	2022-23	2023-24
Land	8028.55	0.00	0.00	0.00	0.00	0.00	8028.55	0.00%	0.00	0.00	0.00	0.00	0.00
Building	4429.63	0.77	0.00	0.00	0.00	0.00	4430.40	3.34%	147.96	147.98	147.98	147.98	147.98
Transmission Line	284609.90	243.25	0.00	0.00	0.00	0.00	284853.15	5.28%	15033.82	15040.25	15040.25	15040.25	15040.25
Sub Station	318117.41	234.17	0.00	0.00	0.00	0.00	318351.58	5.28%	16802.78	16808.96	16808.96	16808.96	16808.96
PLCC	1177.95	0.00	0.00	0.00	0.00	0.00	1177.95	6.33%	74.56	74.56	74.56	74.56	74.56
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment & Software	831.06	0.00	0.00	0.00	0.00	0.00	831.06	15.00%	124.66	124.66	124.66	124.66	124.66
Total	617194.51	478.19	0.00	0.00	0.00	0.00	617672.70		32183.79	32196.41	32196.41	32196.41	32196.41
Weighted Average Rate of Depreciation (in %)									5.21%	5.21%	5.21%	5.21%	5.21%
Average Gross Block (₹ in lakh)									617433.60	617672.70	617672.70	617672.70	617672.70

