

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 625/TT/2020

Coram:

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

Date of order: 31.05.2022

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing-up of transmission tariff of 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of **Asset-1** : 15.5 Km Loop in portion of the line section to provide arrangement for evacuating ROJA power out of the LILO of both Ckts of 400 kV D/C Bareilly-Lucknow Line; **Asset-2** : 315MVA, 400/220 kV ICT at Bhiwadi; **Asset-3** : 400/220 kV 500 MVA ICT-I at Jaipur South Sub-station alongwith associated bays and 02 nos. 220 KV line bays; **Asset-4** : 400/220 kV 500 MVA ICT-II at Jaipur South Sub-station alongwith associated bays; **Asset-5** : 400/220 kV 2X315 MVA ICTs at Sohawal Sub-station alongwith associated bays; **Asset-6** : LILO on One Ckt of 400 kV D/C Agra-Jaipur Transmisison Line with 50 MVAR Line Reactor at Jaipur South Sub-station alongwith associated bays; **Asset-7** : LILO of 2nd Ckt of 400 kV D/C Ballia-Lucknow Transmisison Line with 50 MVAR Line Reactor at Sohawal S/S; **Asset-8** : LILO of 1st Ckt of 400 kV D/C Ballia-Lucknow Transmisison Line with 50 MVAR Line Reactor at Sohawal Sub-station; **Asset-9** : LILO of Second Ckt of 400 kV D/C Agra-Jaipur Transmisison Line with 50MVAR Line Reactor at Jaipur South Sub-station alongwith associated bays; **Asset-10** : 125 MVAR Bus Reactor at Jaipur South; **Asset-11** : 400 kV Bhiwani-Jind Transmisison Line along with associated bays plus 01 nos. 500 MVA, 400/220 kV ICT-I and associated bays at Jind Sub-station; **Asset-12** : 400/220 kV 500 MVA ICT-II along with associated 400/220 kV bays at Jind Sub-station and 01 no. of 220 kV Line bays; **Asset-13** : 01 no. of 400 kV,125 MVAR Bus Reactor at Jind Sub-station alongwith associated bays; **Asset-14** : LILO Ckt-II of 400 kV D/C Lucknow-Bareilly TL at Shahjahanpur; **Asset-15** : 315 MVA 400/220 kV ICT-I with 02 Nos. of 220 kV Line Bays at Shahjahanpur; **Asset-16** : 315 MVA 400/220 kV ICT-II at Shahjahanpur; **Asset-17** : Extn of 400/220 kV GIS Gurgaon; **Asset-18** : 2x50 MVAR Bus Reactor at 400/220 kV Bareilly Sub-station alongwith associated bays (Existing Line Reactors retained and used as Bus Reactor); **Asset-19** : 125 MVAR Bus Reactor at Shahjahanpur; **Asset-20** : Combined:(i) 315 MVA 400/220 kV ICT-I & associated bays and 03 Nos. 220 kV line bays at Saharanpur Sub-station,(ii) 315 MVA 400/220 kV ICT-II & associated bays and 03 Nos. 220 kV line bays at Saharanpur Sub-



station,(iii) 50 MVA, 400kV Bus Reactor-I at Saharanpur Sub-station and (iv) 50 MVA, 400 kV Bus Reactor-II at Saharanpur Sub-station; **Asset-21** : 2 Nos. 220 kV Line bays (Feeder-SEZ & Feeder- Dooni) at 400/220 kV Jaipur South Sub-station; **Asset-22** : Bays of 50 MVAR Bus reactor 2 & 3 at 400/220 kV Bassi Sub-station; **Asset-23** : 400 kV FSC in ballia-I & II bays at Sohawal Sub-station of 400 kV D/C Ballia- Sohawal Line; **Asset-24** : 1x63 MVAR,400 kV Bus Reactor-I at 400/220 kV Sohawal Sub-station; **Asset-25** : 1x63 MVAR,400 kV Bus Reactor-II at 400/220 kV Sohawal Sub-station; **Asset-26** : 2 nos. 220 kV bays of 220 kV(PG)-Sohawal (UP) TL at 400/220 kV Sohawal (PG) Sub-station; **Asset-27** : 2 nos. 220 kV bays No. 208 & 209 (Barabanki-I &II of UPPTCL) at 400/220 kV Sohawal (PG) Sub-station; **Asset-28** : 02 nos 220 kV Line Bays of Sohawal (PG)-Tanda (UP) Transmision Line at 400/220 kV Sohawal (PG) Sub-station; **Asset-29** : 2 nos. 220 kV bays No. 206 & 207 of Shahjahanpur (PG)-Shahjahanpur (UPPTCL) at 400/220 kV Shahjahanpur Sub-Station; **Asset-30** : 1 Nos, 220 kV line bays No. 210 of Shahjahanpur (PG)-Shahjahanpur (UPPTCL) at 400/220 kV Shahjahanpur Sub-Station; **Asset-31** : 1 Nos, 220 kV line bays No. 211 of Shahjahanpur (PG)-Shahjahanpur (UPPTCL) at 400/220 kV Shahjahanpur Sub-Station; **Asset-32** : 2 Nos. 220 kV Line bays (Vatika-I and Vatika-II) at 400/220 kV Jaipur (South) Sub-station; **Asset-33** : 2 Nos. 220 kV line bays (211 and 212) at 400/220 kV Jaipur (South) Sub-station under “765 kV system for Central Part of Northern Grid-Part III” in Northern Region.

And in the matter of:

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

.....Petitioner

Versus

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Vidyut Marg,
Jaipur-302005.
2. Ajmer Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017.
3. Jaipur Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017.
4. Jodhpur Vidyut Vitran Nigam Limited,
132 KV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017.



5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171004.
6. Punjab State Electricity Board,
The Mall,
Patiala-147001.
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula-134109.
8. Power Development Department,
Government of Jammu & Kashmir,
Mini Secretariat,
Jammu.
9. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board),
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226001.
10. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110002.
11. BSES Yamuna Power Limited,
BSES Bhawan, Nehru Place,
New Delhi.
12. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi.
13. TATA Power Delhi Distribution Limited,
33 kV Sub-station Building,
Hudson Lane, Kingsway Camp,
North Delhi-110009.
14. Chandigarh Administration,
Sector-9, Chandigarh.
15. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road,
Dehradun.
16. North Central Railway,
Allahabad.



17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002.
18. U.P. Power Transmission Corporation Limited,
11th Floor ,Shakti Bhawan, 14-Ashok Marg,
Lucknow-226001.
19. Haryana Vidyut Prasaran Nigam Limited,
Shakti Bhawan, Sector-6,
Panchkula (Haryana)-134109.

....Respondents

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

For Respondents : Shri R.B. Sharma, Advocate, BRPL
Ms. Megha Bajpeyi, BRPL

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited, a deemed transmission licensee, for truing up of transmission tariff for the period from the date of commercial operation 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 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 transmission assets under “Northern Regional Transmission Strengthening Scheme” in Northern Region (hereinafter referred to as “the transmission project”).

Asset-1: 15.5 km Loop in portion of the line section to provide arrangement for evacuating ROJA power out of the LILO of both Ckts of 400 kV D/C Bareilly-Lucknow Line.

Asset-2: 315 MVA, 400/220 kV ICT at Bhiwadi Sub-station



Asset-3: 400/220 kV 500 MVA ICT-I at Jaipur South Sub-station alongwith associated bays and 02 nos. 220 KV line bays

Asset-4: 400/220 kV 500 MVA ICT-II at Jaipur South Sub-station alongwith associated bays

Asset-5: 400/220 kV 2X315 MVA ICTs at Sohawal Sub-station n alongwith associated bays

Asset-6: LILO on One Ckt of 400 kV D/C Agra-Jaipur T/L with 50 MVAR Line Reactor at Jaipur South Sub-station alongwith associated bays

Asset-7: LILO of 2nd Ckt of 400 kV D/C Ballia-Lucknow T/L with 50 MVAR Line Reactor at Sohawal Sub-station

Asset-8: LILO of 1st Ckt of 400 kV D/C Ballia-Lucknow T/L with 50 MVAR Line Reactor at Sohawal Sub-station

Asset-9: LILO of Second Ckt of 400 kV D/C Agra-Jaipur T/L with 50MVAR Line Reactor at Jaipur South Sub-station along with associated bays

Asset-10: 125 MVAR Bus Reactor at Jaipur South

Asset-11: 400 kV Bhiwani Jind TL along with associated bays plus 01 nos. 500 MVA, 400/220 kV ICT-I and associated bays at Jind Sub-station

Asset-12: 400/220 kV 500 MVA ICT-II along with associated 400/220 kV bays at Jind Sub-station and 01 no. of 220 kV Line bays

Asset-13: 01 no. of 400 kV,125 MVAR Bus Reactor at Jind Sub-station along with associated bays

Asset-14: LILO of Ckt-II of 400 kV D/C Lucknow-Bareilly TL at Shahjahanpur

Asset-15: 315 MVA 400/220 kV ICT-I with 02 Nos. of 220 kV Line Bays at Shahjahanpur

Asset-16: 315 MVA 400/220 kV ICT-II at Shahjahanpur



Asset-17: Extn of 400/220 kV GIS Gurgaon

Asset-18: 2x50 MVAR Bus Reactor at 400/220 kV Bareilly Sub-station along with associated bays (Existing Line Reactors retained and used as Bus Reactor)

Asset-19: 125 MVAR Bus Reactor at Shahjahanpur

Asset-20: Combined:(i) 315 MVA 400/220 kV ICT-I & associated bays and 03 nos. 220 kV line bays at Saharanpur Sub-station,(ii) 315 MVA 400/220 kV ICT-II & associated bays and 03 Nos. 220 kV line bays at Saharanpur Sub-station,(iii) 50 MVA, 400 kV Bus Reactor-I at Saharanpur Sub-station and (iv) 50 MVA, 400 kV Bus Reactor-II at Saharanpur Sub-station.

Asset-21: 2 nos. 220 kV Line bays (Feeder-SEZ & Feeder- Dooni) at 400/220 kV Jaipur South Sub-station **Asset-22:** Bays of 50 MVAR Bus reactor 2 & 3 at 400/220 kV Bassi Sub-station **Asset-23:** 400 kV FSC in ballia-I & II bays at Sohawal Sub-station of 400 kV D/C Ballia- Sohawal Line

Asset-24: 1x63 MVAR, 400 kV Bus Reactor-I at 400/220 kV Sohawal Sub-station

Asset-25: 1x63 MVAR, 400 kV Bus Reactor-II at 400/220 kV Sohawal Sub-station

Asset-26: 2 nos. 220 kV bays of 220 kV (PG)-Sohawal (UP) TL at 400/220 kV Sohawal (PG) Sub-station

Asset-27: 2 nos. 220 kV bays No. 208 & 209 (Barabanki-I &II of UPPTCL) at 400/220 kV Sohawal (PG) Sub-station

Asset-28: 02 nos 220 kV Line Bays of Sohawal (PG)-Tanda (UP) TL at 400/220kV Sohawal (PG) Sub-station

Asset-29: 2 nos. 220 kV bays No.206 & 207 of Shahjahanpur (PG)-Shahjahanpur (UPPTCL) at 400/220 kV Shahjahanpur Sub-Station



Asset-30: 1 no., 220 kV line bays No. 210 of Shahjahanpur (PG)-Shahjahanpur (UPPTCL) at 400/220 kV Shahjahanpur Sub-Station

Asset-31: 1 no., 220 kV line bays No. 211 of Shahjahanpur (PG)-Shahjahanpur (UPPTCL) at 400/220kV Shahjahanpur Sub-Station

Asset-32: 2 nos. 220 kV Line bays (Vatika-I and Vatika-II) at 400/220 kV Jaipur (South) Sub-station

Asset-33: 2 nos. 220 kV line bays (211 and 212) at 400/220 kV Jaipur (South) Sub-station

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

"1) Approve the trued-up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 8 and 9 above.

2) Allow the Petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 8 and 9 above for respective block.

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

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

5) Allow the Petitioner to bill and adjust impact on Interest on Loan due to change in interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the respondents.

6) Allow the Petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 9.10 above.

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

8) Allow recovery of annual lease rent for 2014-19 and remaining 28 years as allowed in order dtd. 26.02.2016 in petition No. 32/TT/2013.



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

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

Background

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

a) The Investment Approval (hereinafter referred to as “IA”) for implementation of assets under “Northern Regional Transmission Strengthening Scheme” in Northern Region was accorded by the Board of Directors of the Petitioner in 234th meeting held on 16.3.2010 and communicated vide Memorandum No. C/CP/NRTSS dated 17.3.2010 at an estimated cost for ₹96558 lakh including IDC of ₹7003 lakh based on 3rd Quarter, 2009 Price level.

b) The Revised Cost Estimate (hereinafter referred to as "RCE") for implementation of assets under “Northern Regional Transmission Strengthening Scheme” in Northern Region was accorded by the Board of Directors of the Petitioner on 31.3.2017 for ₹98000 lakh including IDC of ₹7719 lakh based on August, 2016 price level (communicated vide Memorandum No. C/CP/NRTSS dated 31.3.2017).

c) The scope of the scheme was discussed and agreed upon in 26th Standing Committee Meeting (SCM) of Northern Region (NR) held on 13.10.2008 and 10th meeting of TCC and 11th meeting of NRPC held on 15.1.2009 and 6.1.2009 respectively. The Petitioner has been entrusted with the implementation of the said scheme.



d) The scope of the transmission project “System Strengthening Scheme-VII” in Northern Region is as follows:

Transmission lines:

- (i) Bhiwani-Jind 400 kV D/C line
- (ii) LILO of both circuits of 400 kV D/C Balia-Lucknow line at Sohawal
- (iii) LILO of both circuits of 400 kV D/C Dehradun-Bagpat line (Quad) at Saharanpur.
- (iv) LILO of both circuits of 400 kV D/C Lucknow-Bareilly (Powergrid) line (Quad) at Shahjahanpur
- (v) LILO of both circuits of 400 kV D/C Agra-Jaipur line (Quad) at Jaipur (South)

Sub-stations:

- (i) New 2x315 MVA, 400/220 kV Sub-station at Sohawal
- (ii) New 2x315 MVA, 400/220 kV Sub-station at Shahajapur
- (iii) New 2x315 MVA, 400/220 kV Sub-station at Saharanpur
- (iv) New 2x315 MVA, 400/220 kV Sub-station at Jind
- (v) New 2x315 MVA, 400/220 kV Sub-station at Jaipur (South)
- (vi) Extension of Bhiwadi 400/220 kV Sub-station-1x315 MVA 400/220 kV transformer
- (vii) Extension of Gurgaon 400/220 kV Gas Insulated Sub-station
- (viii) Extension of Bhiwani 765/400/220 kV Sub-station
- (ix) Extension of Jaipur (Bassi) 400/220 kV Sub-station
- (x) Extension of Bareilly 400/220 kV Sub-station

Reactive Compensation:

Sr. No.	Line Reactor	Approximate Line Length	Line Reactor from Bus Reactor	Line Reactor to Bus Reactor
1	Bhiwani – Jind 400 kV D/C	75 km	-	-
2	LILO of both circuits of Balia – Lucknow 400 kV D/C at Sohawal (twin moose with 95° C)	320 km	-	-
a	Balia – Sohawal section	260 km	63 MVAR on both circuits (existing to be retained)	New 50 MVAR reactors on both circuits



b	Sohawal – Lucknow section	100 km	-	63 MVAR on both circuits (existing to be shifted to sohawal and used as Bus reactor)
c	40% FSC to be shifted from Lucknow to Sohawal	-	-	-
3	LILO of both circuits of Dehradun– Bagpat at Saharanpur (quad)	210 km	-	-
a	Dehradun – Saharanpur section	80 km	50 MVAR on both circuits (proposed under NRS XVIII) – To be diverted directly to Saharanpur and used as Bus reactor	-
b	Saharanpur – Bagpat section	150 km	-	-
4	LILO of both circuits of Lucknow– Bareilly 400 kV D/C at Shahjahanpur	250 km	-	-
a	Lucknow – Shahjahanpur section	180 km	50 MVAR on both circuits (existing to be retained)	-
b	Shahjahanpur – Bareilly section	90 km	-	50 MVAR on both circuits (existing to be retained and used as Bus reactor)
5	LILO of two circuit of Agra – Jaipur (Bassi) 400 kV lines at Jaipur (South)	218 km	-	-
a	Agra – Jaipur (South) section	230 km	50 MVAR on both circuits (existing to be retained)	New 50 MVAR reactors on both circuits.
b	Jaipur (South)–Jaipur (Bassi) Section	30 km	-	50 MVAR on both circuits (existing to be retained and used as bus reactor).

Bus Reactor:

- (i) Jind - 1x125 MVAR
- (ii) Sohawal - 2x63 MVAR (existing line reactors to be shifted from Lucknow and used as Bus reactor)



- (iii) Saharanpur - 2x50 MVAR (line reactors proposed at Dehradun under NRSS-XVIII to be diverted directly to Saharanpur)
- (iv) Shahjahanpur - 1x25 MVAR
- (v) Jaipur (South) - 1x25 MVAR
- (vi) Bareilly - 2x50 MVAR (existing line reactors to be retained and used as Bus reactor)
- (vii) Jaipur (Bassi) - 2x50 MVAR (existing line reactors to be retained and used as Bus reactor)

e) The status and scope of work of the subject project covered under various petitions is as follows:-

Asset number in original petition	Description	Asset nomenclature in current petition	Date of Commercial Operation
Commission's order dated 26.2.2016 in Petition No.: 04/TT/2015			
Asset-A	15.5 km Loop in portion of the line section to provide arrangement for evacuating ROJA power out of the LILO of both Ckts of 400 kV D/C Bareilly-Lucknow Line	Asset-1	1.4.2012
Asset-B	315 MVA, 400/220 kV ICT at Bhiwadi	Asset-2	1.4.2012
Commission's order dated 18.4.2016 in Petition No.: 290/TT/2015			
Asset-I	400/220 kV 500 MVA ICT-I at Jaipur South Sub-station alongwith associated bays and 02 numbers 220 kV line bays	Asset-3	1.6.2012
Asset-II	400/220 kV 500 MVA ICT-II at Jaipur South Sub-station alongwith associated bays	Asset-4	1.12.2012
Asset-III	400/220 kV 2X315 MVA ICTs at Sohawal Sub-station alongwith associated bays	Asset-5	1.7.2012
Asset-IV	LILO on One Ckt of 400 kV D/C Agra-Jaipur T/L with 50 MVAR Line Reactor at Jaipur South Sub-station alongwith associated bays	Asset-6	1.6.2012
Asset-V	LILO of 2nd Ckt of 400 kV D/C Ballia-Lucknow T/L with 50 MVAR Line Reactor at Sohawal Sub-station	Asset-7	1.7.2012
Asset-VI	LILO of 1st Ckt of 400 kV D/C Ballia-Lucknow T/L with 50 MVAR Line Reactor at Sohawal Sub-station	Asset-8	1.2.2013
Asset-VII	LILO of Second Ckt of 400 kV D/C Agra-	Asset-9	1.9.2012



	Jaipur T/L with 50 MVAR Line Reactor at Jaipur South Sub-station alongwith associated bays		
Commission's Order dated 3.12.2019 in Petition No.: 200/TT/2018			
Asset-I	125 MVAR Bus Reactor at Jaipur South	Asset-10	1.1.2013
Asset-II	400 kV Bhiwani- Jind TL along with associated bays plus 01 nos. 500 MVA, 400/220 kV ICT-I and associated bays at Jind Sub-station	Asset-11	1.4.2013
Asset-III	400/220 kV 500 MVA ICT-II along with associated 400/220 kV bays at Jind Sub-station and 01 number of 220 kV Line bays	Asset-12	1.10.2013
Asset-IV	01 number of 400 kV, 125 MVAR Bus Reactor at Jind Sub-station alongwith associated bays	Asset-13	1.10.2013
Commission's Order dated 30.4.2016 in Petition No.: 33/TT/2015 and 16.06.2017 in Review Petition 7/RP/2017			
Asset-A	LILO Ckt-II of 400 kV D/C Lucknow- Bareilly TL at Shahjahanpur	Asset-14	13.6.2014
Asset-B	315 MVA 400/220 kV ICT-I with 02Nos. of 220 kV Line Bays at Shahjahanpur	Asset-15	15.6.2014
Asset-C	315 MVA 400/220 kV ICT-II at Shahjahanpur	Asset-16	26.9.2014
Asset-D**	Extn of 400/220 kV GIS Gurgaon	Asset-17	16.1.2015
Asset-E**	2x50 MVAR Bus Reactor at 400/220 kV Bareilly Sub-station alongwith associated bays (Existing Line Reactors retained and used as Bus Reactor)	Asset-18	1.4.2014
Asset-F	125 MVAR Bus Reactor at Shahjahanpur	Asset-19	1.4.2015
Commission's Order dated 20.9.2017 in Petition No.: 272/TT/2015, 19.7.2018 in Review Petition No.-45/RP/2017 & 12.10.2018 in Petition No.: 272/TT/2015			
Combined Asset	Combined:(i) 315 MVA 400/220 kV ICT-I & associated bays and 03 Nos. 220 kV line bays at Saharanpur Sub-station, (ii) 315 MVA 400/220 kV ICT-II & associated bays and 03 Nos. 220 kV line bays at Saharanpur Sub-station, (iii) 50 MVA, 400 kV Bus Reactor-I at Saharanpur Sub-station and (iv) 50 MVA, 400 kV Bus Reactor-II at Saharanpur Sub-station.*	Asset-20	9.5.2016
Commission's Order dated 28.9.2017 in Petition No.: 195/TT/2016			
Asset-I	2 numbers 220 kV Line bays (Feeder-SEZ & Feeder- Dooni) at 400/220 kV Jaipur South Sub-station	Asset-21	18.10.2014
Asset-II	Bays of 50 MVAR Bus reactor 2 & 3 at 400/220 kV Bassi Sub-station	Asset-22	11.11.15



Asset-III	400 kV FSC in Ballia-I & II bays at Sohawal Sub-station of 400 kV D/C Ballia- Sohawal Line	Asset-23	12.2.2016
Commission's Order dated 22.1.2020 in Petition No.: 375/TT/2018			
Asset-I	1x63 MVAR, 400 kV Bus Reactor-I at 400/220 kV Sohawal Sub-station	Asset-24	29.7.2017
Asset-II	1x63 MVAR, 400 kV Bus Reactor-II at 400/220kV Sohawal Sub-station	Asset-25	7.5.2018
Asset-III	2 numbers 220 kV bays of 220kV(PG)-Sohawal (UP) TL at 400/220 kV Sohawal (PG) Sub-station	Asset-26	5.3.2017
Asset-IV	2 numbers 220 kV bays No. 208 & 209 (Barabanki-I & II of UPPTCL) at 400/220 kV Sohawal (PG) Sub-station*	Asset-27	12.2.2017
Asset-V	02 numbers 220 kV Line Bays of Sohawal (PG)-Tanda (UP) TL at 400/220kV Sohawal(PG) Sub-station*	Asset-28	12.12.2018
Asset-VI	2 numbers 220 kV bays No. 206 & 207 of Shahjahanpur (PG)-Shahjahanpur (UPPTCL) at 400/220kV Shahjahanpur Sub-Station*	Asset-29	3.11.2016
Asset-VII	1 number 220 kV line bay no. 210 of Shahjahanpur (PG)-Shahjahanpur (UPPTCL) at 400/220kV Shahjahanpur Sub-Station*	Asset-30	5.8.2016
Asset-VIII	1 number 220 kV line bays No. 211 of Shahjahanpur (PG)-Shahjahanpur (UPPTCL) at 400/220 kV Shahjahanpur Sub-Station*	Asset-31	5.8.2016
Asset-IX	2 numbers 220 kV Line bays (Vatika-I and Vatika-II) at 400/220 kV Jaipur (South) Sub-station	Asset-32	14.5.2017
Asset-X	2 numbers 220 kV line bays (211 and 212) at 400/220kV Jaipur (South) Sub-station*	Asset-33	28.9.2017

* COD approved under provisio (ii) of Regulation 4(3) of 2014 Tariff Regulations.

** COD provisionally approved under provisio (ii) of Regulation 4(3) of 2014 Tariff Regulations

f) As per IA dated 16.3.2010, the transmission assets under the transmission project were scheduled to be put into commercial operation within 32 months from the date of the IA.

g) The transmission tariff in respect of the transmission assets for Asset-1 and Asset-2 was allowed by the Commission vide order dated 26.2.2016 in Petition



No. 4/TT/2015, for Asset-3 to Asset-9 vide order dated 18.4.2016 in Petition No. 290/TT/2015, for Asset-10 to Asset-13 vide order dated 3.12.2019 in Petition No. 200/TT/2018, for Asset-14 to Asset-19 vide order dated 30.4.2016 in Petition No. 33/TT/2015 and order dated 16.6.2017 in Review Petition No. 7/RP/2017, for Asset-20 vide orders dated 20.9.2017 and 12.10.2018 in Petition No. 272/TT/2015, order dated 19.7.2018 in Review Petition No. 45/RP/2017, for Asset-21 to Asset-23 vide order dated 28.9.2017 in Petition No. 195/TT/2016 and for Asset-24 to Asset-33 vide order dated 22.1.2020 in Petition No. 375/TT/2018.

h) As per the directions of the Commission in orders dated 28.9.2017 and 22.1.2010, the Petitioner has de-capitalised FSC and Bus Reactor I & Bus Reactor II from Kahalgaon Stage-II phase I Transmission System and recapitalized the same in the instant petition. Based on the de-capitalisation and re-capitalisation carried out in Asset-23, Asset-24 and Asset-25, the assets are bifurcated into:

Asset	Assets	COD
Asset-23 (a)	400 kV FSC in Ballia-I & Ballia-II bays at Sohawal Sub-station of 400 kV D/C Ballia- Sohawal Line (Excluding FSC)	12.2.2016
Asset-23 (b)	400 kV FSC in Ballia-I & Ballia-II bays at Sohawal Sub-station of 400 kV D/C Ballia- Sohawal Line (Only FSC)	12.2.2016
Asset-24 (a)	1x63 MVAR, 400 kV Bus Reactor-I at 400/220 kV Sohawal Sub-station under NRTSS (Excluding Bus reactor)	29.7.2017
Asset-24 (b)	1x63 MVAR, 400 kV Bus Reactor-I at 400/220 kV Sohawal Sub-station under NRTSS (Only Bus reactor)	29.7.2017
Asset-25 (a)	1x63 MVAR, 400 kV Bus Reactor-II at 400/220 kV Sohawal Sub-station under NRTSS (Excluding Bus reactor)	7.5.2018
Asset-25 (b)	1x63 MVAR, 400 kV Bus Reactor-II at 400/220 kV Sohawal Sub-station under NRTSS (Only Bus reactor)	7.5.2018

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



5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers. BSES Rajdhani Power Limited (BRPL) i.e. Respondent No. 12 has filed its reply vide affidavit dated 19.4.2021 and has raised the issues of time over-run, cost over-run, RCE, Additional Capital Expenditure (ACE) and initial spares claimed during 2014-19 period, effective rate considered for calculation of RoE, deferred tax liability, adoption of Indian Accounting Standards by the Petitioner and annual truing-up by transmission licensee. In response to the issues raised by BRPL, the Petitioner has filed a rejoinder vide affidavit dated 3.5.2021.

6. The hearing in this matter was held on 20.4.2021 through video conference and the order was reserved.

7. Having heard the representatives of the Petitioner and Respondents and after perusal of the material on record, we proceed to dispose of the petition.

8. This order is issued considering the submissions made by the Petitioner in the Petition and the additional information filed vide affidavit dated 30.6.2020, the reply of BRPL and the rejoinders filed by the Petitioner.

9. It is observed that BRPL has been raising the same issues in several petitions despite clear findings of the Commission rejecting the contentions of BRPL. The aforesaid contentions of BRPL have been rejected by the Commission in several other petitions including Petition No. 136/TT/2020. As BRPL has not challenged



the findings, the same have attained finality. In view of these, the above said pleas raised by BRPL are rejected. Therefore, in the instant petition we do not go into details of the contentions of BRPL, and the clarifications given by the Petitioner on issues where the Commission has already given its findings. The issues which are specific to the instant petition and not dealt by the Commission earlier are considered in the relevant portions of this order.

TRUING UP OF ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

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

(₹ in lakh)

Particulars	Asset-1				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	100.49	100.65	100.80	100.80	100.80
Interest on Loan	99.48	90.64	81.69	72.51	63.35
Return on Equity	111.97	112.69	112.86	112.86	113.16
O&M Expenses	7.78	7.62	7.45	7.25	7.07
Interest on working capital	10.96	11.33	11.70	12.09	12.49
Total	330.68	322.93	314.50	305.51	296.87

(₹ in lakh)

Particulars	Asset-2				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	77.90	80.83	80.83	80.83	80.83
Interest on Loan	80.57	76.34	68.66	60.99	53.32
Return on Equity	86.68	90.39	90.39	90.39	90.62
O&M Expenses	15.97	16.37	16.55	16.73	16.94
Interest on working capital	186.93	193.13	199.55	206.16	213.01
Total	448.05	457.06	455.98	455.10	454.72

(₹ in lakh)

Particulars	Asset-3 to Asset-9				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1164.88	1214.90	1238.27	1241.05	1244.17
Interest on Loan	1164.00	1124.98	1042.01	925.70	819.51
Return on Equity	1392.42	1457.43	1484.83	1488.22	1495.82
O&M Expenses	143.00	146.65	147.88	147.38	147.28
Interest on working capital	1038.01	1072.49	1108.10	1144.89	1182.84
Total	4902.31	5016.45	5021.09	4947.24	4889.62



(₹ in lakh)

Particulars	Asset-10 to Asset-13				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	889.18	928.07	954.74	957.92	958.85
Interest on Loan	886.41	856.31	802.75	708.35	627.65
Return on Equity	1110.26	1162.66	1193.62	1197.17	1201.38
O&M Expenses	110.28	113.14	114.74	114.28	114.14
Interest on working capital	793.79	820.17	847.40	875.52	904.55
Total	3789.92	3880.35	3913.25	3853.24	3806.57

(₹ in lakh)

Particulars	Asset-14				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	163.74	225.70	231.36	235.57	237.66
Interest on Loan	209.68	267.30	251.90	232.50	213.45
Return on Equity	218.25	297.75	304.25	309.09	312.31
O&M Expenses	25.25	33.22	33.64	33.92	34.13
Interest on working capital	210.47	271.82	280.85	290.18	299.79
Total	827.39	1095.79	1102.00	1101.26	1097.34

(₹ in lakh)

Particulars	Asset-15				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	93.01	125.55	136.32	141.44	144.76
Interest on Loan	111.93	142.83	144.51	134.77	124.76
Return on Equity	104.70	143.63	157.58	163.75	168.15
O&M Expenses	15.33	20.15	21.12	21.51	21.84
Interest on working capital	148.52	193.13	199.55	206.16	213.01
Total	473.49	625.29	659.08	667.63	672.52

(₹ in lakh)

Particulars	Asset-16				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	49.79	103.74	111.35	114.34	115.57
Interest on Loan	58.91	116.62	116.30	108.92	99.97
Return on Equity	56.18	118.14	127.41	130.96	132.77
O&M Expenses	6.70	13.64	14.22	14.40	14.47
Interest on working capital	52.52	105.91	109.43	113.06	116.81
Total	224.10	458.05	478.71	481.68	479.59

(₹ in lakh)

Particulars	Asset-17				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	13.50	66.44	71.67	78.06	79.72
Interest on Loan	14.55	68.01	67.42	67.29	62.12
Return on Equity	15.04	74.39	80.24	87.40	89.50
O&M Expenses	1.95	9.63	10.03	10.50	10.64
Interest on working capital	17.35	87.22	90.12	93.10	96.20
Total	62.39	305.69	319.48	336.35	338.18



(₹ in lakh)

Particulars	Asset-18				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	21.29	26.49	28.48	29.18	29.77
Interest on Loan	22.90	26.74	26.59	24.50	22.50
Return on Equity	23.72	29.66	31.89	32.68	33.42
O&M Expenses	4.90	5.35	5.56	5.66	5.77
Interest on working capital	60.30	62.30	64.37	66.51	68.71
Total	133.11	150.54	156.89	158.53	160.17

(₹ in lakh)

Particulars	Asset-19			
	2015-16	2016-17	2017-18	2018-19
Depreciation	46.04	49.98	51.90	53.40
Interest on Loan	50.03	49.58	44.04	40.66
Return on Equity	52.39	57.25	59.47	61.35
O&M Expenses	6.86	7.17	7.25	7.37
Interest on working capital	62.30	64.37	66.51	68.71
Total	217.62	228.35	229.17	231.49

(₹ in lakh)

Particulars	Asset-20A		
	2016-17	2017-18	2018-19
Depreciation	421.21	503.95	515.51
Interest on Loan	675.21	746.28	711.84
Return on Equity	747.59	878.98	895.29
O&M Expenses	60.71	70.07	70.71
Interest on working capital	392.16	452.24	467.24
Total	2296.88	2651.52	2660.59

(₹ in lakh)

Particulars	Asset-20B		
	2016-17	2017-18	2018-19
Depreciation	41.18	47.59	48.28
Interest on Loan	45.94	49.06	45.53
Return on Equity	45.79	52.91	53.82
O&M Expenses	11.34	13.00	13.28
Interest on working capital	161.48	186.20	192.40
Total	305.73	348.76	353.31

(₹ in lakh)

Particulars	Asset-21				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	9.29	20.54	20.54	20.54	20.54
Interest on Loan	11.79	24.12	21.69	18.81	16.72
Return on Equity	10.35	23.00	23.00	23.00	23.06
O&M Expenses	2.83	6.38	6.48	6.58	6.70
Interest on working capital	38.16	87.22	90.12	93.10	96.20
Total	72.42	161.26	161.83	162.03	163.22



(₹ in lakh)

Particulars	Asset-22			
	2015-16	2016-17	2017-18	2018-19
Depreciation	10.52	27.12	27.12	27.12
Interest on Loan	12.82	31.09	27.82	25.19
Return on Equity	11.78	30.37	30.37	30.45
O&M Expenses	3.48	9.15	9.31	9.50
Interest on working capital	48.34	128.74	133.02	137.42
Total	86.94	226.47	227.64	229.68

(₹ in lakh)

Particulars	Asset-23A			
	2015-16	2016-17	2017-18	2018-19
Depreciation	1.52	11.86	12.37	12.99
Interest on Loan	1.81	13.26	12.10	11.51
Return on Equity	1.70	13.28	13.85	14.58
O&M Expenses	1.04	8.00	8.23	8.49
Interest on working capital	16.68	128.74	133.02	137.42
Total	22.75	175.14	179.57	184.99

(₹ in lakh)

Particulars	Asset-23B			
	2015-16	2016-17	2017-18	2018-19
Depreciation	24.62	183.90	183.90	183.90
Interest on Loan	13.36	90.06	72.90	55.74
Return on Equity	27.57	205.91	205.91	206.45
O&M Expenses	1.51	11.05	10.65	10.27
Interest on working capital	0.00	0.00	0.00	0.00
Total	67.06	490.92	473.36	456.36

(₹ in lakh)

Particulars	Asset-24 A	
	2017-18	2018-19
Depreciation	9.68	14.41
Interest on Loan	14.20	20.00
Return on Equity	13.24	19.75
O&M Expenses	3.11	4.70
Interest on working capital	44.83	68.71
Total	85.06	127.57

(₹ in lakh)

Particulars	Asset-24 B	
	2017-18	2018-19
Depreciation	15.50	23.00
Interest on Loan	6.34	7.62
Return on Equity	17.35	25.82
O&M Expenses	0.84	1.21
Interest on working capital	0.00	0.00
Total	40.03	57.65



(₹ in lakh)

Particulars	Asset-25 A	
	2018-19	
Depreciation		12.89
Interest on Loan		17.06
Return on Equity		17.68
O&M Expenses		4.07
Interest on working capital		61.93
Total		113.63

(₹ in lakh)

Particulars	Asset-25 B	
	2018-19	
Depreciation		20.73
Interest on Loan		6.72
Return on Equity		23.27
O&M Expenses		1.05
Interest on working capital		0.00
Total		51.77

(₹ in lakh)

Particulars	Asset-26		
	2016-17	2017-18	2018-19
Depreciation	1.35	18.33	18.39
Interest on Loan	1.70	22.04	20.41
Return on Equity	1.62	21.97	22.11
O&M Expenses	0.45	6.23	6.36
Interest on working capital	6.66	93.10	96.20
Total	11.78	161.67	163.47

(₹ in lakh)

Particulars	Asset-27		
	2016-17	2017-18	2018-19
Depreciation	2.43	18.54	18.61
Interest on Loan	3.15	23.09	21.44
Return on Equity	2.91	22.23	22.37
O&M Expenses	0.80	6.26	6.39
Interest on working capital	11.86	93.10	96.20
Total	21.15	163.22	165.01

(₹ in lakh)

Particulars	Asset-28	
	2018-19	
Depreciation		6.03
Interest on Loan		7.88
Return on Equity		7.12
O&M Expenses		1.88
Interest on working capital		29.00
Total		51.91



(₹ in lakh)

Particulars	Asset-29		
	2016-17	2017-18	2018-19
Depreciation	9.63	24.42	25.01
Interest on Loan	12.23	29.34	27.77
Return on Equity	11.67	29.60	30.39
O&M Expenses	2.65	6.69	6.85
Interest on working capital	36.79	93.10	96.20
Total	72.97	183.15	186.22

(₹ in lakh)

Particulars	Asset-30		
	2016-17	2017-18	2018-19
Depreciation	7.89	12.54	12.82
Interest on Loan	10.33	15.32	14.41
Return on Equity	9.57	15.21	15.60
O&M Expenses	2.15	3.37	3.45
Interest on working capital	29.51	46.55	48.10
Total	59.45	92.99	94.38

(₹ in lakh)

Particulars	Asset-31		
	2016-17	2017-18	2018-19
Depreciation	7.95	12.64	12.93
Interest on Loan	10.50	15.57	14.62
Return on Equity	9.65	15.33	15.73
O&M Expenses	2.15	3.38	3.46
Interest on working capital	29.51	46.55	48.10
Total	59.76	93.47	94.84

(₹ in lakh)

Particulars	Asset-32	
	2017-18	2018-19
Depreciation	18.55	21.06
Interest on Loan	21.64	22.74
Return on Equity	20.59	23.44
O&M Expenses	5.53	6.40
Interest on working capital	82.14	96.20
Total	148.45	169.84

(₹ in lakh)

Particulars	Asset-33	
	2017-18	2018-19
Depreciation	14.80	29.29
Interest on Loan	16.27	30.33
Return on Equity	16.45	32.66
O&M Expenses	3.45	6.93
Interest on working capital	47.18	96.20
Total	98.15	195.41



11. The details of the trued-up Interest on Working Capital (IWC) claimed by the Petitioner are as follows:

(₹ in lakh)

Asset-1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	0.91	0.94	0.98	1.01	1.04
Maintenance Spares	1.64	1.70	1.76	1.81	1.87
Receivables	55.11	53.82	52.42	50.92	49.48
Total	57.66	56.46	55.16	53.74	52.39
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	7.78	7.62	7.45	7.25	7.07

(₹ in lakh)

Asset-2					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	15.58	16.09	16.63	17.18	17.75
Maintenance Spares	28.04	28.97	29.93	30.92	31.95
Receivables	74.68	76.18	76.00	75.85	75.79
Total	118.30	121.24	122.56	123.95	125.49
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	15.97	16.37	16.55	16.73	16.94

(₹ in lakh)

Asset-3 to 9					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	86.50	89.37	92.34	95.41	98.57
Maintenance Spares	155.70	160.87	166.22	171.73	177.43
Receivables	817.05	836.08	836.85	824.54	814.94
Total	1059.25	1086.32	1095.41	1091.68	1090.94
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	143.00	146.65	147.88	147.38	147.28

(₹ in lakh)

Asset-10 to 13					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	66.15	68.35	70.62	72.96	75.38
Maintenance Spares	119.07	123.03	127.11	131.33	135.68
Receivables	631.65	646.73	652.21	642.21	634.43
Total	816.87	838.11	849.94	846.50	845.49
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	110.28	113.14	114.74	114.28	114.14



(₹ in lakh)

Asset-14					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	21.92	22.65	23.40	24.18	24.98
Maintenance Spares	39.46	40.77	42.13	43.53	44.97
Receivables	172.37	182.63	183.67	183.54	182.89
Total	233.75	246.05	249.20	251.25	252.84
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	25.25	33.22	33.64	33.92	34.13

(₹ in lakh)

Asset-15					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	15.58	16.09	16.63	17.18	17.75
Maintenance Spares	28.04	28.97	29.93	30.92	31.95
Receivables	99.33	104.22	109.85	111.27	112.09
Total	142.95	149.28	156.41	159.37	161.79
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	15.33	20.15	21.12	21.51	21.84

(₹ in lakh)

Asset-16					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	8.54	8.83	9.12	9.42	9.73
Maintenance Spares	15.38	15.89	16.41	16.96	17.52
Receivables	72.90	76.34	79.79	80.28	79.93
Total	96.82	101.06	105.32	106.66	107.18
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	6.70	13.64	14.22	14.40	14.47

(₹ in lakh)

Asset-17					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	7.04	7.27	7.51	7.76	8.02
Maintenance Spares	12.66	13.08	13.52	13.97	14.43
Receivables	50.60	50.95	53.25	56.06	56.36
Total	70.30	71.30	74.28	77.79	78.81
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	1.95	9.63	10.03	10.50	10.64



(₹ in lakh)

Asset-18					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	5.03	5.19	5.36	5.54	5.73
Maintenance Spares	9.05	9.35	9.66	9.98	10.31
Receivables	22.18	25.09	26.15	26.42	26.70
Total	36.26	39.63	41.17	41.94	42.74
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	4.90	5.35	5.56	5.66	5.77

(₹ in lakh)

Asset-19				
Particulars	2015-16	2016-17	2017-18	2018-19
O & M Expenses	5.19	5.36	5.54	5.73
Maintenance Spares	9.35	9.66	9.98	10.31
Receivables	36.27	38.06	38.20	38.58
Total	50.81	53.08	53.72	54.62
Rate of Interest (in %)	13.50	13.50	13.50	13.50
Interest on Working Capital	6.86	7.17	7.25	7.37

(₹ in lakh)

Asset-20 A			
Particulars	2016-17	2017-18	2018-19
O & M Expenses	36.48	37.69	38.94
Maintenance Spares	65.66	67.84	70.09
Receivables	427.30	441.92	443.43
Total	529.44	547.45	552.46
Rate of Interest (in %)	12.80	12.80	12.80
Interest on Working Capital	60.71	70.07	70.71

(₹ in lakh)

Asset-20 B			
Particulars	2016-17	2017-18	2018-19
O & M Expenses	15.02	15.52	16.03
Maintenance Spares	27.04	27.93	28.86
Receivables	56.88	58.13	58.89
Total	98.94	101.58	103.78
Rate of Interest (in %)	12.80	12.80	12.80
Interest on Working Capital	11.34	13.00	13.28



(₹ in lakh)

Asset-21					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	7.04	7.27	7.51	7.76	8.02
Maintenance Spares	12.66	13.08	13.52	13.97	14.43
Receivables	26.70	26.88	26.97	27.01	27.20
Total	46.40	47.23	48.00	48.74	49.65
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	2.83	6.38	6.48	6.58	6.70

(₹ in lakh)

Asset-22					
Particulars	2015-16	2016-17	2017-18	2018-19	
O & M Expenses	10.38	10.73	11.09	11.45	
Maintenance Spares	18.69	19.31	19.95	20.61	
Receivables	37.35	37.75	37.94	38.28	
Total	66.42	67.79	68.98	70.34	
Rate of Interest (in %)	13.50	13.50	13.50	13.50	
Interest on Working Capital	3.48	9.15	9.31	9.50	

(₹ in lakh)

Asset-23 A					
Particulars	2015-16	2016-17	2017-18	2018-19	
O & M Expenses	10.38	10.73	11.09	11.45	
Maintenance Spares	18.69	19.31	19.95	20.61	
Receivables	28.32	29.19	29.93	30.83	
Total	57.39	59.23	60.97	62.89	
Rate of Interest (in %)	13.50	13.50	13.50	13.50	
Interest on Working Capital	1.04	8.00	8.23	8.49	

(₹ in lakh)

Asset-23 B					
Particulars	2015-16	2016-17	2017-18	2018-19	
O & M Expenses	0.00	0.00	0.00	0.00	
Maintenance Spares	0.00	0.00	0.00	0.00	
Receivables	83.48	81.82	78.89	76.06	
Total	83.48	81.82	78.89	76.06	
Rate of Interest (in %)	13.50	13.50	13.50	13.50	
Interest on Working Capital	1.51	11.05	10.65	10.27	



(₹ in lakh)

Asset-24 A		
Particulars	2017-18	2018-19
O & M Expenses	5.54	5.73
Maintenance Spares	9.98	10.31
Receivables	21.03	21.26
Total	36.55	37.30
Rate of Interest (in %)	12.60	12.60
Interest on Working Capital	3.11	4.70

(₹ in lakh)

Asset-24 B		
Particulars	2017-18	2018-19
O & M Expenses	0.00	0.00
Maintenance Spares	0.00	0.00
Receivables	9.90	9.61
Total	9.90	9.61
Rate of Interest (in %)	12.60	12.60
Interest on Working Capital	0.84	1.21

(₹ in lakh)

Asset-25 A	
Particulars	2018-19
O & M Expenses	35.50
Maintenance Spares	63.90
Receivables	231.16
Total	330.56
Rate of Interest (in %)	13.50
Interest on Working Capital	4.07

(₹ in lakh)

Asset-25 B	
Particulars	2018-19
O & M Expenses	0.00
Maintenance Spares	0.00
Receivables	9.58
Total	9.58
Rate of Interest (in %)	12.20
Interest on Working Capital	1.05

(₹ in lakh)

Asset-26			
Particulars	2016-17	2017-18	2018-19
O & M Expenses	7.51	7.76	8.02
Maintenance Spares	13.52	13.97	14.43
Receivables	26.56	26.95	27.25
Total	47.59	48.68	49.70
Rate of Interest (in %)	12.80	12.80	12.80
Interest on Working Capital	0.45	6.23	6.36



(₹ in lakh)

Asset-27			
Particulars	2016-17	2017-18	2018-19
O & M Expenses	7.51	7.76	8.02
Maintenance Spares	13.52	13.97	14.43
Receivables	26.80	27.20	27.50
Total	47.83	48.93	49.95
Rate of Interest (in %)	12.80	12.80	12.80
Interest on Working Capital	0.80	6.26	6.39

(₹ in lakh)

Asset-28		2018-19
Particulars		
O & M Expenses		8.02
Maintenance Spares		14.43
Receivables		28.71
Total		51.16
Rate of Interest (in %)		12.20
Interest on Working Capital		1.88

(₹ in lakh)

Asset-29			
Particulars	2016-17	2017-18	2018-19
O & M Expenses	7.51	7.76	8.02
Maintenance Spares	13.52	13.97	14.43
Receivables	29.79	30.53	31.04
Total	50.82	52.26	53.49
Rate of Interest (in %)	12.80	12.80	12.80
Interest on Working Capital	2.65	6.69	6.85

(₹ in lakh)

Asset-30			
Particulars	2016-17	2017-18	2018-19
O & M Expenses	3.76	3.88	4.01
Maintenance Spares	6.76	6.98	7.22
Receivables	15.13	15.50	15.73
Total	25.65	26.36	26.96
Rate of Interest (in %)	12.80	12.80	12.80
Interest on Working Capital	2.15	3.37	3.45



(₹ in lakh)

Asset-31			
Particulars	2016-17	2017-18	2018-19
O & M Expenses	3.76	3.88	4.01
Maintenance Spares	6.76	6.98	7.22
Receivables	15.21	15.58	15.81
Total	25.73	26.44	27.04
Rate of Interest (in %)	12.80	12.80	12.80
Interest on Working Capital	2.15	3.38	3.46

(₹ in lakh)

Asset-32		
Particulars	2017-18	2018-19
O & M Expenses	7.76	8.02
Maintenance Spares	13.97	14.43
Receivables	28.05	28.31
Total	49.78	50.76
Rate of Interest (in %)	12.60	12.60
Interest on Working Capital	5.53	6.40

(₹ in lakh)

Asset-33		
Particulars	2017-18	2018-19
O & M Expenses	7.76	8.02
Maintenance Spares	13.97	14.43
Receivables	32.28	32.57
Total	54.01	55.02
Rate of Interest (in %)	12.60	12.60
Interest on Working Capital	3.45	6.93

Date of Commercial Operation

12. The Petitioner has submitted the actual COD of the transmission assets as follows:

Assets	COD
Asset-1	1.4.2012
Asset-2	1.4.2012
Asset-3	1.6.2012
Asset-4	1.12.2012
Asset-5	1.7.2012
Asset-6	1.6.2012
Asset-7	1.7.2012
Asset-8	1.2.2013
Asset-9	1.9.2012
Asset-10	1.1.2013
Asset-11	1.4.2013



Assets	COD
Asset-12	1.10.2013
Asset-13	1.10.2013
Asset-14	13.6.2014
Asset-15	15.6.2014
Asset-16	26.9.2014
Asset-17	16.1.2015
Asset-18	1.4.2014
Asset-19	1.4.2015
Asset-20	9.5.2016
Asset-21	18.10.2014
Asset-22	11.11.2015
Asset-23	12.2.2016
Asset-24	29.7.2017
Asset-25	7.5.2018
Asset-26	5.3.2017
Asset-27	12.2.2017
Asset-28	12.12.2018
Asset-29	3.11.2016
Asset-30	5.8.2016
Asset-31	5.8.2016
Asset-32	14.5.2017
Asset-33	28.9.2017

13. The Commission vide order dated 30.4.2016 in Petition No. 33/TT/2015 has approved the COD of Asset-17 and Asset-18 on provisional basis under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations and considered the COD as 16.1.2015 and 1.4.2014, respectively, and the relevant extracts of the order is as follows:

“16. We have considered the submission of the Petitioner w.r.t COD of Asset D and Asset E. It is observed that for the both these assets where the COD is on 16.1.2015 and 1.4.2014, respectively, for Asset D and Asset E the Petitioner has not submitted the RLDC certificate for on load trial run operation. The commercial operation date of Asset D and Asset E has been provisionally considered as 16.1.2015 and 1.4.2014 respectively and the tariff is worked out from 16.1.2015 to 31.3.2019 for Asset D and 1.4.2014 to 31.3.2019 for Asset E. However, the Petitioner is directed to submit the RLDC certificate at the time of truing up.”

14. In response to the above direction of the Commisison, the Petitioner in the instant petition has submitted that the Asset-18, was put into commercial operation on 1.4.2014, i.e. in 2009-14 tariff period, where there was provision for declaring the



commercial operation w.e.f. 1st day of the following month. Thus, its COD was declared w.e.f. 1.4.2014. Further, in the tariff block 2009-14, there is no provision regarding the requirement of charging certificate of an asset from respective RLDC. Thus, the RLDC charging certificate for Asset-18 is not applicable and further Asset-18 is a bus reactor and there is no linking with downstream system. Further with respect to Asset-17, the Petitioner has submitted that it has yet to receive the RLDC Certificate and shall submit the same after receipt of the same.

15. We have considered the submissions of the Petitioner with regard to RLDC certificate in respect to Asset-17. The Petitioner is given a last opportunity to submit the RLDC certificate in case of Asset-17 at the time truing up of the tariff of the 2019-24 tariff period.

16. The Commission vide order dated 20.9.2017 in Petition No. 272/TT/2015 did not approve the COD of 4 numbers 220 kV line bays at Saharanpur Sub-station. Against the order dated 20.9.2017 in Petition No. 272/TT/2015, the Petitioner has filed Review Petition No. 45/RP/2017 and the Commission vide order dated 19.7.2018 in Review Petition No. 45/RP/2017 held as follows:

“9. The main contention of the Review Petitioner is that the Commission should have approved the COD of the 4 bays at Saharanpur under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations taking into consideration the RLDC certificate dated 16.5.2016, indicating the completion of successful trial operation of the asset under Regulation 5 (2) of the 2014 Tariff Regulations submitted in the main petition and allow the capital cost of the 4 nos. of 220 kV line bays at Saharanpur. The Review Petitioner had not prayed for approval of the COD of the 4 bays at Saharanpur under 4(3) of the 2014 Tariff Regulations in the main petition. The Review Petitioner has sought approval of the COD of the 4 bays for the first time under Regulation 4(3) of the 2014 Tariff Regulations in the instant review petition. It is observed that the Review Petitioner had submitted the RLDC certificate under Regulation 5(2) of the 2014 Tariff Regulations certifying the successful charging of the transmission system. Further, the Review Petitioner has submitted the CMD certificate confirming that the 4 bays at Saharanpur conform to the relevant Grid Standard and Grid Code and are capable of operation to their full capacity as required under the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2016 in the instant review petition. The Review Petitioner has also submitted the energisation certificate under Regulation 43 of CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 in the main



petition. We are of the view that the Review Petitioner was ready on 9.5.2016 but was prevented from putting the 4 bays into regular use as the downstream assets under the scope of UPPTCL were not ready. Therefore, we approve the COD of the 4 bays at Saharanpur as 9.5.2016 under proviso (ii) of Regulations 4(3) of the 2014 Tariff Regulations. Consequently, the transmission charges of the 4 bays from 9.5.2016 upto the date of commercial operation of the downstream assets under the scope of UPPTCL will be borne by UPPTCL. Accordingly, the review on this count is allowed.

17. The Commission vide order dated 22.1.2020 in Petition No. 375/TT/2018 approved the COD of Asset-27, Asset-28, Asset-29, Asset-30 and Asset-31 under proviso (ii) Regulation 4(3) of the 2014 Tariff Regulations as their associated downstream systems under the scope of works of UPPTCL were not ready. Further the Commission vide order dated 22.1.2020 in Petition No. 375/TT/2018 also approved COD of Asset-33 under proviso (ii) Regulation 4(3) of the 2014 Tariff Regulations as the downstream under the scope of RRVPNL were not ready.

18. The Petitioner in the instant true up petition has submitted the downstream status of Asset-17, Asset-18, Asset-20, Assets-27 to Asset-31 and Asset-33 and the same is as follows:

Asset	Asset Name	COD	Direction of the Commission	Present status
Asset-17	Extension of 400/220 kV GIS Gurgaon	16.1.2015	Vide order dated 30.04.2016 the Commission directed that transmission charges for the Asset-17 and Asset-18 shall be borne by the beneficiaries or the long term transmission customers/ DICs, as the case may be till the commissioning of the downstream system.	Power flow started from 30.4.2015
Asset-18	2x50 MVAR Bus Reactor at 400/220 kV Bareilly Sub-station alongwith associated bays (Existing Line Reactors retained and used as Bus Reactor)	1.4.2014		It's a Bus reactor and there is no linking with downstream system.



Asset-20	Combined: (i) 315 MVA 400/220 kV ICT-I & associated bays and 03 Nos. 220 kV line bays at Saharanpur Sub-station, (ii) 315 MVA 400/220 kV ICT-II & associated bays and 03 numbers 220 kV line bays at Saharanpur S/Stn, (iii) 50MVA, 400kV Bus Reactor-I at Saharanpur S/Stn and (iv) 50MVA, 400kV Bus Reactor-II at Saharanpur Sub-station	9.5.2016	Out of 6 numbers bays 2 numbers bays power flow started along with ICT's. Vide Order dated 19.7.2018, the Commission directed that the transmission charges of the 4 bays from 9.5.2016 upto the date of commercial operation of the downstream assets under the scope of UPPTCL will be borne by UPPTCL.	Power flow in Bay No.206 & No.207 started from 5.6.2018 and in Bay No.210 & No.211 started from 13.6.2018.
Asset-27	2 numbers 220 kV bays No. 208 & No.209 (Barabanki-I & II of UPPTCL) at 400/220 kV Sohawal (PG) Sub-station	12.2.2017	Vide order dated 22.1.2010 the Commission directed that transmission charges from 12.2.2017 to 30.4.2017 will be borne by UPPTCL and thereafter from 1.5.2018 (date of power flow) shall be recovered though POC mechanism.	Allowed to recover under PoC from 1.5.2018 (date of power flow)
Asset-28	02 numbers 220 kV Line Bays of Sohawal (PG)-Tanda (UP) TL at 400/220 kV Sohawal (PG) Sub-station	12.12.2018	Vide order dated 22.1.2010 the Commission directed that the transmission charges from 12.12.2018 to till COD of downstream system will be borne by UPPTCL and thereafter the transmission charges shall be recovered though POC mechanism.	220 kV Sohawal-Tandal Ckt-I charged on 28.5.2019 and Ckt-II on 08.06.2019
Asset-29	2 numbers 220 kV bays No. 206 & 207 of Shahjahanpur (PG)-Shahjahanpur(UPPTCL) at 400/220 kV Shahjahanpur Sub-Station	3.11.2016	Vide order dated 22.1.2010 the Commission directed that the transmission charges in case of Asset-29, from 3.11.2016 and that of Asset-30 and 31, from 5.8.2016 till COD of the downstream system under the scope of UPPTCL will be borne by UPPTCL and thereafter shall be recovered though POC mechanism.	Yet to be commissioned
Asset-30	1 number 220 kV line bays No. 210 of Shahjahanpur (PG)-Shahjahanpur(UPPTCL) at 400/220 kV Shahjahanpur Sub-Station	5.8.2016		Yet to be commissioned



Asset-31	1 number 220 kV line bays No. 211 of Shahjahanpur (PG)-Shahjahanpur(UPPTCL) at 400/220 kV Shahjahanpur Sub-Station	5.8.2016		Power Flow started from 24.8.2016
Asset-33	2 numbers 220 kV line bays(211 and 212) at 400/220 kV Jaipur (South) Sub-station	28.9.2017	The transmission charges in case of Asset-X from 28.9.2017 to till COD of the downstream transmission system under the scope of RRVPNL shall be borne by RRVPNL and thereafter the transmission charges shall be recovered though POC mechanism.	Yet to be commissioned

Capital Cost as on 1.4.2014/ COD

19. The transmission tariff for Asset-1 and Asset-2 was approved vide order dated 26.2.2016 in Petition No. 04/TT/2015, for Asset-3 to Asset-9 vide order dated 18.4.2016 in Petition No. 290/TT/2015, for Asset-10 to Asset-13 vide order dated 3.12.2019 in Petition No. 200/TT/2018, for Asset-14 to Asset-19 vide order dated 30.4.2016 in Petition No. 33/TT/2015 and vide order dated 16.6.2017 in Review Petition No. 7/RP/2017, for Asset-20 vide orders dated 20.9.2017 and 12.10.2018 in Petition No. 272/TT/2015, vide order dated 19.7.2018 in Review Petition No. 45/RP/2017, for Asset-21 to Asset-23 vide order dated 28.9.2017 in Petition No. 195/TT/2016 and for Asset-24 to Asset-33 vide order dated 22.01.2020 in Petition No. 375/TT/2018 approved the following capital cost and ACE for the transmission assets:

(₹ in lakh)

Assets	Admitted Cost as on COD or 1.4.2014*	Additional Capitalisation 2014-19	Total Capital Cost as on 31.3.2019
Asset-1	1903.27	77.67	1980.94
Asset-2	1389.91	113.24	1503.15
Asset-3 to Asset-9	23104.54	2476.01	25580.55
Asset-10 to Asset-13	18543.49	1791.09	20334.58
Asset-14	4306.11	1027.88	5333.99



Assets	Admitted Cost as on COD or 1.4.2014*	Additional Capitalisation 2014-19	Total Capital Cost as on 31.3.2019
Asset-15	2238.58	182.03	2420.61
Asset-16	1850.44	119.24	1969.68
Asset-17	1090.75	300.26	1391.01
Asset-18	331.99	114.70	446.69
Asset-19	823.45	161.60	985.05
Asset-20	12271.45	1903.52	14174.97
Asset-21	389.02	0.00	389.02
Asset-22	513.72	20.38	534.10
Asset-23	Tariff was not approved in order dated 28.9.2017 in Petition No. 195/TT/2016. However, vide para-6 of the said order, the Petitioner was directed to claim tariff while trueing up of the tariff of the 2014-19 tariff period along with other assets.		
Asset-24	331.57	64.05	395.62
Asset-25	330.90	62.44	393.34
Asset-26	370.02	44.49	414.51
Asset-27	374.24	44.62	418.86
Asset-28	398.19	0.00	398.19
Asset-29	478.58	68.18	546.76
Asset-30	243.15	37.15	280.30
Asset-31	245.05	37.15	282.20
Asset-32	394.21	21.19	415.40
Asset-33	548.00	42.15	590.15

20. The Petitioner vide Auditor's Certificate dated 12.6.2020 and 15.6.2020 has submitted the capital cost upto the date of commercial operation along with ACE up to 31.3.2019. The details of the apportioned approved capital cost, capital cost as on COD and the ACE incurred upto 31.3.2019 as claimed by the Petitioner in the instant true up petition for the transmission assets are as follows:

Assets	Apportioned Approved Cost as per FR	Apportioned Approved Cost as per RCE	Capital Cost as on 31.03.2014/ COD	Actual Add Cap					Total Capital Cost as on 31/03/2019
				2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-1	2573.44	2176.55	1903.27	0.00	5.84	0.00	0.00	0.00	1909.11
Asset-2	2337.56	1956.23	1389.91	111.10	0.00	0.00	0.00	0.00	1501.01
Asset-3	3818.17	2842.87	2251.27	211.68	87.08	3.36	3.25	1.76	2558.40
Asset-4	3818.17	2672.44	2179.71	197.73	87.08	3.36	3.25	1.76	2472.89
Asset-5	6829.76	5217.84	4188.74	368.89	151.71	22.16	19.48	0.00	4750.98
Asset-6	5442.4	6387.05	4806.83	96.90	184.81	3.36	3.25	32.92	5128.07
Asset-7	3268.27	2902.53	2396.51	29.82	87.05	12.35	10.86	0.00	2536.59
Asset-8	3268.27	3012.53	2414.47	112.11	88.72	12.59	11.07	0.00	2638.96
Asset-9	5442.3	6023.32	4867.01	87.79	179.80	3.36	3.25	32.92	5174.13



Asset-10	1208.74	1328.61	910.45	25.97	53.09	10.89	5.80	0.89	1007.09
Asset-11	16643.24	17641.28	15226.49	515.25	867.06	35.92	28.55	0.00	16673.27
Asset-12	1989.80	2222.33	1556.10	79.04	26.81	0.00	0.00	0.00	1661.95
Asset-13	840.05	1026.62	850.44 (857.18-6.74)*	9.02 (2.28+6.74)*	14.62	39.10	0.00	0.00	913.18
Asset-14	6531.45	6751.32	4338.63	661.88	137.27	82.55	81.10	0.00	5301.43
Asset-15	3276.11	3264.47	2260.26	2.72	376.52	95.17	113.50	20.57	2868.74
Asset-16	3004.56	2438.56	1885.70	26.61	242.66	70.76	49.52	0.00	2275.25
Asset-17	1473.92	1664.01	1267.98	0.00	0.00	178.85	63.09	0.00	1509.92
Asset-18	446.69	696.48	362.68	142.46	54.41	21.16	5.44	16.68	602.83
Asset-19	973.49	1208.73	858.81	0.00	125.73	38.51	36.77	21.27	1081.09
Asset-20(a)#	8295.10	16507.61	13933.97	0.00	0.00	770.75	326.87	145.33	15176.92
Asset -20(b)#			883.78	0.00	0.00	0.00	22.46	3.48	909.72
Asset-21	525.67	508.99	424.16	0.00	0.00	0.00	0.00	0.00	424.16
Asset-22	702.96	1596.95	607.46	0.00	0.00	0.00	0.00	0.00	607.46
Asset-23 A	1469.35	368.47	214.84	0.00	0.00	19.48	0.00	23.37	257.69
Asset-23 B			3483.04	0.00	0.00	0.00	0.00	0.00	3483.04
Asset-24A	849.20	897.34	463.49	0.00	0.00	0.00	1.61	0.00	465.10
Asset-24B			435.55	0.00	0.00	0.00	0.00	0.00	435.55
Asset-25A	849.20	877.34	412.04	0.00	0.00	0.00	0.00	0.00	412.04
Asset 25B			435.55	0.00	0.00	0.00	0.00	0.00	435.55
Asset-26	912.82	862.35	516.44	0.00	0.00	0.26	2.73	0.00	519.43
Asset-27	912.82	862.35	519.32	0.00	0.00	0.39	2.73	0.00	522.44
Asset-28	912.82	862.35	633.12	0.00	0.00	0.00	0.00	0.00	633.12
Asset-29	758.81	825.90	590.60	0.00	0.00	10.17	23.98	0.00	624.75
Asset-30	379.40	412.95	280.49	0.00	0.00	8.14	11.99	0.00	300.62
Asset-31	379.40	412.95	282.51	0.00	0.00	8.14	11.99	0.00	302.64
Asset-32	525.67	674.34	519.09	0.00	0.00	0.00	1.19	0.00	520.28
Asset-33	675.67	896.32	683.12	0.00	0.00	0.00	2.15	1.76	687.03
Total	91335.28	97999.98	81233.83	2678.97	2770.26	1450.78	845.88	302.71	89282.43

* In Asset-13, accrual IDC as per order dated 3.12.2019 in Petition No. 200/TT/2018

In Asset-20, out of 6 numbers 220 kV line bays downstream of 4 numbers line bays were not available at the time of commercial operation, therefore the Commission vide order dated 19.7.2018 in Review Petition No. 45/RP/2017 has directed to claim transmission charges of 4 numbers from UPPTCL till the commissioning of the downstream line.

Note: The mis-match in COD cost of Asset-20 being claimed in the instant petition and approved vide order dated 20.9.2017 and 12.10.2018 in Petition No. 272/TT/2015 is on account of COD cost approved on estimated figures in order dated 20.9.2017 and 12.10.2018 and actual COD cost as per the Auditor certificate submitted now.

21. In Asset-20, out of 6 numbers 220 kV line bays, downstream of 4 numbers line bays was not available at the time of COD, therefore the Commission vide order dated



19.7.2018 in Review Petition No. 45/RP/2017 directed to claim transmission charges of 4 numbers from UPPTCL till the COD of the downstream line under the scope of UPPTCL. In order to separate tariff of 4 numbers line bays, Asset-20 is bifurcated as below:

Assets	Assets	COD
Asset-20 A	Combined:(i) 315 MVA 400/220 kV ICT-I & associated bays and one 220 kV line bays at Saharanpur Sub-station, (ii) 315 MVA 400/220 kV ICT-II & associated bays and 01 Nos. 220 kV line bays at Saharanpur Sub-station, (iii) 50 MVA, 400 kV Bus Reactor-I at Saharanpur Sub-station and (iv) 50 MVA, 400 kV Bus Reactor-II at Saharanpur Sub-station .	9.5.2016
Asset-20 B	04 numbers 220 kV line bays at Saharanpur Sub-station	9.5.2016

Cost over-run

22. BRPL has submitted that the Petitioner without citing any reasons for cost over run has filed the Revised Cost Estimates (RCE). The perusal of the RCE would show that it is merely an indication of revision of cost of various assets without furnishing any justification for increase in cost approved. BRPL has further submitted that the Board of Directors of the Petitioner have been delegated the financial powers to approve the investments by the Department of Public Enterprise (DPE), Ministry of Heavy Industries and Public Enterprises, Government of India through its OM No. 26(3)/2005-GM-GL-92 dated 1.5.2008 and OM No. DPE/11(2)/97-Fin dated 22.7.1997. The revision of the cost estimate without mentioning the reasons and the justification of the cost escalation would be arbitrary in nature and the Petitioner cannot claim tariff based on such arbitrary exercise of delegated power. BRPL prayed to disallow the cost over-run as claimed by the Petitioner.

23. The Petitioner in response submit that the reasons for cost variation in all the assets covered in the instant petition has been given in respective Form 5 submitted vide affidavit dated 13.4.2021. The Petitioner has further submit that the RCE of the



project was accorded vide the Memorandum No. C/CP/NRTSS dated 31.3.2017 and is approved by competent Authority. Major heads of Cost variation based on RCE is as below:

- a) Price variation
- b) Increase in Land compensation
- c) Foreign Exchange Rate Variation (FERV)

24. The Petitioner vide affidavit dated 21.4.2021 has submitted that apportioned approved cost as per FR for assets pertaining to Sohawal Sub-station and Shahjahanpur Sub-station is being revised on account of change in Civil and Building apportionment and the reason for the same is as below:

(a) 400/220 kV Sohawal and 400/220 kV Shahjahanpur Sub-stations were constructed under NRTSS scheme and commissioned in July, 2012 & June, 2014 respectively. Colony at Sohawal and Shahjahanpur Sub-station were not constructed at that time 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 whereas colony at these locations were kept in the FR/ DPR of the NRTSS scheme. Accordingly, FR cost against colony was apportioned in different assets put into commercial operation from 2012 to 2015.

(b) Considering the challenges faced in maintenance through MSH, it was felt appropriate to follow the earlier concept of sub-station maintenance by placing maintenance staff at these sub-stations and, to place some operation staff in sub-station for operation purpose so that any contingency can be met immediately to avert any major breakdown.



(c) Accordingly, residential quarters for Operation & Maintenance staff at Sohawal and Shahjahanpur Sub-stations are being constructed under NRTSS scheme in which colony were originally provisioned in FR/ DPR. Therefore, cost of construction of colony is considered under ACE of the asset put into commercial operation in 2017 and 2018.

(d) Thus, FR cost against colony were apportioned in the different assets put into commercial operation from 2012 to 2014 whereas the cost of construction of colony is considered under ACE of the assets put into commercial operation in 2017 and 2018 under NRTSS Scheme once it was decided to construct colony at these sub-stations. Therefore, the re-apportionment of FR/ DPR cost of the assets has been done by shifting the FR/ DPR cost of colony considered in the assets put into commercial operation in 2012 to 2014 to assets put into commercial operation in 2017-2018 in which colony cost considered under ACE.

25. The Petitioner has revised the FR apportioned cost associated with Sohawal and Shahjahanpur Sub-station and the same is as follows:

Assets	Region	Scope as approved in Investment Approval	COD	FR Approved Cost as per CERC order (₹ in lakh)	Revised FR as submitted now (₹ in lakh)	RCE approved cost (₹ in lakh)
Asset-5	NR-III	400/220 kV 2X315 MVA ICTs at Sohawal Sub-station along with associated bays	1.7.2012	7141.02	6829.76	5217.84
Asset-7	NR-III	LILO of 2 nd Ckt of 400 kV D/C Ballia-Lucknow T/L with 50 MVAR Line Reactor at Sohawal Sub-station	1.7.2012	3330.52	3268.27	2902.53
Asset-8	NR-III	LILO of 1 st Ckt of 400 kV D/C Ballia-Lucknow T/L with 50 MVAR Line Reactor at Sohawal Sub-station	1.2.2013	3330.52	3268.27	3012.53
Asset-14	NR-III	LILo Ckt-II of 400 kV D/C Lucknow-Bareilly TL at Shahjahanpur	13.6.2014	6664.25	6531.45	6751.32
Asset-15	NR-III	315 MVA 400/220 kV ICT-I with 02 numbers of 220 kV Line Bays at Shahjahanpur	15.6.2014	3442.11	3276.11	3264.47
Asset-16	NR-III	315 MVA 400/220 kV ICT-II at Shahjahanpur	26.9.2014	3170.56	3004.56	2438.56



26. We have considered the submissions of the Petitioner and BRPL. The Petitioner has revised the cost of Asset-5, Asset-7, Asset-8, Asset-14, Asset-15 and Asset-16 in the instant true-up petition. Asset-5, Asset-7 and Asset-8 were put into commercial operation in 2009-14 tariff period and the Commission vide order dated 18.4.2016 in Petition No. 290/TT/2015 has already carried out true-up of 2009-14 period and tariff for 2014-19 period for Asset-5, Asset-7 and Asset-8 based on the RCE apportioned approved cost. The tariff of Asset-5, Asset-7 and Asset-8 already attained finality, so we are not inclined to re-open the FR apportioned approved cost in the instant true up petition. Asset-14, Asset-15 and Asset-16 were put into commercial operation in 2014-19 tariff period and the Commission vide order dated 30.4.2016 in Petition No. 33/TT/2015 and order dated 16.6.2017 in Review Petition No 7/RP/2017 against 33/TT/2015 approved the capital cost as on COD and ACE for 2014-19 tariff period based on the FR cost.

Shifting/ Re-capitalisation

27. The Petitioner has submitted that Asset-23 i.e. “400 kV FSC in Balia-I and II bays at Sohawal Sub-station of 400 kV D/C Balia-Sohawal Line” was shifted from Lucknow Sub-station to Sohawal Sub-station and cost claimed does not include the cost of FSC. The 400 kV FSC shifted from Lucknow Sub-station to Sohawal Sub-station was covered under Kahalgaon Stage-II Phase-I Transmission System. The Commission in order dated 28.9.2017 in Petition No. 195/TT/2016 directed to carry out the de-capitalisation and corresponding capitalisation of the assets within a period of six months and claim the revised tariff of the “40% FSC” at Sohawal Sub-station at the time of true-up. The relevant extracts of the draft order is as follows:

“6. The tariff of “40% FSC at Lucknow Sub-station” was allowed since 1.6.2007 and it has completed 10 years of its useful life. It is a case of inter-unit transfer. Since the proposed shifting of FSC from Lucknow to Sohawal is of permanent nature and as it involves two



different schemes covered under different Investment Approvals, there will be a mismatch of recovery of the cost of the “40% FSC” over the 25 years. In order to address this issue, the Commission in the past has decided that in case of inter-unit transfer, the assets shall be de-capitalised in the books of accounts of the transmission system where the asset was originally commissioned and capitalised in the books of accounts of the transmission system where it is transferred. In the instant case, the 40% FSC has been transferred from Lucknow to Sohawal end. Therefore, the said assets need to be de-capitalised from the books of accounts of the assets at Lucknow and capitalised in the books of account of assets at Sohawal. The Petitioner is directed to carry out the decapitalisation and corresponding capitalisation of the assets within a period of six months and claim the revised tariff of the “40% FSC” at Sohawal Sub-station at the time of true-up. In so far as the expenditure involved in inter-unit transfer is concerned, this is in the nature of revenue expenditure and is allowed as a onetime pass through. Since the “40% FSC” was dismantled and shifted to Sohawal and thereafter, commissioned on 12.2.2016, the tariff of the assets shall be determined afresh with reference to the COD as 12.2.2016. Accordingly, the Petitioner after carrying out necessary de-capitalisation of the assets at Lucknow and capitalisation at Sohawal Sub-station shall seek fresh determination of the tariff with effect from 12.2.2016. Therefore, the tariff for “40% FSC at Sohawal Sub-station” is not allowed in this order.”

28. Asset-24 i.e “1x63 MVAR,400 kV Bus Reactor-I at 400/220 kV Sohawal Sub-station” and Asset-25 i.e “1x63 MVAR, 400 kV Bus Reactor-II at 400/220 kV Sohawal Sub-station” were shifted from Lucknow Sub-station to Sohawal Sub-station and cost claimed does not include the cost of Bus Reactor. The 400 kV, 63 MVAR Bus Reactor-I and II shifted from Lucknow Sub-station to Sohawal Sub-station were covered under Kahalgaon Stage-II Phase-I Transmission system. The Commission in order dated 22.1.2020 in Petition No. 375/TT/2018 directed to file true-up petition in respect of assets covered under Kahalgaon Stage-II separately after de-capitalisation of 63 MVAR Reactors shifted from Lucknow to Sohawal Sub-station.

29. In line with direction vide order dated 28.9.2017 and 22.1.2010, FSC and Bus Reactor-I and II has been de-capitalised form Kahalgaon Stage-II Phase-I Transmission System in true-up of 2014-19 tariff period in Petition No. 86/TT/2020 and the same is being re-capitalized in the instant petition. The Petitioner has submitted the Auditor’s Certificate indicating de-capitalisation as submitted in Petition No. 86/TT/2020.



30. Based on the de-capitalisation and re-capitalisation carried out the Asset-23, Asset-24 and Asset-25 covered under instant petition is as follows:

Assets	Assets	COD
Asset-23 A	400 kV FSC in Ballia-I & Ballia-II bays at Sohawal Sub-station of 400 kV D/C Ballia-Sohawal Line (Excluding FSC)	12.2.2016
Asset-23 B	400 kV FSC in Ballia-I & Ballia-II bays at Sohawal Sub-station of 400 kV D/C Ballia-Sohawal Line (Only FSC)	12.2.2016
Asset-24 A	1x63 MVAR, 400kV Bus Reactor-I at 400/220 kV Sohawal Sub-station under NRTSS (Excluding Bus reactor)	29.7.2017
Asset-24 B	1x63 MVAR, 400 kV Bus Reactor-I at 400/ 220 kV Sohawal Sub-station under NRTSS (Only Bus Reactor)	29.7.2017
Asset-25 A	1x63 MVAR, 400 kV Bus Reactor-II at 400/220 kV Sohawal Sub-station under NRTSS (Excluding Bus Reactor)	7.5.2018
Asset-25 B	1x63 MVAR, 400 kV Bus Reactor-II at 400/220 kV Sohawal Sub-station under NRTSS (Only Bus Reactor)	7.5.2018

31. The Petitioner has prayed to allow the de-capitalisation of FSC and Bus Raectors from Kahalgaon Stage-II Phase-I Transmission System in true-up tariff of 2014-19 period in Petition No. 86/TT/2020 and re-capitalisation under instant project now i.e. in true-up petition of 2014-19.

32. We have considered the submissions of the Petitioner and observed that the Commission in order dated 11.9.2021 in Petition No. 86/TT/2020 has de-capitalised the assets and the Petitioner in the instant petition has claimed the re-capaitalisation of the assets and the same is as follows:

Equipment/ Asset	Year of capitalisation of asset/ equipment being de-capitalised	Actual date of removal of the asset	Date of re-capitalisation claimed in the petitions
A	B	C	D
FSCs	2007-08 (1.6.2007)	5.9.2014	11.2.2016
1X63 MVAR Bus Reactor I	2007-08 (1.5.2007)	6.1.2016	28.7.2017
1X63 MVAR Bus Reactor II	2007-08 (1.5.2007)	6.1.2016	6.5.2018
80 MVAR Bus Reactor	2007-08 (1.5.2007)	2.3.2019	21.7.2019



33. The Petitioner has also submitted the Auditor's certificate for de-capitalized assets and the same has been considered for calculating the cumulative depreciation.

Time over-run

34. The scheduled date of commercial operation (SCOD) of the transmission assets and the actual COD of the transmission assets are as follows:

Assets	SCOD	Date of Commercial Operation	Time Over-run (days)
Asset-1	16.11.2012	1.4.2012	-
Asset-2	16.11.2012	1.4.2012	-
Asset-3	16.11.2012	1.6.2012	-
Asset-4	16.11.2012	1.12.2012	-
Asset-5	16.11.2012	1.7.2012	-
Asset-6	16.11.2012	1.6.2012	-
Asset-7	16.11.2012	1.7.2012	-
Asset-8	16.11.2012	1.2.2013	77
Asset-9	16.11.2012	1.9.2012	-
Asset-10	16.11.2012	1.1.2013	46
Asset-11	16.11.2012	1.4.2013	136
Asset-12	16.11.2012	1.10.2013	319
Asset-13	16.11.2012	1.10.2013	319
Asset-14	16.11.2012	13.6.2014	574
Asset-15	16.11.2012	15.6.2014	576
Asset-16	16.11.2012	26.9.2014	679
Asset-17	16.11.2012	16.1.2015	791
Asset-18	16.11.2012	1.4.2014	501
Asset-19	16.11.2012	1.4.2015	866
Asset-20	16.11.2012	9.5.2016	1270
Asset-21	16.11.2012	18.10.2014	701
Asset-22	16.11.2012	11.11.2015	1090
Asset-23	16.11.2012	12.2.2016	1183
Asset-24	16.11.2012	29.7.2017	1716
Asset-25	16.11.2012	7.5.2018	1998
Asset-26	16.11.2012	5.3.2017	1570
Asset-27	16.11.2012	12.2.2017	1549
Asset-28	16.11.2012	12.12.2018	2217
Asset-29	16.11.2012	3.11.2016	1448
Asset-30	16.11.2012	5.8.2016	1358
Asset-31	16.11.2012	5.8.2016	1358
Asset-32	16.11.2012	14.5.2017	1640
Asset-33	16.11.2012	28.9.2017	1777



35. The Commission has dealt with the time over-run for all the assets except for Asset-20 and Asset-23. The time over-run in respect of Asset-10 to Asset-13 has already been dealt by the Commission in order dated 3.12.2019 in Petition No. 200/TT/2018. The time over-run in case of Asset-14 to Asset-19 was dealt in order dated 30.4.2016 in Petition No. 33/TT/2015. The time over-run in case of Asset-21 and Asset-22 was dealt by the Commission in order dated 28.9.2017 in Petition No. 195/TT/2016. The time over-run in case of Asset-24 to Asset-33 was dealt by the Commission in order dated 22.1.2020 in Petition No. 375/TT/2018.

36. The Commission vide order dated 12.10.2018 in Petition No. 272/TT/2015 observed that the time over-run in case of Asset-20 will be considered at the time of truing up. The relevant portion of the order dated 12.10.2018 is as follows:

“12. As held in order dated 20.7.2017 in Petition No.272/TT/2015 and 19.7.2018 in Petition No.45/RP/2017, the time over-run of 1271 days in case of the instant assets will be considered at the time of truing-up alongwith 400 kV D/C (Quad) Roorkee-Saharanpur line. Accordingly, IDC and IEDC corresponding to time over-run of 1271 days has not been considered in this order.”

37. The tariff for Asset-23 was not approved by the Commission in order dated 28.9.2017 in Petition No. 195/TT/2016 and observed that the same will be considered at the time of truing up stage. The relevant portion of the order dated 28.9.2017 is extracted hereunder:

“7. However, the Petitioner is directed to provide complete details of expenses incurred on shifting the instant asset supported by documentary evidence for a prudence check by the Commission. Further, there can be more cases of multiple shifting of such FSC/Reactors etc. from one project to another or even within the same project at some other locations. Therefore, in order to avoid multiplicity of tariff revisions, the tariff revision in such cases will be allowed once at the end of tariff block under truing-up provisions.”

Reasons for time over-run in case of Asset-20

38. The Petitioner has submitted the following reasons for time over-run in case of Asset-20:



(a) There is a time over-run of 1270 days. The Saharanpur Sub-station was initially planned to be charged through LILO of 400 kV Dehradun-Bagpat D/C Line at Saharanpur. However, during 36th Standing Committee Meeting on Power System Planning in Northern Region held on 13.7.2015 at NRPC, Katwaria Sarai, New Delhi, it was deliberated and decided that due to stiff resistance from farmers especially in Saharanpur, Muzzafarnagar, Bagpat, Shamli and Meerut, the construction of LILO of 400 kV D/C Dehradun-Bagpat Transmission Line at Saharanpur (Under NRTSS) was not feasible. Various meetings were taken by Special Secretary, Ministry of Power, wherein Petitioner requested for deployment of police force by the DM (Saharanpur) so that work could be initiated. Keeping in view severe RoW issue and public protests, DM (Saharanpur) opined that the Petitioner may drop LILO of 400 kV Dehradun-Bagpat D/C Line at Saharanpur and assured to provide police force for completion of other two lines (400 kV Dehradun-Bagpat D/C line under NRSS-XVIII and 400 kV Roorkee-Saharanpur D/C line under NRSS XXI). Members also agreed that commissioning of Saharanpur Sub-station may be taken up by constructing Roorkee-Saharanpur 400 kV D/C.

(b) There was time over-run in commissioning of 400 kV D/C (Quad) Roorkee-Saharanpur line (covered under NRSS-XXI, True-up Petition No-472/TT/2020) and the line was charged on 7.5.2016 and 14.6.2016 and declared under commercial operation from 16.6.2016. CoD of Asset-20 was declared as 9.5.2016 after commissioning of 1st ckt of Roorkee-Saharanpur line and COD has already been approved by the Commission. Time over-



run in case of 400 kV D/C (Quad) Roorkee-Saharanpur line and Asset-20 is mainly on account of land acquisition and RoW Problem.

39. (a) *Land acquisition at Saharanpur Sub-station:* The land acquisition process at Saharanpur sub-station was started on 19.1.2009 well before investment approval on 17.3.2010. In spite of the formal land allocation, full/ complete physical possession of the land was not available with the Petitioner. Land was allotted on 25.6.2011. The boundary wall and bay extension work started after the acquisition of land. The land acquisition process took almost 2.5 years. The Petitioner expedited other activities and delay on account of land acquisition was reduced to 6-8 months. Detailed chronology of events of land acquisition is as under:

DATE	Chronology of events occurred
19.1.2009	Ministry of Power, Govt. of India approved the construction of a new 400/220 kV sub-station at Saharanpur, UP
28.1.2009	Powergrid sought help of DM, Saharanpur for identification of Land for construction of new sub-station
29.4.2009	Powergrid Roorkee, identified 03 alternative sites for finalisation of best alternative by Technical committee
29.6.2009	Technical Committee submitted the recommendation to approve the land at village Kankarkui
29.7.2009	Competent Authority approved the recommendation of site selection committee
21.8.2009	DM, Saharanpur expressed inability to provide the land at the site selected by the committee and suggested another piece of land at nearby area of village Manani
10.10.2009	Powergrid came to know that the land suggested by DM, Saharanpur was notified for acquisition by GAIL for their gas pipeline project, Powergrid filed an objection to GAIL for shifting of gas pipeline. After meeting with GAIL, officials at NOIDA, GAIL officials expressed inability to shift the pipeline as Gazette Notification was already published on dated 20.04.2009
30.10.2009	Fresh exercise was started by the Powergrid for identification of another land for new sub-station at Saharanpur
20.12.2009	Land finalised after change at Village Mohanpur Gada.,10KM from Saharanpur
11.1.2010	Rs.3.75 Crore being the 20% of land cost deposited
21.1.2010	The case for acquisition of Land was resubmitted to SLAO, Saharanpur
18.3.2010	Rs.17.70 Crore being balance 80% was deposited with SLAO, Saharanpur.
14.5.2010 & 27.5.2010	Notification and publication u/s 4 of Land Acquisition Act, 1894
2.7.2010	Court case at Allahabad High Court



DATE	Chronology of events occurred
11.8.2010	Gazette Notification u/s 6 of L.A. 1894
11.8.2010	Publication of notification under Section 6 of the 2003 Act kept under hold
11.1.2011	Notification under Section 9 of the 2003 Act issued
10.2.2011	First meeting of committee members held with land owners under Karaar Adhinium
24.2.2011	Second meeting of committee members held with land owners under Karaar Adhinium
25.6.2011	Procession of land total area 42.77 Acre (17.317 Hect)

(b) *Time over-run on account of Right of Way:* The Petitioner further submitted that 400 kV Saharanpur Sub-station was to be connected to 400 kV Roorkee Sub-station through 400 kV D/C (Quad) Roorkee-Saharanpur line (covered under NRSS-XXI). However, the construction activities of transmission line Roorkee-Saharanpur started in the month of April, 2011. Work on above transmission line was stopped by the farmers of Roorkee, Saharanpur, Muzzafarnagar districts since April, 2011. The kisan unions were demanding unreasonable compensation for the transmission line. This has seriously affected the construction work the said transmission line. The above issue was brought to the notice of DMs of the concerned area, Commissioners and our officers had series of meetings with District authorities as well as Secretary, Energy Uttar Pradesh. The Petitioner released compensation against damages caused during construction of transmission line based on assessment and valuation by Revenue/ Forest authorities. The farmers demanded for the additional compensation, the RoW issues started from December, 2010 and continued till April, 2016 i.e for around 64 months and the Petitioner constantly followed up with the district administration and the line was finally charged on 7.5.2016 and 14.6.2016.

40. We have considered the submissions of the Petitioner and have also perused the chronology of events submitted by the Petitioner. As per the Investment Approval,



the scheduled COD of the project was 32 months from the date of Investment Approval. The Investment Approval was accorded on 16.3.2010 and thus the scheduled date of commercial operation was 16.11.2012. The actual COD of the instant asset is 9.5.2016. Hence, there is time over-run of 1270 days. The Petitioner has submitted that the entire time over-run is due to delay in land acquisition and RoW issues for which it has provided documentary evidences. On perusal of the documents, it is observed that the Petitioner has substantiated its claim by providing documentary evidences. It is observed that the delay caused due to land acquisition was for 465 days. However, the land was allotted to the Petitioner on 25.6.2011 and the delay due to RoW issues account for 1270 days. Therefore, the entire time over run of 1270 days in case of Asset 20 is condoned.

Reasons for time over-run in case of Asset-23

41. The Petitioner has submitted that 40% FSC was originally installed at Lucknow end of the 400 kV D/C Balia-Lucknow line in the year 2006. As per the Investment Approval dated 16.3.2010, it was envisaged to make LILO of Balia-Lucknow line at new Sohawal Sub-station and shift the FSC from Balia bays at Lucknow Sub-station to Balia bays at new Sohawal Sub-station. The Petitioner has further submitted that the FSC could not be removed before the COD of LILO of Balia-Lucknow line at Sohawal Sub-station. The LILO of Balia-Lucknow line was put into commercial operation on 1.1.2013. Thereafter, the work of removal, dismantling and shifting of FSC was taken up and the FSC was commissioned at Sohawal Sub-station on 12.2.2016.

42. We have considered the submissions of the Petitioner. As per the Investment Approval, the schedule completion is within 32 months from the date of Investment Approval. The date of Investment Approval is 16.3.2010 and accordingly the scheduled COD is 16.11.2012 against which Asset-23 was put into commercial operation on



12.2.2016. Thus, there is time over-run of 1183 days in case of Asset-23. The Petitioner has submitted that after the completion of LILO of Balia-Lucknow line on 1.1.2013, the FSC shifted from Lucknow and installed on Sohawal Sub-station. The Petitioner has failed to explain the reasons for the delay from 1.1.2013 to 9.5.2016. In view of the non-submission of valid reasons and documentary evidence, we are not inclined to condone the time over-run of 1183 days in case of Asset-23.

43. The details of time over-run condoned and not condoned in respect of the transmission assets is as follows:

Assets	SCOD	Date of commercial operation	Time over-run (days)	Time over-run condoned (days)	Time over-run not condoned (days)
Asset-1	16.11.2012	1.4.2012	-	-	-
Asset-2	16.11.2012	1.4.2012	-	-	-
Asset-3	16.11.2012	1.6.2012	-	-	-
Asset-4	16.11.2012	1.12.2012	-	-	-
Asset-5	16.11.2012	1.7.2012	-	-	-
Asset-6	16.11.2012	1.6.2012	-	-	-
Asset-7	16.11.2012	1.7.2012	-	-	-
Asset-8	16.11.2012	1.2.2013	77	-	77
Asset-9	16.11.2012	1.9.2012	-	-	-
Asset-10	16.11.2012	1.1.2013	46	-	46
Asset-11	16.11.2012	1.4.2013	136	136	-
Asset-12	16.11.2012	1.10.2013	319	319	-
Asset-13	16.11.2012	1.10.2013	319	319	-
Asset-14	16.11.2012	13.6.2014	574	513	61
Asset-15	16.11.2012	15.6.2014	576	515	61
Asset-16	16.11.2012	26.9.2014	679	494	185
Asset-17	16.11.2012	16.1.2015	791	791	-
Asset-18	16.11.2012	1.4.2014	501	-	501
Asset-19	16.11.2012	1.4.2015	866	500	366
Asset-20	16.11.2012	9.5.2016	1270	1270	
Asset-21	16.11.2012	18.10.2014	701	-	701
Asset-22	16.11.2012	11.11.2015	1090	-	1090
Asset-23	16.11.2012	12.2.2016	1183	-	1183
Asset-24	16.11.2012	29.7.2017	1716	-	1716
Asset-25	16.11.2012	7.5.2018	1998	-	1998
Asset-26	16.11.2012	5.3.2017	1570	-	1570
Asset-27	16.11.2012	12.2.2017	1549	-	1549
Asset-28	16.11.2012	12.12.2018	2217	-	2217



Assets	SCOD	Date of commercial operation	Time over-run (days)	Time over-run condoned (days)	Time over-run not condoned (days)
Asset-29	16.11.2012	3.11.2016	1448	-	1448
Asset-30	16.11.2012	5.8.2016	1358	-	1358
Asset-31	16.11.2012	5.8.2016	1358	-	1358
Asset-32	16.11.2012	14.5.2017	1640	-	1640
Asset-33	16.11.2012	28.9.2017	1777	-	1777

Interest During Construction

44. The Petitioner has claimed the same Interest During Construction (IDC) for the transmission assets as approved by the Commission in earlier orders except for Asset-20 and Asset-23, and has submitted the Auditor's Certificates in support of the same. The Petitioner has submitted computation of IDC along with the year-wise details of the IDC discharged.

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

46. Accordingly, based on the information filed by the Petitioner, the IDC considered is as follows:

(₹ in lakh)					
Assets	IDC claimed by Petitioner (as per Auditor Certificate)	Entitled IDC upto COD	IDC disallowed as on COD due to computational difference/ time over-run	Undischarged portion of entitled IDC as on COD	IDC allowed on cash basis as on COD
Asset-14	419.74	416.11	-	3.63	416.11
Asset-15	273.26	266.33	-	6.93	266.33
Asset-16	211.38	174.09	37.29	2.35	171.74
Asset-17	199.29	195.09	4.20	25.08	170.02



Assets	IDC claimed by Petitioner (as per Auditor Certificate)	Entitled IDC upto COD	IDC disallowed as on COD due to computational difference/ time over-run	Undischarged portion of entitled IDC as on COD	IDC allowed on cash basis as on COD
Asset-18	55.01	26.99	28.02	-	26.99
Asset-19	107.43	59.36	48.07	-	59.36
Asset-20 A	2611.34	2,611.34	-	408.19	2203.15
Asset-20 B	107.26	107.26	-	38.58	68.68
Asset-21	37.23	12.44	24.79	-	12.44
Asset-22	88.41	17.24	71.17	-	17.24
Asset-23 A	9.27	-	9.27	-	-
Asset-23 B	-	-	-	-	-
Asset-24 A	122.61	16.62	105.99	-	16.62
Asset-24 B	-	-	-	-	-
Asset-25 A	62.84	17.07	45.77	-	17.07
Asset-25 B	-	-	-	-	-
Asset-26	115.78	10.85	104.93	-	10.85
Asset-27	118.24	15.04	103.20	-	15.04
Asset-28	236.88	32.48	204.40	-	32.48
Asset-29	127.95	51.69	76.26	-	51.69
Asset-30	73.20	39.06	34.14	-	39.06
Asset-31	75.22	21.70	53.52	-	21.70
Asset-32	112.30	10.27	102.03	-	10.27
Asset-33	116.32	10.09	106.23	-	10.09

Incidental Expenditure During Construction (IEDC)

47. The Petitioner has claimed the same IEDC for the transmission assets as allowed by the Commission in earlier orders except for Asset-20 and Asset-23, and has submitted Auditor's Certificate in support of the same. Accordingly, IEDC is allowed as claimed subject to adjustment as per condonation of time over-run. The details of claimed and allowed IEDC are as follows:

Assets	IEDC claimed as per Auditor Certificate	IEDC disallowed due to computational difference & time over-run	IEDC allowed as on COD
Asset-14	278.43	10.96	267.47
Asset-15	181.26	7.12	174.14
Asset-16	121.81	13.62	108.19
Asset-17	121.56	2.65	118.91
Asset-18	37.06	12.57	24.49
Asset-19	73.05	14.51	58.54
Asset-20 A	860.81	-	860.81



Assets	IEDC claimed as per Auditor Certificate	IEDC disallowed due to computational difference & time over-run	IEDC allowed as on COD
Asset-20 B	60.20	-	60.20
Asset-21	26.35	11.01	15.34
Asset-22	42.86	22.61	20.25
Asset-23 A	28.56	15.65	12.91
Asset-23 B	-	-	-
Asset-24 A	32.62	20.79	11.83
Asset-24 B	-	-	-
Asset-25 A	36.50	24.52	11.98
Asset-25 B	-	-	-
Asset-26	49.05	30.25	18.80
Asset-27	49.49	30.36	19.13
Asset-28	37.37	25.95	11.42
Asset-29	50.32	36.91	13.41
Asset-30	8.42	3.17	5.25
Asset-31	8.42	4.90	3.52
Asset-32	30.23	11.84	18.39
Asset-33	35.91	23.18	12.73

Initial Spares

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

(₹ in lakh)

Assets		Capital Cost before disallowance	Capital Cost after disallowance	IDC/IEDC	Spare claimed (d)	Pro-rata Spare claimed (e)=[d*(a-c)/a]	Limit (f) (in %)	Allowable initial spares (g)=[f*(a-c)/(100-f)]	Allowed in previous order (h)
		(a)=(b+c+d-h)	(b)	Disallowances (c)					
Asset-1	Transmission Line	1909.11	1909.11	0	0	0.00	0.75	14.43	0
Asset-2	Sub-station	1528.89	1501.01	0	65.46	65.46	2.50	39.20	37.58
Asset-3	Sub-station	2603.80	2603.8	0	37.98	37.98	2.50	66.76	37.98
	Transmission Line	16.60	16.6	0	0	0.00	0.75	0.13	0
Asset-4	Sub-station	2518.29	2518.29	0.00	37.98	37.98	2.50	64.57	37.98
	Transmission Line	16.60	16.6	0.00	0	0.00	0.75	0.13	0
Asset-5	Sub-station	4744.94	4744.94	0	76.97	76.97	2.50	121.67	76.97
	Transmission Line	6.04	6.04	0.00	0	0.00	0.75	0.05	0
Asset-6	Sub-station	1137.16	1131.82	0	29.49	29.49	2.50	29.16	24.15



Assets		Capital Cost before disallowance	Capital Cost after disallowance (b)	IDC/IEDC	Spare claimed (d)	Pro-rata Spare claimed (e)= [d*(a-c)/a]	Limit (f) (in %)	Allowable initial spares (g)= [f*(a-c)/(100-f)]	Allowed in previous order (h)
		(a)= (b+c+d-h)		Disallowances (c)					
	Transmission Line	4067.25	4067.25	0	0	0.00	0.75	30.73	0
Asset-7	Sub-station	1370.44	1370.44	0	27.33	27.33	2.50	35.14	27.33
	Transmission Line	1166.15	1166.15	0	0	0.00	0.75	8.81	0
Asset-8	Sub-station	1411.39	1404.56	6.83	27.33	27.20	2.50	36.01	27.33
	Transmission Line	1242.32	1234.4	7.92	0	0.00	0.75	9.33	0
Asset-9	Sub-station	1144.25	1139.22	0	29.49	29.49	2.50	29.34	24.46
	Transmission Line	4105.91	4105.91	0.00	0	0.00	0.75	31.03	0
Asset-10	Sub-station	1108.12	1106.09	1.73	25.66	25.62	2.50	28.37	25.36
Asset-11	Sub-station	8048.63	8048.63	0	120.58	120.58	2.50	206.38	120.58
	Transmission Line	8628.67	8628.67	0.00	62.4	62.40	0.75	65.20	62.4
Asset-12	Sub-station	1717.03	1661.95	55.08	10.44	10.11	2.50	42.61	10.44
Asset-12	Sub-station	1717.03	1661.95	55.08	10.44	10.11	2.50	42.61	10.44
Asset-12	Sub-station	1717.03	1661.95	55.08	10.44	10.11	2.50	42.61	10.44
Asset-13	Sub-station	926.16	913.17	0	35.82	35.82	2.50	23.75	22.83
Total (2009-14)	Transmission Line	21158.65	21150.73	7.92	62.40	62.40		159.83	62.40
	Sub-station	31693.16	31467.82	173.80	545.41	544.23		808.19	493.87

Assets	Particulars	Plant and Machinery Cost (a) (₹ in lakh)	Spare claimed (b) (₹ in lakh)	Limit (c) (in %)	Allowable (d)= [c*(a-b)/(100-c)] (₹ in lakh)	Excess spare (e)=(b-d) (₹ in lakh)
Asset-14	Sub-station	2068.29	41.83	4.00	84.44	(42.61)
	Transmission Line	1972.49	20.98	1.00	19.71	1.27
Asset-15	Sub-station	2234.04	44.23	4.00	91.24	(47.01)
Asset-16	Sub-station	1796.56	30.93	4.00	73.57	(42.64)
Asset-17	Sub-station	1189.07	201.91	5.00	51.96	149.95
Asset-18	Sub-station	510.76	0	4.00	21.28	(21.28)
Asset-19	Sub-station	880.87	26.32	4.00	35.61	(9.29)
Asset-20A	Sub-station	5676.55	115.06	4.00	231.73	(116.67)
Asset-20B	Sub-station	778.76	0	4.00	32.45	(32.45)
Asset-21	Sub-station	360.58	0	4.00	15.02	(15.02)
Asset-22	Sub-station	496.19	0	4.00	20.67	(20.67)
Asset-23A	Sub-station	291.84	0	4.00	12.16	(12.16)
Asset-24A	Sub-station	211.63	9.11	4.00	8.44	0.67
Asset-25B	Sub-station	221.44	9.37	4.00	8.84	0.53
Asset-26	Sub-station	257.05	10.94	4.00	10.25	0.69



Asset-27	Sub-station	256.45	10.95	4.00	10.23	0.72
Asset-28	Sub-station	270.22	9.37	4.00	10.87	(1.50)
Asset-29	Sub-station	309.46	13.59	4.00	12.33	1.26
Asset-30	Sub-station	237.16	6.64	4.00	9.61	(2.97)
Asset-31	Sub-station	151.74	6.64	4.00	6.05	0.59
Asset-32	Sub-station	377.75	0	4.00	15.74	(15.74)
Asset-33	Sub-station	534.80	0	4.00	22.28	(22.28)
Total (2014-19)	Sub-station	19111.21	536.89		784.75	(247.86)
	Transmission Line	1972.49	20.98		19.71	1.27

49. We have considered the submissions of the Petitioner. In terms of the APTEL's judgment dated 14.9.2019 in Appeal No. 74 of 2017, Initial Spares are to be allowed as per the ceiling limit on overall project cost. The APTEL in judgement dated 14.9.2019 in Appeal No. 74 of 2017 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".

50. Accordingly, Initial Spares are allowed as percentage of the project cost as a whole. The assets covered under the transmission project have been put into commercial operation in 2009-14 tariff period and 2014-19 tariff period. The transmission project as per I.A. was completed during 2014-19 tariff period and the overall project cost of the transmission assets is arrived only when all the transmission assets are combined while claiming the tariff for the 2019-24 tariff period. Therefore, the Initial Spares are allowed on the basis of the cost of the individual transmission assets in the 2009-14 period and 2014-19 tariff period and the Initial Spares are allowed on the basis of the overall project cost in the 2019-24 period (as discussed in the relevant portion of the instant order). The Initial spares allowed by the Commission for Assets 14 to 33 is as follows:



Assets	Particulars	Plant & machinery cost up to cut-off date (excluding IDC and IEDC as per Auditor certificate) (₹ in lakh) (a)	Initial Spares claimed (₹ in lakh) (b)	Ceiling Limit (in %) (c)	Allowable Initial Spares worked out (₹ in lakh) (d)= [c*(a-b)/(100-c)]	Excess Initial Spares (₹ in lakh)	Allowed as on COD (₹ in lakh)
Asset-14	Sub-station	2068.29	41.83	4.00	84.44	0.00	41.83
	Transmission Line	1972.49	20.98	1.00	19.71	1.27	19.71
Asset-15	Sub-station	2234.04	44.23	4.00	91.24	0.00	44.23
Asset-16	Sub-station	1796.56	30.93	4.00	73.57	0.00	30.93
Asset-17	Sub-station	1189.07	201.91	5.00	51.96	149.95	51.96
Asset-18	Sub-station	510.76	0.00	4.00	21.28	0.00	0.00
Asset-19	Sub-station	879.29	26.32	4.00	35.54	0.00	26.32
Asset-20A	Sub-station	5676.55	115.06	4.00	231.73	0.00	115.06
Asset-20B	Sub-station	778.76	0.00	4.00	32.45	0.00	0.00
Asset-21	Sub-station	360.58	0.00	4.00	15.02	0.00	0.00
Asset-22	Sub-station	496.19	0.00	4.00	20.67	0.00	0.00
Asset-23A	Sub-station	291.84	0.00	4.00	12.16	0.00	0.00
Asset-24A	Sub-station	211.63	9.11	4.00	8.44	0.67	8.44
Asset-25A	Sub-station	221.44	9.37	4.00	8.84	0.53	8.84
Asset-26	Sub-station	257.05	10.94	4.00	10.25	0.69	10.25
Asset-27	Sub-station	256.45	10.95	4.00	10.23	0.72	10.23
Asset-28	Sub-station	270.22	9.37	4.00	10.87	0.00	9.37
Asset-29	Sub-station	309.46	13.59	4.00	12.33	1.26	12.33
Asset-30	Sub-station	237.16	6.64	4.00	9.61	0.00	6.64
Asset-31	Sub-station	151.74	6.64	4.00	6.05	0.59	6.05
Asset-32	Sub-station	377.75	0.00	4.00	15.74	0.00	0.00
Asset-33	Sub-station	534.80	0.00	4.00	22.28	0.00	0.00
Total (2014-19)	Sub-station	19111.21	536.89		784.75	154.41	784.75
	Transmission Line	1972.49	20.98		19.71	1.27	19.71

Capital Cost as on COD

51. Accordingly, the capital cost allowed as on COD is summarized as follows:



(₹ in lakh)

Assets	Capital Cost as on 1.4.2014 or COD whichever is later as per Auditor Certificate	Less: IDC as on COD		Less: IEDC dis-allowed as on COD	Excess Initial Spares	Capital Cost considered as on 1.4.2014
		due to Computation difference/ time over-run	Un-discharged			
Asset-1	1903.27	-	-	-	-	1,903.27
Asset-2	1389.91	-	-	-	-	1,389.91
Asset-3 to Asset-9	23104.54	-	-	-	-	23,104.54
Asset-10 to Asset-13	18543.48	-	-	-	-	18,543.48
Asset-14	4338.63	-	3.63	10.96	1.27	4,322.77
Asset-15	2260.26	-	6.93	7.12	-	2,246.21
Asset-16	1885.70	37.29	2.35	13.62	-	1,832.44
Asset-17	1267.98	4.20	25.08	2.65	149.95	1,086.11
Asset-18	362.68	28.02	-	12.57	-	322.09
Asset-19	858.81	48.07	-	14.51	-	796.23
Asset-20 A	13933.97	-	408.19	-	-	13,525.78
Asset- 20 B	883.78	-	38.58	-	-	845.20
Asset-21	424.16	24.79	-	11.01	-	388.35
Asset-22	607.46	71.17	-	22.61	-	513.68
Asset-23 A	214.84	9.27	-	15.65	-	189.92
Asset-23 B	3483.04	-	-	-	-	3,483.04
Asset-24 A	463.49	105.99	-	20.79	0.67	336.04
Asset-24 B	435.55	-	-	-	-	435.55
Asset-25 A	412.03	45.77	-	24.52	0.53	341.21
Asset-25 B	435.55	-	-	-	-	435.55
Asset-26	516.44	104.93	-	30.25	0.69	380.57
Asset-27	519.32	103.20	-	30.36	0.72	385.04
Asset-28	633.12	204.40	-	25.95	-	402.77
Asset-29	590.60	76.26	-	36.91	1.26	476.17
Asset-30	280.49	34.14	-	3.17	-	243.18
Asset-31	282.51	53.52	-	4.90	0.43	223.66
Asset-32	519.09	102.03	-	11.84	-	405.22
Asset-33	683.12	106.23	-	23.18	-	553.71
Total	81233.82	1159.28	484.75	322.58	155.52	79111.68

Additional Capital Expenditure (ACE)

52. The Petitioner has claimed the following Additional Capital Expenditure for the assets covered in the instant petition and has submitted the Auditor's Certificates in support of the same:



(₹ in lakh)

Assets	Actual Add-Cap					Total
	2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-1	0.00	5.84	0.00	0.00	0.00	5.84
Asset-2	111.10	0.00	0.00	0.00	0.00	111.10
Asset-3	211.68	87.08	3.36	3.25	1.76	307.13
Asset-4	197.73	87.08	3.36	3.25	1.76	293.18
Asset-5	368.89	151.71	22.16	19.48	0.00	562.24
Asset-6	96.90	184.81	3.36	3.25	32.92	321.24
Asset-7	29.82	87.05	12.35	10.86	0.00	140.08
Asset-8	112.11	88.72	12.59	11.07	0.00	224.49
Asset-9	87.79	179.80	3.36	3.25	32.92	307.12
Asset-10	25.97	53.09	10.89	5.80	0.89	96.64
Asset-11	515.25	867.06	35.92	28.55	0.00	1446.78
Asset-12	79.04	26.81	0.00	0.00	0.00	105.85
Asset-13	9.02 (2.28+6.74*)	14.62	39.10	0.00	0.00	62.74
Asset-14	661.88	137.27	82.55	81.10	0.00	962.80
Asset-15	2.72	376.52	95.17	113.50	20.57	608.48
Asset-16	26.61	242.66	70.76	49.52	0.00	389.55
Asset-17	0.00	0.00	178.85	63.09	0.00	241.94
Asset-18	142.46	54.41	21.16	5.44	16.68	240.15
Asset-19	0.00	125.73	38.51	36.77	21.27	222.28
Asset-20A	0.00	0.00	770.75	326.87	145.33	1242.95
Asset-20B	0.00	0.00	0.00	22.46	3.48	25.94
Asset-21	0.00	0.00	0.00	0.00	0.00	0.00
Asset-22	0.00	0.00	0.00	0.00	0.00	0.00
Asset-23A	0.00	0.00	19.48	0.00	23.37	42.85
Asset-23B	0.00	0.00	0.00	0.00	0.00	0.00
Asset-24A	0.00	0.00	0.00	1.61	0.00	1.61
Asset-24B	0.00	0.00	0.00	0.00	0.00	0.00
Asset-25A	0.00	0.00	0.00	0.00	0.00	0.00
Asset-25B	0.00	0.00	0.00	0.00	0.00	0.00
Asset-26	0.00	0.00	0.26	2.73	0.00	2.99
Asset-27	0.00	0.00	0.39	2.73	0.00	3.12
Asset-28	0.00	0.00	0.00	0.00	0.00	0.00
Asset-29	0.00	0.00	10.17	23.98	0.00	34.15
Asset-30	0.00	0.00	8.14	11.99	0.00	20.13
Asset-31	0.00	0.00	8.14	11.99	0.00	20.13
Asset-32	0.00	0.00	0.00	1.19	0.00	1.19
Asset-33	0.00	0.00	0.00	2.15	1.76	3.91
Total	2678.97	2770.26	1450.78	845.88	302.71	8048.60

*In Asset-13, accrual IDC as per order dated 03.12.2019 in petition No.: 200/TT/2018



53. We have considered the submissions of the Petitioner. The 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 Petitioner vide affidavit dated 13.4.2021 has submitted that the Additional Capitalisation incurred for the instant assets is on account of undischarged liability towards final payment/ with held payment due to contractual exigencies for works executed within the cut-off date. The Additional Capitalisation during 2014-19 period has been claimed under Regulation 14(3)(v) (liabilities after cut-off date) of the 2014 Tariff Regulations. The details of ACE allowed are as follows:

(₹ in lakh)

Assets	Capital Cost considered to allow as on 1.4.2014 or COD whichever is later	Actual Add Cap					Capital Cost as on 31.3.2019
		2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-1	1903.27	-	5.84	-	-	-	1,909.11
Asset-2	1389.91	111.10	-	-	-	-	1,501.01
Asset-3 to Asset-9	23104.54	1104.92	866.25	60.54	54.41	69.36	25260.02
Asset-10 to Asset-13	18543.48	629.27	961.58	85.91	34.35	0.89	20255.48
Asset-14*	4322.77	665.51	137.27	82.55	81.10	-	5289.20
Asset-15*	2246.21	9.65	376.52	95.17	113.50	20.57	2861.62
Asset-16	1832.44	26.61	242.66	70.76	49.52	-	2221.99
Asset-17	1086.10	8.98	14.60	178.85	63.09	-	1351.62
Asset-18	322.09	142.46	54.41	21.16	5.44	16.68	562.24
Asset-19	796.23	-	125.73	38.51	36.77	21.27	1018.51
Asset-20 A*	13525.78	-	-	770.75	326.93	145.33	14768.79
Asset-20 B	845.20	-	-	-	22.46	3.48	871.14
Asset-21	388.35	-	-	-	-	-	388.35
Asset-22	513.68	-	-	-	-	-	513.68
Asset-23 A	189.92	-	-	19.48	-	23.37	232.77
Asset-23 B	3483.04	-	-	-	-	-	3483.04
Asset-24 A	336.03	-	-	-	1.61	-	337.64



Assets	Capital Cost considered to allow as on 1.4.2014 or COD whichever is later	Actual Add Cap					Capital Cost as on 31.3.2019
		2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-24 B	435.55	-	-	-	-	-	435.55
Asset-25 A	341.21	-	-	-	-	-	341.21
Asset-25 B	435.55	-	-	-	-	-	435.55
Asset-26	380.58	-	-	0.26	2.73	-	383.57
Asset-27	385.04	-	-	0.39	2.73	-	388.16
Asset-28	402.77	-	-	-	-	-	402.77
Asset-29	476.17	-	-	10.17	23.98	-	510.32
Asset-30	243.18	-	-	8.14	11.99	-	263.31
Asset-31	223.66	-	-	8.14	11.99	-	243.79
Asset-32	405.22	-	-	-	1.19	-	406.41
Asset-33	553.71	-	-	-	2.15	1.76	557.62
Total	79111.68	2698.50	2784.86	1450.78	845.94	302.71	87194.47

* Includes undischarged liabilities after COD

54. It has been observed that the total estimated completion cost including ACE for the 2014-19 period is within the approved cost as per RCE.

Debt-Equity Ratio

55. The Petitioner has considered Debt-Equity ratio of 70:30 as on COD and for Additional Capital Expenditure post COD. The 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 the date of commercial operation and as on 31.3.2019 is as follows:

Asset-1	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	1332.29	70.00	1336.38	70.00
Equity	570.98	30.00	572.73	30.00
Total	1903.27	100.00	1909.11	100.00



Asset-2	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	972.94	70.00	1050.71	70.00
Equity	416.97	30.00	450.30	30.00
Total	1389.91	100.00	1501.01	100.00

Asset-3 to Asset-9	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	16173.18	70.00	17682.03	70.00
Equity	6931.36	30.00	7577.99	30.00
Total	23104.54	100.00	25260.02	100.00

Asset-10 to Asset-13	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	12980.44	70.00	14178.87	70.00
Equity	5563.04	30.00	6076.61	30.00
Total	18543.48	100.00	20255.48	100.00

Asset-14	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	3025.95	70.00	3702.46	70.00
Equity	1296.83	30.00	1586.75	30.00
Total	4322.77	100.00	5289.20	100.00

Asset-15	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	1572.34	70.00	2003.13	70.00
Equity	673.86	30.00	858.48	30.00
Total	2246.21	100.00	2861.62	100.00

Asset-16	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	1282.71	70.00	1555.40	70.00
Equity	549.73	30.00	666.59	30.00
Total	1832.44	100.00	2221.99	100.00



Asset-17	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	760.28	70.00	946.15	70.00
Equity	325.83	30.00	405.47	30.00
Total	1086.10	100.00	1351.62	100.00

Asset-18	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	225.46	70.00	393.58	70.00
Equity	96.63	30.00	168.66	30.00
Total	322.09	100.00	562.24	100.00

Asset-19	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	557.37	70.00	712.97	70.00
Equity	238.85	30.00	305.53	30.00
Total	796.23	100.00	1018.51	100.00

Asset-20A	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	9468.05	70.00	10338.16	70.00
Equity	4057.73	30.00	4430.63	30.00
Total	13525.78	100.00	14768.79	100.00

Asset-20B	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	591.65	70.00	609.81	70.00
Equity	253.55	30.00	261.33	30.00
Total	845.20	100.00	871.14	100.00

Asset-21	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	271.85	70.00	271.85	70.00
Equity	116.51	30.00	116.51	30.00
Total	388.35	100.00	388.35	100.00



Asset-22	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	359.58	70.00	359.58	70.00
Equity	154.10	30.00	154.10	30.00
Total	513.68	100.00	513.68	100.00

Asset-23 A	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	132.95	70.00	162.95	70.00
Equity	56.97	30.00	69.82	30.00
Total	189.92	100.00	232.77	100.00

Asset-23 B	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	2438.13	70.00	2438.13	70.00
Equity	1044.91	30.00	1044.91	30.00
Total	3483.04	100.00	3483.04	100.00

Asset-24 A	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	235.22	70.00	236.35	70.00
Equity	100.81	30.00	101.29	30.00
Total	336.03	100.00	337.64	100.00

Asset-24 B	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	304.89	70.00	304.89	70.00
Equity	130.66	30.00	130.66	30.00
Total	435.55	100.00	435.55	100.00

Asset-25 A	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	238.84	70.00	238.84	70.00
Equity	102.36	30.00	102.36	30.00
Total	341.21	100.00	341.21	100.00



Asset-25 B	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	304.89	70.00	304.89	70.00
Equity	130.66	30.00	130.66	30.00
Total	435.55	100.00	435.55	100.00

Asset-26	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	266.40	70.00	268.50	70.00
Equity	114.17	30.00	115.07	30.00
Total	380.58	100.00	383.57	100.00

Asset-27	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	269.53	70.00	271.71	70.00
Equity	115.51	30.00	116.45	30.00
Total	385.04	100.00	388.16	100.00

Asset-28	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	281.94	70.00	281.94	70.00
Equity	120.83	30.00	120.83	30.00
Total	402.77	100.00	402.77	100.00

Asset-29	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	333.32	70.00	357.23	70.00
Equity	142.85	30.00	153.09	30.00
Total	476.17	100.00	510.32	100.00

Asset-30	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	170.23	70.00	184.33	70.00
Equity	72.95	30.00	78.99	30.00
Total	243.18	100.00	263.32	100.00



Asset-31	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	156.57	70.00	170.66	70.00
Equity	67.09	30.00	73.13	30.00
Total	223.66	100.00	243.79	100.00

Asset-32	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	283.66	70.00	284.49	70.00
Equity	121.56	30.00	121.92	30.00
Total	405.22	100.00	406.41	100.00

Asset-33	Capital Cost as on COD or 1.4.2014 (₹ in lakh)	(in %)	Total Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	387.60	70.00	390.34	70.00
Equity	166.11	30.00	167.28	30.00
Total	553.71	100.00	557.62	100.00

Depreciation

56. The depreciation has been allowed as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations considering capital expenditure as on 1.4.2014 / COD and approved ACE during the 2014-19 tariff period. The Gross Block during the 2014-19 tariff period with regard to the Combined Asset has been depreciated at Weighted Average Rate of Depreciation (WAROD). The WAROD at relevant Annexure has been worked out after taking into account the depreciation rates of assets as specified in the 2014 Tariff Regulations and depreciation allowed during the 2014-19 period for the Combined Asset is as follows:

(₹ in lakh)					
Asset-1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block (a)	1903.27	1903.27	1909.11	1909.11	1909.11
ACE (b)	0.00	5.84	0.00	0.00	0.00
Closing Gross Block (c)=(a+b)	1903.27	1909.11	1909.11	1909.11	1909.11
Average Gross Block (d)=[(a+c)/2]	1903.27	1906.19	1909.11	1909.11	1909.11



Weighted average rate of Depreciation (WAROD) (in %) (e)	5.28	5.28	5.28	5.28	5.28
Balance useful life of the asset at the beginning of the year (f)	34.00	33.00	32.00	31.00	30.00
Aggregated Depreciable Value (g)	1712.94	1715.57	1718.20	1718.20	1718.20
Depreciation during the year (h)=(d*e)	100.49	100.65	100.80	100.80	100.80
Cummulative Depreciation at the end of the year (i)	288.08	388.73	489.53	590.33	691.13
Remaining Depreciable value at the end of the year (j)=(g-i)	1424.86	1326.84	1228.67	1127.87	1027.07

(₹ in lakh)

Asset-2					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block (a)	1389.91	1501.01	1501.01	1501.01	1501.01
ACE (b)	111.10	0.00	0.00	0.00	0.00
Closing Gross Block (c)=(a+b)	1501.01	1501.01	1501.01	1501.01	1501.01
Average Gross Block (d)=[(a+c)/2]	1445.46	1501.01	1501.01	1501.01	1501.01
Weighted average rate of Depreciation (WAROD) (in %) (e)	5.29	5.29	5.29	5.29	5.29
Balance useful life of the asset at the beginning of the year (f)	24.00	23.00	22.00	21.00	20.00
Aggregated Depreciable Value (g)	1300.91	1350.91	1350.91	1350.91	1350.91
Depreciation during the year (h)=(d*e)	76.43	79.37	79.37	79.37	79.37
Cummulative Depreciation at the end of the year (i)	217.72	297.08	376.45	455.82	535.18
Remaining Depreciable value at the end of the year (j)=(g-i)	1083.20	1053.83	974.46	895.09	815.73

(₹ in lakh)

Asset-3 to Asset-9					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block (a)	23104.54	24209.46	25075.71	25136.25	25190.66
ACE (b)	1104.92	866.25	60.54	54.41	69.36
Closing Gross Block (c)=(a+b)	24209.46	25075.71	25136.25	25190.66	25260.02
Average Gross Block (d)=[(a+c)/2]	23657.00	24642.59	25105.98	25163.46	25225.34
Weighted average rate of Depreciation (WAROD) (in %) (e)	4.92	4.93	4.93	4.93	4.93
Balance useful life of the asset at the beginning of the year (f)	27.00	26.00	25.00	24.00	23.00
Aggregated Depreciable Value (g)	20032.25	20919.28	21336.34	21388.06	21443.76



Depreciation during the year (h)=(d*e)	1164.33	1214.36	1237.72	1240.50	1243.61
Cummulative Depreciation at the end of the year (i)	2896.97	4111.32	5349.05	6589.55	7833.16
Remaining Depreciable value at the end of the year (j)=(g-i)	17135.29	16807.96	15987.29	14798.52	13610.60

(₹ in lakh)

Asset-10 to Asset-13					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block (a)	18543.48	19172.75	20134.33	20220.24	20254.59
ACE (b)	629.27	961.58	85.91	34.35	0.89
Closing Gross Block (c)=(a+b)	19172.75	20134.33	20220.24	20254.59	20255.48
Average Gross Block (d)=[(a+c)/2]	18858.12	19653.54	20177.29	20237.42	20255.04
Weighted average rate of Depreciation (WAROD) (in %) (e)	4.62	4.63	4.64	4.64	4.64
Balance useful life of the asset at the beginning of the year (f)	26.00	25.00	24.00	23.00	22.00
Aggregated Depreciable Value (g)	14989.24	15705.13	16176.50	16230.61	16246.47
Depreciation during the year (h)=(d*e)	871.05	909.93	936.60	939.78	940.71
Cummulative Depreciation at the end of the year (i)	1594.91	2504.84	3441.44	4381.22	5321.93
Remaining Depreciable value at the end of the year (j)=(g-i)	13394.34	13200.29	12735.06	11849.40	10924.55

(₹ in lakh)

Asset-14					
Particulars	2014-15 (Pro-rata 292 days)	2015-16	2016-17	2017-18	2018-19
Opening Gross Block (a)	4322.77	4988.28	5125.55	5208.10	5289.20
ACE (b)	665.51	137.27	82.55	81.10	0.00
Closing Gross Block (c)=(a+b)	4988.28	5125.55	5208.10	5289.20	5289.20
Average Gross Block (d)=(a+c)/2	4655.53	5056.92	5166.83	5248.65	5289.20
Weighted average rate of Depreciation (WAROD) (in %) (e)	4.42	4.48	4.50	4.51	4.51
Balance useful life of the asset at the beginning of the year (f)	25.00	25.00	24.00	23.00	22.00
Aggregated Depreciable Value (g)	3516.20	3877.45	3976.37	4050.01	4086.51
Depreciation during the year (h)=(d*e)	164.51	226.76	232.42	236.64	238.73
Cummulative Depreciation at the end of the year (i)	164.51	391.27	623.69	860.33	1099.06
Remaining Depreciable value at the end of the year (j)=(g-i)	3351.69	3486.18	3352.68	3189.68	2987.45



(₹ in lakh)

Asset-15					
Particulars	2014-15 (Pro-rata 290 days)	2015-16	2016-17	2017-18	2018-19
Opening Gross Block (a)	2246.21	2255.86	2632.38	2727.55	2841.05
ACE (b)	9.65	376.52	95.17	113.50	20.57
Closing Gross Block (c)=(a+b)	2255.86	2632.38	2727.55	2841.05	2861.62
Average Gross Block (d)=[(a+c)/2]	2251.03	2444.12	2679.96	2784.30	2851.33
Weighted average rate of Depreciation (WAROD) (in %) (e)	5.22	5.16	5.11	5.10	5.10
Balance useful life of the asset at the beginning of the year (f)	25.00	25.00	24.00	23.00	22.00
Aggregated Depreciable Value (g)	2025.93	2199.70	2411.96	2505.87	2566.20
Depreciation during the year (h)=(d*e)	93.42	126.18	136.95	142.06	145.39
Cummulative Depreciation at the end of the year (i)	93.42	219.60	356.55	498.62	644.00
Remaining Depreciable value at the end of the year (j)=(g-i)	1932.51	1980.10	2055.41	2007.25	1922.20

(₹ in lakh)

Asset-16					
Particulars	2014-15 (Pro-rata 187 days)	2015-16	2016-17	2017-18	2018-19
Opening Gross Block (a)	1832.44	1859.05	2101.71	2172.47	2221.99
ACE (b)	26.61	242.66	70.76	49.52	0.00
Closing Gross Block (c)=(a+b)	1859.05	2101.71	2172.47	2221.99	2221.99
Average Gross Block (d)=[(a+c)/2]	1845.75	1980.38	2137.09	2197.23	2221.99
Weighted average rate of Depreciation (WAROD) (in %) (e)	5.21	5.19	5.17	5.16	5.16
Balance useful life of the asset at the beginning of the year (f)	25.00	25.00	24.00	23.00	22.00
Aggregated Depreciable Value (g)	1661.17	1782.34	1923.38	1977.51	1999.79
Depreciation during the year (h)=(d*e)	49.31	102.79	110.40	113.40	114.63
Cummulative Depreciation at the end of the year (i)	49.31	152.11	262.51	375.91	490.55
Remaining Depreciable value at the end of the year (j)=(g-i)	1611.86	1630.24	1660.87	1601.60	1509.25



(₹ in lakh)

Asset-17					
Particulars	2014-15 (Pro-rata 85 days)	2015-16	2016-17	2017-18	2018-19
Opening Gross Block (a)	1086.10	1095.08	1109.68	1288.53	1351.62
ACE (b)	8.98	14.60	178.85	63.09	0.00
Closing Gross Block (c)=(a+b)	1095.08	1109.68	1288.53	1351.62	1351.62
Average Gross Block (d)=[(a+c)/2]	1090.59	1102.38	1199.11	1320.08	1351.62
Weighted average rate of Depreciation (WAROD) (in %) (e)	5.28	5.28	5.28	5.28	5.28
Balance useful life of the asset at the beginning of the year (f)	25.00	25.00	24.00	23.00	22.00
Aggregated Depreciable Value (g)	981.53	992.14	1079.20	1188.07	1216.46
Depreciation during the year (h)=(d*e)	11.83	58.21	63.31	69.70	71.37
Cummulative Depreciation at the end of the year (i)	11.83	70.04	133.35	203.05	274.42
Remaining Depreciable value at the end of the year (j)=(g-i)	969.70	922.11	945.85	985.02	942.04

(₹ in lakh)

Asset-18					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block (a)	322.09	464.55	518.96	540.12	545.56
ACE (b)	142.46	54.41	21.16	5.44	16.68
Closing Gross Block (c)=(a+b)	464.55	518.96	540.12	545.56	562.24
Average Gross Block (d)=[(a+c)/2]	393.32	491.75	529.54	542.84	553.90
Weighted average rate of Depreciation (WAROD) (in %) (e)	5.28	5.28	5.28	5.28	5.28
Balance useful life of the asset at the beginning of the year (f)	25.00	24.00	23.00	22.00	21.00
Aggregated Depreciable Value (g)	353.99	442.58	476.59	488.56	498.51
Depreciation during the year (h)=(d*e)	20.77	25.96	27.96	28.66	29.25
Cummulative Depreciation at the end of the year (i)	20.77	46.73	74.69	103.35	132.60
Remaining Depreciable value at the end of the year (j)=(g-i)	333.22	395.85	401.89	385.20	365.91

(₹ in lakh)

Asset-19					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block (a)	0.00	796.23	921.96	960.47	997.24
ACE (b)	0.00	125.73	38.51	36.77	21.27
Closing Gross Block (c)=(a+b)	0.00	921.96	960.47	997.24	1018.51
Average Gross Block (d)=[(a+c)/2]	0.00	859.09	941.21	978.85	1007.87
Weighted average rate of	0.00	5.19	5.16	5.16	5.16



Depreciation (WAROD) (in %) (e)					
Balance useful life of the asset at the beginning of the year (f)	25.00	25.00	24.00	23.00	22.00
Aggregated Depreciable Value (g)	0.00	773.18	847.09	880.97	907.09
Depreciation during the year (h)=(d*e)	0.00	44.61	48.56	50.48	51.97
Cummulative Depreciation at the end of the year (i)	0.00	44.61	93.18	143.65	195.63
Remaining Depreciable value at the end of the year (j)=(g-i)	0.00	728.57	753.91	737.31	711.46

(₹ in lakh)

Asset-20 A			
Particulars	2016-17 (Pro-rata 327 days)	2017-18	2018-19
Opening Gross Block (a)	13525.78	14296.53	14623.46
ACE (b)	770.75	326.93	145.33
Closing Gross Block (c)=(a+b)	14296.53	14623.46	14768.79
Average Gross Block (d)=[(a+c)/2]	13911.16	14460.00	14696.13
Weighted average rate of Depreciation (WAROD) (in %) (e)	3.32	3.36	3.39
Balance useful life of the asset at the beginning of the year (f)	17.00	17.00	16.00
Aggregated Depreciable Value (g)	8510.43	9004.39	9216.90
Depreciation during the year (h)=(d*e)	413.31	486.33	497.88
Cummulative Depreciation at the end of the year (i)	413.31	899.64	1397.52
Remaining Depreciable value at the end of the year (j)=(g-i)	8097.12	8104.75	7819.39

(₹ in lakh)

Asset-20 B			
Particulars	2016-17 (Pro-rata 327 days)	2017-18	2018-19
Opening Gross Block (a)	845.20	845.20	867.66
ACE (b)	0.00	22.46	3.48
Closing Gross Block (c)=(a+b)	845.20	867.66	871.14
Average Gross Block (d)=[(a+c)/2]	845.20	856.43	869.40
Weighted average rate of Depreciation (WAROD) (in %) (e)	5.32	5.32	5.32
Balance useful life of the asset at the beginning of the year (f)	25.00	25.00	24.00
Aggregated Depreciable Value (g)	760.68	770.79	782.46
Depreciation during the year (h)=(d*e)	40.26	45.54	46.23
Cummulative Depreciation at the end of the year (i)	40.26	85.80	132.03
Remaining Depreciable value at the end of the year (j)=(g-i)	720.42	684.99	650.43



(₹ in lakh)

Asset-21					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block (a)	388.35	388.35	388.35	388.35	388.35
ACE (b)	0.00	0.00	0.00	0.00	0.00
Closing Gross Block (c)=(a+b)	388.35	388.35	388.35	388.35	388.35
Average Gross Block (d)=[(a+c)/2]	388.35	388.35	388.35	388.35	388.35
Weighted average rate of Depreciation (WAROD) (in %) (e)	5.28	5.28	5.28	5.28	5.28
Balance useful life of the asset at the beginning of the year (f)	25.00	25.00	24.00	23.00	22.00
Aggregated Depreciable Value (g)	349.52	349.52	349.52	349.52	349.52
Depreciation during the year (h)=(d*e)	9.27	20.51	20.51	20.51	20.51
Cummulative Depreciation at the end of the year (i)	9.27	29.77	50.28	70.78	91.29
Remaining Depreciable value at the end of the year (j)=(g-i)	340.25	319.74	299.24	278.73	258.23

(₹ in lakh)

Asset-22				
Particulars	2015-16 (Pro-rata 142 days)	2016-17	2017-18	2018-19
Opening Gross Block (a)	513.68	513.68	513.68	513.68
ACE (b)	0.00	0.00	0.00	0.00
Closing Gross Block (c)=(a+b)	513.68	513.68	513.68	513.68
Average Gross Block (d)=[(a+c)/2]	513.68	513.68	513.68	513.68
Weighted average rate of Depreciation (WAROD) (in %) (e)	5.28	5.28	5.28	5.28
Balance useful life of the asset at the beginning of the year (f)	25.00	25.00	24.00	23.00
Aggregated Depreciable Value (g)	462.31	462.31	462.31	462.31
Depreciation during the year (h)=(d*e)	10.52	27.12	27.12	27.12
Cummulative Depreciation at the end of the year (i)	10.52	37.65	64.77	91.89
Remaining Depreciable value at the end of the year (j)=(g-i)	451.79	424.67	397.54	370.42

(₹ in lakh)

Asset-23 A				
Particulars	2015-16 (Pro-rata 49 days)	2016-17	2017-18	2018-19
Opening Gross Block (a)	189.92	189.92	209.40	209.40
ACE (b)	0.00	19.48	0.00	23.37
Closing Gross Block (c)=(a+b)	189.92	209.40	209.40	232.77
Average Gross Block (d)=[(a+c)/2]	189.92	199.66	209.40	221.09
Weighted average rate of Depreciation (WAROD) (in %) (e)	5.28	5.28	5.28	5.28



Balance useful life of the asset at the beginning of the year (f)	25.00	25.00	24.00	23.00
Aggregated Depreciable Value (g)	170.93	179.69	188.46	198.98
Depreciation during the year (h)=(d*e)	1.34	10.54	11.06	11.67
Cummulative Depreciation at the end of the year (i)	1.34	11.88	22.94	34.61
Remaining Depreciable value at the end of the year (j)=(g-i)	169.59	167.81	165.52	164.36

(₹ in lakh)

Asset-23 B				
Particulars	2015-16 (Pro-rata 49 days)	2016-17	2017-18	2018-19
Opening Gross Block (a)	3483.04	3483.04	3483.04	3483.04
ACE (b)	0.00	0.00	0.00	0.00
Closing Gross Block (c)=(a+b)	3483.04	3483.04	3483.04	3483.04
Average Gross Block (d)=[(a+c)/2]	3483.04	3483.04	3483.04	3483.04
Weighted average rate of Depreciation (WAROD) (in %) (e)	5.28	5.28	5.28	5.28
Balance useful life of the asset at the beginning of the year (f)	25.00	25.00	24.00	23.00
Aggregated Depreciable Value (g)	3134.74	3134.74	3134.74	3134.74
Depreciation during the year (h)=(d*e)	24.62	183.90	183.90	183.90
Cummulative Depreciation at the end of the year (i)	24.62	208.53	392.43	576.33
Remaining Depreciable value at the end of the year (j)=(g-i)	3110.11	2926.21	2742.31	2558.40

(₹ in lakh)

Asset-24 A		
Particulars	2017-18 (Pro-rata 246 days)	2018-19
Opening Gross Block (a)	336.03	337.64
ACE (b)	1.61	0.00
Closing Gross Block (c)=(a+b)	337.64	337.64
Average Gross Block (d)=[(a+c)/2]	336.84	337.64
Weighted average rate of Depreciation (WAROD) (in %) (e)	4.33	4.33
Balance useful life of the asset at the beginning of the year (f)	21.00	21.00
Aggregated Depreciable Value (g)	260.33	261.05
Depreciation during the year (h)=(d*e)	9.83	14.63
Cummulative Depreciation at the end of the year (i)	9.83	24.46
Remaining Depreciable value at the end of the year (j)=(g-i)	250.50	236.59



(₹ in lakh)

Asset-24 B		
Particulars	2017-18 (Pro-rata 246 days)	2018-19
Opening Gross Block (a)	435.55	435.55
ACE (b)	0.00	0.00
Closing Gross Block (c)=(a+b)	435.55	435.55
Average Gross Block (d)=[(a+c)/2]	435.55	435.55
Weighted average rate of Depreciation (WAROD) (in %) (e)	5.28	5.28
Balance useful life of the asset at the beginning of the year (f)	25.00	25.00
Aggregated Depreciable Value (g)	392.00	392.00
Depreciation during the year (h)=(d*e)	15.50	23.00
Cummulative Depreciation at the end of the year (i)	15.50	38.50
Remaining Depreciable value at the end of the year (j)=(g-i)	376.50	353.50

(₹ in lakh)

Asset-25 A	
Particulars	2018-19 (Pro-rata 329 days)
Opening Gross Block (a)	341.21
ACE (b)	0.00
Closing Gross Block (c)=(a+b)	341.21
Average Gross Block (d)=[(a+c)/2]	341.21
Weighted average rate of Depreciation (WAROD) (in %) (e)	4.34
Balance useful life of the asset at the beginning of the year (f)	21.00
Aggregated Depreciable Value (g)	264.26
Depreciation during the year (h)=(d*e)	13.36
Cummulative Depreciation at the end of the year (i)	13.36
Remaining Depreciable value at the end of the year (j)=(g-i)	250.90

(₹ in lakh)

Asset-25 B	
Particulars	2018-19 (Pro-rata 329 days)
Opening Gross Block (a)	435.55
ACE (b)	0.00
Closing Gross Block (c)=(a+b)	435.55
Average Gross Block (d)=[(a+c)/2]	435.55
Weighted average rate of Depreciation (WAROD) (in %) (e)	5.28
Balance useful life of the asset at the beginning of the year (f)	25.00
Aggregated Depreciable Value (g)	392.00
Depreciation during the year (h)=(d*e)	20.73
Cummulative Depreciation at the end of the year (i)	20.73
Remaining Depreciable value at the end of the year (j)=(g-i)	371.27



(₹ in lakh)

Asset-26			
Particulars	2016-17 (Pro-rata 27 days)	2017-18	2018-19
Opening Gross Block (a)	380.58	380.84	383.57
ACE (b)	0.26	2.73	0.00
Closing Gross Block (c)=(a+b)	380.84	383.57	383.57
Average Gross Block (d)=(a+c)/2	380.71	382.20	383.57
Weighted average rate of Depreciation (WAROD) (in %) (e)	4.93	4.93	4.93
Balance useful life of the asset at the beginning of the year (f)	25.00	25.00	24.00
Aggregated Depreciable Value (g)	342.64	343.98	345.21
Depreciation during the year (h)=(d*e)	1.39	18.85	18.91
Cummulative Depreciation at the end of the year (i)	1.39	20.24	39.15
Remaining Depreciable value at the end of the year (j)=(g-i)	341.25	323.75	306.06

(₹ in lakh)

Asset-27			
Particulars	2016-17 (Pro-rata 48 days)	2017-18	2018-19
Opening Gross Block (a)	385.04	385.43	388.16
ACE (b)	0.39	2.73	0.00
Closing Gross Block (c)=(a+b)	385.43	388.16	388.16
Average Gross Block (d)=[(a+c)/2]	385.23	386.79	388.16
Weighted average rate of Depreciation (WAROD) (in %) (e)	4.93	4.93	4.93
Balance useful life of the asset at the beginning of the year (f)	25.00	25.00	24.00
Aggregated Depreciable Value (g)	346.71	348.11	349.34
Depreciation during the year (h)=(d*e)	2.50	19.07	19.14
Cummulative Depreciation at the end of the year (i)	2.50	21.57	40.71
Remaining Depreciable value at the end of the year (j)=(g-i)	344.21	326.54	308.63

(₹ in lakh)

Asset-28	
Particulars	2018-19 (Pro-rata 110 days)
Opening Gross Block (a)	402.77
ACE (b)	0.00
Closing Gross Block (c)=(a+b)	402.77
Average Gross Block (d)=[(a+c)/2]	402.77
Weighted average rate of Depreciation (WAROD) (in %) (e)	5.02
Balance useful life of the asset at the beginning of the year (f)	24.89
Aggregated Depreciable Value (g)	362.49



Asset-28	
Particulars	2018-19 (Pro-rata 110 days)
Depreciation during the year (h)=(d*e)	6.09
Cummulative Depreciation at the end of the year (i)	6.09
Remaining Depreciable value at the end of the year (j)=(g-i)	356.40

(₹ in lakh)

Asset-29			
Particulars	2016-17 (Pro-rata 149 days)	2017-18	2018-19
Opening Gross Block (a)	476.17	486.34	510.32
ACE (b)	10.17	23.98	0.00
Closing Gross Block (c)=(a+b)	486.34	510.32	510.32
Average Gross Block (d)=(a+c)/2	481.26	498.33	510.32
Weighted average rate of Depreciation (WAROD) (in %) (e)	4.88	4.88	4.88
Balance useful life of the asset at the beginning of the year (f)	25	25	24
Aggregated Depreciable Value (g)	433.13	448.50	459.29
Depreciation during the year (h)=(d*e)	9.58	24.30	24.88
Cummulative Depreciation at the end of the year (i)	9.58	33.87	58.75
Remaining Depreciable value at the end of the year (j)=(g-i)	423.55	414.62	400.53

(₹ in lakh)

Asset-30			
Particulars	2016-17 (Pro-rata 239 days)	2017-18	2018-19
Opening Gross Block (a)	243.18	251.32	263.31
ACE (b)	8.14	11.99	0.00
Closing Gross Block (c)=(a+b)	251.32	263.31	263.31
Average Gross Block (d)=[(a+c)/2]	247.25	257.32	263.31
Weighted average rate of Depreciation (WAROD) (in %) (e)	4.87	4.87	4.87
Balance useful life of the asset at the beginning of the year (f)	24.79	24.79	23.79
Aggregated Depreciable Value (g)	222.53	231.59	236.98
Depreciation during the year (h)=(d*e)	7.89	12.53	12.83
Cummulative Depreciation at the end of the year (i)	7.89	20.42	33.25
Remaining Depreciable value at the end of the year (j)=(g-i)	214.64	211.17	203.73



(₹ in lakh)

Asset-31			
Particulars	2016-17 (Pro-rata 239 days)	2017-18	2018-19
Opening Gross Block (a)	223.66	231.80	243.79
ACE (b)	8.14	11.99	0.00
Closing Gross Block (c)=(a+b)	231.80	243.79	243.79
Average Gross Block (d)=(a+c)/2	227.73	237.79	243.79
Weighted average rate of Depreciation (WAROD) (in %) (e)	4.87	4.87	4.87
Balance useful life of the asset at the beginning of the year (f)	25.00	25.00	24.00
Aggregated Depreciable Value (g)	204.96	214.02	219.41
Depreciation during the year (h)=(d*e)	7.26	11.58	11.87
Cummulative Depreciation at the end of the year (i)	7.26	18.84	30.72
Remaining Depreciable value at the end of the year (j)=(g-i)	197.69	195.17	188.69

(₹ in lakh)

Asset-32		
Particulars	2017-18 (Pro-rata 322 days)	2018-19
Opening Gross Block (a)	405.22	406.41
ACE (b)	1.19	0.00
Closing Gross Block (c)=(a+b)	406.41	406.41
Average Gross Block (d)=(a+c)/2	405.81	406.41
Weighted average rate of Depreciation (WAROD) (in %) (e)	5.33	5.33
Balance useful life of the asset at the beginning of the year (f)	25.00	25.00
Aggregated Depreciable Value (g)	365.23	365.77
Depreciation during the year (h)=(d*e)	19.07	21.65
Cummulative Depreciation at the end of the year (i)	19.07	40.72
Remaining Depreciable value at the end of the year (j)=(g-i)	346.16	325.05

(₹ in lakh)

Asset-33		
Particulars	2017-18 (Pro-rata 185 days)	2018-19
Opening Gross Block (a)	553.71	555.86
ACE (b)	2.15	1.76
Closing Gross Block (c)=(a+b)	555.86	557.62
Average Gross Block (d)=(a+c)/2	554.78	556.74
Weighted average rate of Depreciation (WAROD) (in %) (e)	5.32	5.32
Balance useful life of the asset at the beginning of the year (f)	25	24
Aggregated Depreciable Value (g)	499.30	501.06
Depreciation during the year (h)=(d*e)	14.95	29.59



Cummulative Depreciation at the end of the year (i)	14.95	44.54
Remaining Depreciable value at the end of the year (j)=(g-i)	484.36	456.52

Interest on Loan (“IoL”)

57. IoL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The Petitioner has claimed the IoL based on actual interest rates for each year during the 2014-19 tariff period and has prayed to consider the floating rate of interest applicable during the truing-up of the tariff during the said period.

58. IoL has been worked out by considering:

- (i) Gross amount of loan, repayment of instalments and weighted average rate of interest on actual loan have been considered as per the petition.
- (ii) The repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that period

59. The details of IoL allowed in respect of the transmission assets are as follows:

(₹ in lakh)

Asset-1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan (a)	1332.29	1332.29	1336.38	1336.38	1336.38
Cumulative Repayments upto Previous Year (b)	187.59	288.08	388.73	489.53	590.33
Net Loan-Opening (c)=(a-b)	1144.70	1044.21	947.65	846.85	746.05
Additions due to Additional Capitalisation (d)	0.00	4.09	0.00	0.00	0.00
Repayment during the year (e)	100.49	100.65	100.80	100.80	100.80
Net Loan-Closing (f)=(c+d-e)	1044.21	947.65	846.85	746.05	645.25
Average Loan (g)=[(c+f)/2]	1094.45	995.93	897.25	796.45	695.65
Weighted Average Rate of Interest on Loan (in %) (h)	9.089	9.101	9.105	9.104	9.106
Interest on Loan (i)=(h*g)	99.48	90.64	81.69	72.51	63.34



(₹ in lakh)

Asset-2					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan (a)	972.94	1050.71	1050.71	1050.71	1050.71
Cumulative Repayments upto Previous Year (b)	141.29	217.72	297.08	376.45	455.82
Net Loan-Opening (c)=(a-b)	831.65	832.99	753.63	674.26	594.89
Additions due to Additional Capitalisation (d)	77.77	0.00	0.00	0.00	0.00
Repayment during the year (e)	76.43	79.37	79.37	79.37	79.37
Net Loan-Closing (f)=(c+d-e)	832.99	753.63	674.26	594.89	515.52
Average Loan (g)=[(c+f)/2]	832.32	793.31	713.94	634.57	555.21
Weighted Average Rate of Interest on Loan (in %) (h)	9.466	9.417	9.408	9.398	9.386
Interest on Loan (i)=(h*g)	78.79	74.71	67.17	59.64	52.11

(₹ in lakh)

Asset-3 to Asset-9					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan (a)	16173.18	16946.62	17553.00	17595.38	17633.47
Cumulative Repayments upto Previous Year (b)	1732.64	2896.97	4111.32	5349.05	6589.55
Net Loan-Opening (c)=(a-b)	14440.54	14049.66	13441.68	12246.34	11043.93
Additions due to Additional Capitalisation (d)	773.44	606.38	42.38	38.09	48.56
Repayment during the year (e)	1164.33	1214.36	1237.72	1240.50	1243.61
Net Loan-Closing (f)=(c+d-e)	14049.66	13441.68	12246.34	11043.93	9848.88
Average Loan (g)=[(c+f)/2]	14245.10	13745.67	12844.01	11645.13	10446.40
Weighted Average Rate of Interest on Loan (in %) (h)	8.167	8.180	8.109	7.946	7.842
Interest on Loan (i)=(h*g)	1163.43	1124.45	1041.53	925.27	819.16

(₹ in lakh)

Asset-10 to Asset-13					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan (a)	12980.44	13420.95	14094.06	14154.20	14178.25
Cumulative Repayments upto Previous Year (b)	723.86	1594.91	2504.84	3441.44	4381.22
Net Loan-Opening (c)=(a-b)	12256.58	11826.04	11589.22	10712.76	9797.03
Additions due to Additional Capitalisation (d)	440.51	673.11	60.14	24.05	0.62
Repayment during the year	871.05	909.93	936.60	939.78	940.71



Asset-10 to Asset-13					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
(e)					
Net Loan-Closing (f)=(c+d-e)	11826.04	11589.22	10712.76	9797.03	8856.94
Average Loan (g)=[(c+f)/2]	12041.31	11707.63	11150.99	10254.89	9326.99
Weighted Average Rate of Interest on Loan (in %) (h)	7.361	7.325	7.222	6.944	6.782
Interest on Loan (i)=(h*g)	886.40	857.62	805.36	712.11	632.55

(₹ in lakh)

Asset-14					
Particulars	2014-15 (Pro-rata 292 days)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan (a)	3025.95	3491.81	3587.90	3645.69	3702.46
Cumulative Repayments upto Previous Year (b)	0.00	164.51	391.27	623.69	860.33
Net Loan-Opening (c)=(a-b)	3025.95	3327.30	3196.63	3021.99	2842.12
Additions due to Additional Capitalisation (d)	465.86	96.09	57.79	56.77	0.00
Repayment during the year (e)	164.51	226.76	232.42	236.64	238.73
Net Loan-Closing (f)=(c+d-e)	3327.30	3196.63	3021.99	2842.12	2603.39
Average Loan (g)=[(c+f)/2]	3176.62	3261.96	3109.31	2932.06	2722.76
Weighted Average Rate of Interest on Loan (in %) (h)	8.283	8.227	8.133	7.959	7.867
Interest on Loan (i)=(h*g)	210.51	268.36	252.87	233.35	214.21

(₹ in lakh)

Asset-15					
Particulars	2014-15 (Pro-rata 290 days)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan (a)	1572.34	1579.10	1842.66	1909.28	1988.73
Cumulative Repayments upto Previous Year (b)	0.00	93.42	219.60	356.55	498.62
Net Loan-Opening (c)=(a-b)	1572.34	1485.68	1623.06	1552.73	1490.12
Additions due to Additional Capitalisation (d)	6.76	263.56	66.62	79.45	14.40
Repayment during the year (e)	93.42	126.18	136.95	142.06	145.39
Net Loan-Closing (f)=(c+d-e)	1485.68	1623.06	1552.73	1490.12	1359.13
Average Loan (g)=[(c+f)/2]	1529.01	1554.37	1587.90	1521.42	1424.62
Weighted Average Rate of Interest on Loan (in %) (h)	9.259	9.245	9.151	8.906	8.804
Interest on Loan (i)=(h*g)	112.48	143.71	145.31	135.50	125.43

(₹ in lakh)



Asset-16					
Particulars	2014-15 (Pro-rata 187 days)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan (a)	1282.71	1301.34	1471.20	1520.73	1555.39
Cumulative Repayments upto Previous Year (b)	0.00	49.31	152.11	262.51	375.91
Net Loan-Opening (c)=(a-b)	1282.71	1252.02	1319.09	1258.22	1179.48
Additions due to Additional Capitalisation (d)	18.63	169.86	49.53	34.66	0.00
Repayment during the year (e)	49.31	102.79	110.40	113.40	114.63
Net Loan-Closing (f)=(c+d-e)	1252.02	1319.09	1258.22	1179.48	1064.85
Average Loan (g)=[(c+f)/2]	1267.36	1285.56	1288.65	1218.85	1122.17
Weighted Average Rate of Interest on Loan (in %) (h)	8.985	8.990	8.951	8.865	8.839
Interest on Loan (i)=(h*g)	58.34	115.57	115.34	108.05	99.19

(₹ in lakh)

Asset-17					
Particulars	2014-15 (Pro-rata 85 days)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan (a)	760.28	766.56	776.79	901.99	946.15
Cumulative Repayments upto Previous Year (b)	0.00	11.83	70.04	133.35	203.05
Net Loan-Opening (c)=(a-b)	760.28	754.73	706.75	768.64	743.10
Additions due to Additional Capitalisation (d)	6.29	10.23	125.20	44.16	0.00
Repayment during the year (e)	11.83	58.21	63.31	69.70	71.37
Net Loan-Closing (f)=(c+d-e)	754.73	706.75	768.64	743.10	671.74
Average Loan (g)=[(c+f)/2]	757.50	730.74	737.69	755.87	707.42
Weighted Average Rate of Interest on Loan (in %) (h)	8.198	8.154	8.080	7.971	7.889
Interest on Loan (i)=(h*g)	12.76	59.59	59.61	60.25	55.81

(₹ in lakh)

Asset-18					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan (a)	225.46	325.18	363.27	378.09	381.90
Cumulative Repayments upto Previous Year (b)	0.00	20.77	46.73	74.69	103.35
Net Loan-Opening (c)=(a-b)	225.46	304.42	316.54	303.40	278.54
Additions due to Additional Capitalisation (d)	99.72	38.09	14.81	3.81	11.68
Repayment during the year (e)	20.77	25.96	27.96	28.66	29.25
Net Loan-Closing (f)=(c+d-e)	304.42	316.54	303.40	278.54	260.98
Average Loan (g)=[(c+f)/2]	264.94	310.48	309.97	290.97	269.76



Asset-18					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Weighted Average Rate of Interest on Loan (in %) (h)	8.430	8.445	8.427	8.275	8.202
Interest on Loan (i)=(h*g)	22.33	26.22	26.12	24.08	22.13

(₹ in lakh)

Asset-19				
Particulars	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan (a)	557.37	645.38	672.34	698.08
Cumulative Repayments upto Previous Year (b)	0.00	44.61	93.18	143.65
Net Loan-Opening (c)=(a-b)	557.37	600.77	579.17	554.43
Additions due to Additional Capitalisation (d)	88.01	26.96	25.74	14.89
Repayment during the year (e)	44.61	48.56	50.48	51.97
Net Loan-Closing (f)=(c+d-e)	600.77	579.17	554.43	517.35
Average Loan (g)=[(c+f)/2]	579.07	589.97	566.80	535.89
Weighted Average Rate of Interest on Loan (in %) (h)	8.375	8.169	7.563	7.393
Interest on Loan (i)=(h*g)	48.50	48.20	42.87	39.62

(₹ in lakh)

Asset-20 A			
Particulars	2016-17 (Pro-rata 327 days)	2017-18	2018-19
Gross Normative Loan (a)	9468.05	10007.57	10236.43
Cumulative Repayments upto Previous Year (b)	0.00	413.31	899.64
Net Loan-Opening (c)=(a-b)	9468.05	9594.26	9336.79
Additions due to Additional Capitalisation (d)	539.53	228.85	101.73
Repayment during the year (e)	413.31	486.33	497.88
Net Loan-Closing (f)=(c+d-e)	9594.26	9336.79	8940.64
Average Loan (g)=[(c+f)/2]	9531.16	9465.53	9138.71
Weighted Average Rate of Interest on Loan (in %) (h)	7.794	7.666	7.581
Interest on Loan (i)=(h*g)	665.51	725.66	692.78

(₹ in lakh)

Asset-20 B			
Particulars	2016-17 (Pro-rata 327 days)	2017-18	2018-19
Gross Normative Loan (a)	591.65	591.65	607.37
Cumulative Repayments upto Previous Year (b)	0.00	40.26	85.80
Net Loan-Opening (c)=(a-b)	591.65	551.39	521.57
Additions due to Additional Capitalisation (d)	0.00	15.72	2.44
Repayment during the year (e)	40.26	45.54	46.23
Net Loan-Closing (f)=(c+d-e)	551.39	521.57	477.78



Asset-20 B			
Particulars	2016-17 (Pro-rata 327 days)	2017-18	2018-19
Average Loan (g)=[(c+f)/2]	571.52	536.48	499.68
Weighted Average Rate of Interest on Loan (in %) (h)	8.772	8.737	8.711
Interest on Loan (i)=(h*g)	44.92	46.87	43.53

(₹ in lakh)

Asset-21					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan (a)	271.85	271.85	271.85	271.85	271.85
Cumulative Repayments upto Previous Year (b)	0.00	9.27	29.77	50.28	70.78
Net Loan-Opening (c)=(a-b)	271.85	262.58	242.07	221.57	201.06
Additions due to Additional Capitalisation (d)	0.00	0.00	0.00	0.00	0.00
Repayment during the year (e)	9.27	20.51	20.51	20.51	20.51
Net Loan-Closing (f)=(c+d-e)	262.58	242.07	221.57	201.06	180.56
Average Loan (g)=[(c+f)/2]	267.21	252.33	231.82	211.32	190.81
Weighted Average Rate of Interest on Loan (in %) (h)	9.748	9.544	9.339	8.886	8.746
Interest on Loan (i)=(h*g)	11.77	24.08	21.65	18.78	16.69

(₹ in lakh)

Asset-22				
Particulars	2015-16 (Pro-rata 142 days)	2016-17	2017-18	2018-19
Gross Normative Loan (a)	359.58	359.58	359.58	359.58
Cumulative Repayments upto Previous Year (b)	0.00	10.52	37.65	64.77
Net Loan-Opening (c)=(a-b)	359.58	349.05	321.93	294.81
Additions due to Additional Capitalisation (d)	0.00	0.00	0.00	0.00
Repayment during the year (e)	10.52	27.12	27.12	27.12
Net Loan-Closing (f)=(c+d-e)	349.05	321.93	294.81	267.69
Average Loan (g)=[(c+f)/2]	354.31	335.49	308.37	281.25
Weighted Average Rate of Interest on Loan (in %) (h)	9.325	9.267	9.021	8.954
Interest on Loan (i)=(h*g)	12.82	31.09	27.82	25.18



(₹ in lakh)

Asset-23 A				
Particulars	2015-16 (Pro-rata 49 days)	2016-17	2017-18	2018-19
Gross Normative Loan (a)	132.95	132.95	146.59	146.59
Cumulative Repayments upto Previous Year (b)	0.00	1.34	11.88	22.94
Net Loan-Opening (c)=(a-b)	132.95	131.60	134.70	123.65
Additions due to Additional Capitalisation (d)	0.00	13.64	0.00	16.36
Repayment during the year (e)	1.34	10.54	11.06	11.67
Net Loan-Closing (f)=(c+d-e)	131.60	134.70	123.65	128.33
Average Loan (g)=[(c+f)/2]	132.28	133.15	129.17	125.99
Weighted Average Rate of Interest on Loan (in %) (h)	9.020	8.855	8.377	8.226
Interest on Loan (i)=(h*g)	1.60	11.79	10.82	10.36

(₹ in lakh)

Asset-23 B				
Particulars	2015-16 (Pro-rata 49 days)	2016-17	2017-18	2018-19
Gross Normative Loan (a)	2438.13	2438.13	2438.13	2438.13
Cumulative Repayments upto Previous Year (b)	1356.30	1380.92	1564.82	1748.72
Net Loan-Opening (c)=(a-b)	1081.83	1057.21	873.31	689.41
Additions due to Additional Capitalisation (d)	0.00	0.00	0.00	0.00
Repayment during the year (e)	24.62	183.90	183.90	183.90
Net Loan-Closing (f)=(c+d-e)	1057.21	873.31	689.41	505.51
Average Loan (g)=[(c+f)/2]	1069.52	965.26	781.36	597.46
Weighted Average Rate of Interest on Loan (in %) (h)	9.330	9.330	9.330	9.330
Interest on Loan (i)=(h*g)	13.36	90.06	72.90	55.74

(₹ in lakh)

Asset-24 A		
Particulars	2017-18 (Pro-rata 246 days)	2018-19
Gross Normative Loan (a)	235.22	236.35
Cumulative Repayments upto Previous Year (b)	0.00	9.83
Net Loan-Opening (c)=(a-b)	235.22	226.52
Additions due to Additional Capitalisation (d)	1.13	0.00
Repayment during the year (e)	9.83	14.63
Net Loan-Closing (f)=(c+d-e)	226.52	211.89
Average Loan (g)=[(c+f)/2]	230.87	219.20
Weighted Average Rate of Interest on Loan (in %) (h)	9.246	9.242
Interest on Loan (i)=(h*g)	14.39	20.26



(₹ in lakh)

Asset-24 B		
Particulars	2017-18 (Pro-rata 246 days)	2018-19
Gross Normative Loan (a)	304.89	304.89
Cumulative Repayments upto Previous Year (b)	196.23	211.73
Net Loan-Opening (c)=(a-b)	108.66	93.16
Additions due to Additional Capitalisation (d)	0.00	0.00
Repayment during the year (e)	15.50	23.00
Net Loan-Closing (f)=(c+d-e)	93.16	70.16
Average Loan (g)=[(c+f)/2]	100.91	81.66
Weighted Average Rate of Interest on Loan (in %) (h)	9.330	9.330
Interest on Loan (i)=(h*g)	6.35	7.62

(₹ in lakh)

Asset-25 A	
Particulars	2018-19 (Pro-rata 329 days)
Gross Normative Loan (a)	238.84
Cumulative Repayments upto Previous Year (b)	0.00
Net Loan-Opening (c)=(a-b)	238.84
Additions due to Additional Capitalisation (d)	0.00
Repayment during the year (e)	13.36
Net Loan-Closing (f)=(c+d-e)	225.49
Average Loan (g)=[(c+f)/2]	232.17
Weighted Average Rate of Interest on Loan (in %) (h)	8.406
Interest on Loan (i)=(h*g)	17.59

(₹ in lakh)

Asset-25 B	
Particulars	2018-19 (Pro-rata 329 days)
Gross Normative Loan (a)	304.89
Cumulative Repayments upto Previous Year (b)	214.60
Net Loan-Opening (c)=(a-b)	90.29
Additions due to Additional Capitalisation (d)	0.00
Repayment during the year (e)	20.73
Net Loan-Closing (f)=(c+d-e)	69.56
Average Loan (g)=[(c+f)/2]	79.93
Weighted Average Rate of Interest on Loan (in %) (h)	9.330
Interest on Loan (i)=(h*g)	6.72



(₹ in lakh)

Asset-26			
Particulars	2016-17 (Pro-rata 27 days)	2017-18	2018-19
Gross Normative Loan (a)	266.40	266.59	268.50
Cumulative Repayments upto Previous Year (b)	0.00	1.39	20.24
Net Loan-Opening (c)=(a-b)	266.40	265.20	248.26
Additions due to Additional Capitalisation (d)	0.18	1.91	0.00
Repayment during the year (e)	1.39	18.85	18.91
Net Loan-Closing (f)=(c+d-e)	265.20	248.26	229.35
Average Loan (g)=[(c+f)/2]	265.80	256.73	238.81
Weighted Average Rate of Interest on Loan (in %) (h)	8.891	8.829	8.788
Interest on Loan (i)=(h*g)	1.75	22.67	20.99

(₹ in lakh)

Asset-27			
Particulars	2016-17 (Pro-rata 48 days)	2017-18	2018-19
Gross Normative Loan (a)	269.53	269.80	271.71
Cumulative Repayments upto Previous Year (b)	0.00	2.50	21.57
Net Loan-Opening (c)=(a-b)	269.53	267.30	250.14
Additions due to Additional Capitalisation (d)	0.27	1.91	0.00
Repayment during the year (e)	2.50	19.07	19.14
Net Loan-Closing (f)=(c+d-e)	267.30	250.14	231.00
Average Loan (g)=[(c+f)/2]	268.42	258.72	240.57
Weighted Average Rate of Interest on Loan (in %) (h)	9.191	9.180	9.169
Interest on Loan (i)=(h*g)	3.24	23.75	22.06

(₹ in lakh)

Asset-28	
Particulars	2018-19 (Pro-rata 110 days)
Gross Normative Loan (a)	281.94
Cumulative Repayments upto Previous Year (b)	0.00
Net Loan-Opening (c)=(a-b)	281.94
Additions due to Additional Capitalisation (d)	0.00
Repayment during the year (e)	6.09
Net Loan-Closing (f)=(c+d-e)	275.84
Average Loan (g)=[(c+f)/2]	278.89
Weighted Average Rate of Interest on Loan (in %) (h)	9.478
Interest on Loan (i)=(h*g)	7.97



(₹ in lakh)

Asset-29			
Particulars	2016-17 (Pro-rata 149 days)	2017-18	2018-19
Gross Normative Loan (a)	333.32	340.44	357.23
Cumulative Repayments upto Previous Year (b)	0.00	9.58	33.87
Net Loan-Opening (c)=(a-b)	333.32	330.87	323.36
Additions due to Additional Capitalisation (d)	7.12	16.79	0.00
Repayment during the year (e)	9.58	24.30	24.88
Net Loan-Closing (f)=(c+d-e)	330.87	323.36	298.48
Average Loan (g)=[(c+f)/2]	332.09	327.11	310.92
Weighted Average Rate of Interest on Loan (in %) (h)	8.976	8.926	8.891
Interest on Loan (i)=(h*g)	12.17	29.20	27.64

(₹ in lakh)

Asset-30			
Particulars	2016-17 (Pro-rata 239 days)	2017-18	2018-19
Gross Normative Loan (a)	170.23	175.93	184.33
Cumulative Repayments upto Previous Year (b)	0.00	7.89	20.42
Net Loan-Opening (c)=(a-b)	170.23	168.05	163.91
Additions due to Additional Capitalisation (d)	5.70	8.39	0.00
Repayment during the year (e)	7.89	12.53	12.83
Net Loan-Closing (f)=(c+d-e)	168.05	163.91	151.08
Average Loan (g)=[(c+f)/2]	169.14	165.98	157.49
Weighted Average Rate of Interest on Loan (in %) (h)	9.327	9.234	9.149
Interest on Loan (i)=(h*g)	10.33	15.33	14.41

(₹ in lakh)

Asset-31			
Particulars	2016-17 (Pro-rata 239 days)	2017-18	2018-19
Gross Normative Loan (a)	156.57	162.27	170.66
Cumulative Repayments upto Previous Year (b)	0.00	7.26	18.84
Net Loan-Opening (c)=(a-b)	156.57	155.00	151.82
Additions due to Additional Capitalisation (d)	5.70	8.39	0.00
Repayment during the year (e)	7.26	11.58	11.87
Net Loan-Closing (f)=(c+d-e)	155.00	151.82	139.94
Average Loan (g)=[(c+f)/2]	155.79	153.41	145.88
Weighted Average Rate of Interest on Loan (in %) (h)	9.405	9.305	9.213
Interest on Loan (i)=(h*g)	9.59	14.28	13.44



(₹ in lakh)

Asset-32		
Particulars	2017-18 (Pro-rata 322 days)	2018-19
Gross Normative Loan (a)	283.66	284.49
Cumulative Repayments upto Previous Year (b)	0.00	19.07
Net Loan-Opening (c)=(a-b)	283.66	265.42
Additions due to Additional Capitalisation (d)	0.83	0.00
Repayment during the year (e)	19.07	21.65
Net Loan-Closing (f)=(c+d-e)	265.42	243.77
Average Loan (g)=[(c+f)/2]	274.54	254.59
Weighted Average Rate of Interest on Loan (in %) (h)	9.182	9.182
Interest on Loan (i)=(h*g)	22.24	23.38

(₹ in lakh)

Asset- 33		
Particulars	2017-18 (Pro-rata 185 days)	2018-19
Gross Normative Loan (a)	387.60	389.11
Cumulative Repayments upto Previous Year (b)	0.00	14.95
Net Loan-Opening (c)=(a-b)	387.60	374.16
Additions due to Additional Capitalisation (d)	1.51	1.23
Repayment during the year (e)	14.95	29.59
Net Loan-Closing (f)=(c+d-e)	374.16	345.80
Average Loan (g)=[(c+f)/2]	380.88	359.98
Weighted Average Rate of Interest on Loan (in %) (h)	8.516	8.513
Interest on Loan (i)=(h*g)	16.44	30.64

Return on Equity (“RoE”)

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

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



61. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 had arrived at the effective tax rates based on the notified MAT rates for the Petitioner which are as follows:

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

62. MAT rates considered in order dated 27.4.2020 for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19 period, in terms of the provisions of the 2014 Tariff Regulations, have been considered in the instant case which are as follows:

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

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

(₹ in lakh)

Asset-1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity (a)	570.98	570.98	572.73	572.73	572.73
Addition due to ACE (b)	0.00	1.75	0.00	0.00	0.00
Closing Equity (c)=(a+b)	570.98	572.73	572.73	572.73	572.73
Average Equity (d)=[(a+c)/2]	570.98	571.86	572.73	572.73	572.73
Return on Equity (Base Rate) (in %) (e)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %) (f)	20.961	21.342	21.342	21.342	21.549



Asset-1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Rate of Return on Equity (Pre-tax) (g)	19.610	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	111.97	112.68	112.86	112.86	113.16

(₹ in lakh)

Asset-2					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity (a)	416.97	450.30	450.30	450.30	450.30
Addition due to ACE (b)	33.33	0.00	0.00	0.00	0.00
Closing Equity (c)=(a+b)	450.30	450.30	450.30	450.30	450.30
Average Equity (d)=[(a+c)/2]	433.64	450.30	450.30	450.30	450.30
Return on Equity (Base Rate) (in %) (e)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %) (f)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.610	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	85.04	88.73	88.73	88.73	88.97

(₹ in lakh)

Asset-3 to Asset-9					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity (a)	6931.36	7262.84	7522.71	7540.87	7557.19
Addition due to ACE (b)	331.48	259.87	18.16	16.32	20.80
Closing Equity (c)=(a+b)	7262.84	7522.71	7540.87	7557.19	7577.99
Average Equity (d)=[(a+c)/2]	7097.10	7392.77	7531.79	7549.03	7567.59
Return on Equity (Base Rate) (in %) (e)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %) (f)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.610	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	1391.74	1456.75	1484.14	1487.54	1495.20

(₹ in lakh)

Asset-10 to Asset-13					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity (a)	5563.04	5751.80	6040.27	6066.04	6076.34
Addition due to ACE (b)	188.76	288.47	25.77	10.30	0.27
Closing Equity (c)=(a+b)	5751.80	6040.27	6066.04	6076.34	6076.61
Average Equity (d)=[(a+c)/2]	5657.42	5896.04	6053.16	6071.19	6076.48
Return on Equity (Base Rate) (in %) (e)	15.500	15.500	15.500	15.500	15.500



Asset-10 to Asset-13					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Tax Rate applicable (in %) (f)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.610	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	1109.42	1161.81	1192.77	1196.33	1200.59

(₹ in lakh)

Asset-14					
Particulars	2014-15 (Pro-rata 292 days)	2015-16	2016-17	2017-18	2018-19
Opening Equity (a)	1296.83	1496.48	1537.66	1562.42	1586.75
Addition due to ACE (b)	199.65	41.18	24.76	24.33	0.00
Closing Equity (c)=(a+b)	1496.48	1537.66	1562.42	1586.75	1586.75
Average Equity (d)=[(a+c)/2]	1396.65	1517.07	1550.04	1574.58	1586.75
Return on Equity (Base Rate) (in %) (e)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %) (f)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.610	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	219.11	298.94	305.44	310.27	313.51

(₹ in lakh)

Asset-15					
Particulars	2014-15 (Pro-rata 290 days)	2015-16	2016-17	2017-18	2018-19
Opening Equity (a)	673.86	676.76	789.71	818.26	852.31
Addition due to ACE (b)	2.90	112.96	28.55	34.05	6.17
Closing Equity (c)=(a+b)	676.76	789.71	818.26	852.31	858.48
Average Equity (d)=[(a+c)/2]	675.31	733.23	803.99	835.29	855.40
Return on Equity (Base Rate) (in %) (e)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %) (f)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.610	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	105.22	144.48	158.43	164.59	169.01



(₹ in lakh)

Asset-16					
Particulars	2014-15 (Pro-rata 187 days)	2015-16	2016-17	2017-18	2018-19
Opening Equity (a)	549.73	557.71	630.51	651.73	666.59
Addition due to ACE (b)	7.98	72.80	21.23	14.86	0.00
Closing Equity (c)=(a+b)	557.71	630.51	651.73	666.59	666.59
Average Equity (d)=[(a+c)/2]	553.72	594.11	641.12	659.16	666.59
Return on Equity (Base Rate) (in %) (e)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %) (f)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.610	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	55.63	117.07	126.33	129.89	131.71

(₹ in lakh)

Asset-17					
Particulars	2014-15 (Pro-rata 85 days)	2015-16	2016-17	2017-18	2018-19
Opening Equity (a)	325.83	328.52	332.89	386.54	405.47
Addition due to ACE (b)	2.69	4.37	53.65	18.93	0.00
Closing Equity (c)=(a+b)	328.52	332.89	386.54	405.47	405.47
Average Equity (d)=[(a+c)/2]	327.17	330.71	359.72	396.01	405.47
Return on Equity (Base Rate) (in %) (e)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %) (f)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.610	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	13.18	65.17	70.88	78.03	80.11

(₹ in lakh)

Asset-18					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity (a)	96.63	139.36	155.68	162.03	163.66
Addition due to ACE (b)	42.74	16.32	6.35	1.63	5.00
Closing Equity (c)=(a+b)	139.36	155.68	162.03	163.66	168.66
Average Equity (d)=[(a+c)/2]	118.00	147.52	158.86	162.85	166.16
Return on Equity (Base Rate) (in %) (e)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %) (f)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.610	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax)	23.14	29.07	31.30	32.09	32.83



Asset-18					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
(h)=(d*g)					

(₹ in lakh)

Asset-19				
Particulars	2015-16	2016-17	2017-18	2018-19
Opening Equity (a)	238.85	276.57	288.12	299.15
Addition due to ACE (b)	37.72	11.55	11.03	6.38
Closing Equity (c)=(a+b)	276.57	288.12	299.15	305.53
Average Equity (d)=[(a+c)/2]	257.71	282.35	293.64	302.34
Return on Equity (Base Rate) (in %) (e)	15.500	15.500	15.500	15.500
Tax Rate applicable (in %) (f)	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	50.78	55.64	57.86	59.74

(₹ in lakh)

Asset-20 A			
Particulars	2016-17 (Pro-rata 327 days)	2017-18	2018-19
Opening Equity (a)	4057.73	4288.96	4387.03
Addition due to ACE (b)	231.22	98.08	43.60
Closing Equity (c)=(a+b)	4288.96	4387.03	4430.63
Average Equity (d)=[(a+c)/2]	4173.34	4337.99	4408.83
Return on Equity (Base Rate) (in %) (e)	15.500	15.500	15.500
Tax Rate applicable (in %) (f)	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.705	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	736.74	854.80	871.10

(₹ in lakh)

Asset-20 B			
Particulars	2016-17 (Pro-rata 327 days)	2017-18	2018-19
Opening Equity (a)	253.55	253.55	260.29
Addition due to ACE (b)	0.00	6.74	1.04
Closing Equity (c)=(a+b)	253.55	260.29	261.33
Average Equity (d)=[(a+c)/2]	253.55	256.92	260.81
Return on Equity (Base Rate) (in %) (e)	15.500	15.500	15.500
Tax Rate applicable (in %) (f)	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.705	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	44.76	50.63	51.53

(₹ in lakh)

Asset-21					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity (a)	116.51	116.51	116.51	116.51	116.51
Addition due to ACE (b)	0.00	0.00	0.00	0.00	0.00
Closing Equity (c)=(a+b)	116.51	116.51	116.51	116.51	116.51



Asset-21					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Average Equity (d)=[(a+c)/2]	116.51	116.51	116.51	116.51	116.51
Return on Equity (Base Rate) (in %) (e)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %) (f)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.610	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	10.33	22.96	22.96	22.96	23.02

(₹ in lakh)

Asset-22				
Particulars	2015-16 (Pro-rata 142 days)	2016-17	2017-18	2018-19
Opening Equity (a)	154.10	154.10	154.10	154.10
Addition due to ACE (b)	0.00	0.00	0.00	0.00
Closing Equity (c)=(a+b)	154.10	154.10	154.10	154.10
Average Equity (d)=[(a+c)/2]	154.10	154.10	154.10	154.10
Return on Equity (Base Rate) (in %) (e)	15.500	15.500	15.500	15.500
Tax Rate applicable (in %) (f)	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	11.78	30.37	30.37	30.45

(₹ in lakh)

Asset-23 A				
Particulars	2015-16 (Pro-rata 49 days)	2016-17	2017-18	2018-19
Opening Equity (a)	56.97	56.97	62.81	62.81
Addition due to ACE (b)	0.00	5.84	0.00	7.01
Closing Equity (c)=(a+b)	56.97	62.81	62.81	69.82
Average Equity (d)=[(a+c)/2]	56.97	59.89	62.81	66.32
Return on Equity (Base Rate) (in %) (e)	15.500	15.500	15.500	15.500
Tax Rate applicable (in %) (f)	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	1.50	11.80	12.38	13.10

(₹ in lakh)

Asset-23 B				
Particulars	2015-16 (Pro-rata 49 days)	2016-17	2017-18	2018-19
Opening Equity (a)	1044.91	1044.91	1044.91	1044.91
Addition due to ACE (b)	0.00	0.00	0.00	0.00
Closing Equity (c)=(a+b)	1044.91	1044.91	1044.91	1044.91
Average Equity (d)=[(a+c)/2]	1044.91	1044.91	1044.91	1044.91
Return on Equity (Base Rate) (in %) (e)	15.500	15.500	15.500	15.500
Tax Rate applicable (in %) (f)	21.342	21.342	21.342	21.549



Asset-23 B				
Particulars	2015-16 (Pro-rata 49 days)	2016-17	2017-18	2018-19
Rate of Return on Equity (Pre-tax) (g)	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	27.57	205.90	205.90	206.45

(₹ in lakh)

Asset-24 A		
Particulars	2017-18 (Pro-rata 246 days)	2018-19
Opening Equity (a)	100.81	101.29
Addition due to ACE (b)	0.48	0.00
Closing Equity (c)=(a+b)	101.29	101.29
Average Equity (d)=[(a+c)/2]	101.05	101.29
Return on Equity (Base Rate) (in %) (e)	15.500	15.500
Tax Rate applicable (in %) (f)	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	13.42	20.01

(₹ in lakh)

Asset-24 B		
Particulars	2017-18 (Pro-rata 246 days)	2018-19
Opening Equity (a)	130.66	130.66
Addition due to ACE (b)	0.00	0.00
Closing Equity (c)=(a+b)	130.66	130.66
Average Equity (d)=[(a+c)/2]	130.66	130.66
Return on Equity (Base Rate) (in %) (e)	15.500	15.500
Tax Rate applicable (in %) (f)	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	17.35	25.82

(₹ in lakh)

Asset-25 A	
Particulars	2018-19 (Pro-rata 329 days)
Opening Equity (a)	102.36
Addition due to ACE (b)	0.00
Closing Equity (c)=(a+b)	102.36
Average Equity (d)=[(a+c)/2]	102.36
Return on Equity (Base Rate) (in %) (e)	15.500
Tax Rate applicable (in %) (f)	21.549
Rate of Return on Equity (Pre-tax) (g)	19.758
Return on Equity (Pre-tax) (h)=(d*g)	18.23



(₹ in lakh)

Asset-25 B	
Particulars	2018-19 (Pro-rata 329 days)
Opening Equity (a)	130.66
Addition due to ACE (b)	0.00
Closing Equity (c)=(a+b)	130.66
Average Equity (d)=[(a+c)/2]	130.66
Return on Equity (Base Rate) (in %) (e)	15.500
Tax Rate applicable (in %) (f)	21.549
Rate of Return on Equity (Pre-tax) (g)	19.758
Return on Equity (Pre-tax) (h)=(d*g)	23.27

(₹ in lakh)

Asset-26			
Particulars	2016-17 (Pro-rata 27 days)	2017-18	2018-19
Opening Equity (a)	114.17	114.25	115.07
Addition due to ACE (b)	0.08	0.82	0.00
Closing Equity (c)=(a+b)	114.25	115.07	115.07
Average Equity (d)=[(a+c)/2]	114.21	114.66	115.07
Return on Equity (Base Rate) (in %) (e)	15.500	15.500	15.500
Tax Rate applicable (in %) (f)	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.705	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	1.66	22.59	22.74

(₹ in lakh)

Asset-27			
Particulars	2016-17 (Pro-rata 48 days)	2017-18	2018-19
Opening Equity (a)	115.51	115.63	116.45
Addition due to ACE (b)	0.12	0.82	0.00
Closing Equity (c)=(a+b)	115.63	116.45	116.45
Average Equity (d)=[(a+c)/2]	115.57	116.04	116.45
Return on Equity (Base Rate) (in %) (e)	15.500	15.500	15.500
Tax Rate applicable (in %) (f)	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.705	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	2.99	22.86	23.01

(₹ in lakh)

Asset-28	
Particulars	2018-19 (Pro-rata 110 days)
Opening Equity (a)	120.83
Addition due to ACE (b)	0.00
Closing Equity (c)=(a+b)	120.83
Average Equity (d)=[(a+c)/2]	120.83
Return on Equity (Base Rate) (in %) (e)	15.500
Tax Rate applicable (in %) (f)	21.549
Rate of Return on Equity (Pre-tax) (g)	19.758



Return on Equity (Pre-tax) (h)=(d*g)	7.19
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(₹ in lakh)

Asset-29			
Particulars	2016-17 (Pro-rata 149 days)	2017-18	2018-19
Opening Equity (a)	142.85	145.90	153.09
Addition due to ACE (b)	3.05	7.19	0.00
Closing Equity (c)=(a+b)	145.90	153.09	153.09
Average Equity (d)=[(a+c)/2]	144.37	149.49	153.09
Return on Equity (Base Rate) (in %) (e)	15.500	15.500	15.500
Tax Rate applicable (in %) (f)	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.705	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	11.61	29.46	30.25

(₹ in lakh)

Asset-30			
Particulars	2016-17 (Pro-rata 239 days)	2017-18	2018-19
Opening Equity (a)	72.95	75.39	78.99
Addition due to ACE (b)	2.44	3.60	0.00
Closing Equity (c)=(a+b)	75.39	78.99	78.99
Average Equity (d)=[(a+c)/2]	74.17	77.19	78.99
Return on Equity (Base Rate) (in %) (e)	15.500	15.500	15.500
Tax Rate applicable (in %) (f)	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.705	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	9.57	15.21	15.61

(₹ in lakh)

Asset-31			
Particulars	2016-17 (Pro-rata 239 days)	2017-18	2018-19
Opening Equity (a)	67.09	69.53	73.13
Addition due to ACE (b)	2.44	3.60	0.00
Closing Equity (c)=(a+b)	69.53	73.13	73.13
Average Equity (d)=[(a+c)/2]	68.31	71.33	73.13
Return on Equity (Base Rate) (in %) (e)	15.500	15.500	15.500
Tax Rate applicable (in %) (f)	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.705	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	8.81	14.06	14.45

(₹ in lakh)

Asset-32		
Particulars	2017-18 (Pro-rata 322 days)	2018-19
Opening Equity (a)	121.56	121.92
Addition due to ACE (b)	0.36	0.00
Closing Equity (c)=(a+b)	121.92	121.92



Average Equity (d)=[(a+c)/2]	121.74	121.92
Return on Equity (Base Rate) (in %) (e)	15.500	15.500
Tax Rate applicable (in %) (f)	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	21.16	24.09

(₹ in lakh)

Asset-33		
Particulars	2017-18 (Pro-rata 185 days)	2018-19
Opening Equity (a)	166.11	166.75
Addition due to ACE (b)	0.64	0.53
Closing Equity (c)=(a+b)	166.75	167.28
Average Equity (d)=[(a+c)/2]	166.43	167.02
Return on Equity (Base Rate) (in %) (e)	15.500	15.500
Tax Rate applicable (in %) (f)	21.342	21.549
Rate of Return on Equity (Pre-tax) (g)	19.705	19.758
Return on Equity (Pre-tax) (h)=(d*g)	16.62	33.00

Operation & Maintenance Expenses (O&M Expenses)

64. The O&M Expenses claimed by the Petitioner and allowed as per Regulation 29(4)(a) of the 2014 Tariff Regulations for the purpose of computation of tariff are the same and are as follows:

Asset-1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Transmission Line (km)					
Part of LILO of D/C Lucknow-Bareilly at Shajahnpur for Roja Power evacuation	15.498	15.498	15.498	15.498	15.498
Norm (₹ lakh/km)					
D/C Twin/Triple Conductor	0.707	0.731	0.755	0.78	0.806
Total O&M Expenses (₹ in lakh)	10.96	11.33	11.70	12.09	12.49

Asset-2					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station bays (Numbers)					
400 kV Sub-station	1	1	1	1	1
220 kV Sub-station	3	3	3	3	3
Norm (₹ lakh/bay)					
400 kV Sub-station	60.30	62.30	64.37	66.51	68.71
220 kV Sub-station	42.21	43.61	45.06	46.55	48.10
Total O&M Expenses (₹ in lakh)	186.93	193.13	199.55	206.16	213.01



Asset-3 to Asset-9					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station bays (Numbers)					
400 kV Sub-station bays at Jaipur, Sohawal	12	12	12	12	12
220 kV Sub-station bays at Jaipur, Sohawal	6	6	6	6	6
Transmission Line					
LILO of 1 st and 2 nd Ckt of 400 kV D/C Agra Jaipur at Jaipur (South)	74.60	74.60	74.60	74.60	74.60
LILO of 1 st and 2 nd Ckt of 400 kV D/C Balia Lucknow at Sohawal	11.898	11.898	11.898	11.898	11.898
Norm (₹ lakh/bay)					
400 kV Sub-station	60.30	62.30	64.37	66.51	68.71
220 kV Sub-station	42.21	43.61	45.06	46.55	48.10
Norm (₹ lakh/km)					
D/C Twin/Triple Conductor	0.707	0.731	0.755	0.780	0.806
Total O&M Expenses (₹ in lakh)	1038.01	1072.49	1108.11	1144.89	1182.84

Asset-10 to Asset-13					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station bays (Numbers)					
400 kV Sub-station	8	8	8	8	8
220 kV Sub-station	6	6	6	6	6
Transmission Line					
Bhiwani Jind	82.226	82.226	82.226	82.226	82.226
Norm (₹ lakh/bay)					
400 kV Sub-station	60.30	62.30	64.37	66.51	68.71
220 kV Sub-station	42.21	43.61	45.06	46.55	48.10
Norm (₹ lakh/km)					
D/C Twin/Triple Conductor	0.707	0.731	0.755	0.780	0.806
Total O&M Expenses (₹ in lakh)	793.79	820.17	847.40	875.52	904.55

Asset-14					
Particulars	2014-15 (Pro-rata 292 days)	2015-16	2016-17	2017-18	2018-19
Sub-station bays (Numbers)					
400 kV Sub-station	4	4	4	4	4
Norm (₹ lakh/bay)					
400 kV Sub-station	60.30	62.30	64.37	66.51	68.71
Transmission Line (km)					
D/C Twin/Triple Conductor	30.95	30.95	30.95	30.95	30.95
Norm (₹ lakh/km)					
D/C Twin/Triple Conductor	0.707	0.731	0.755	0.780	0.806
Total O&M Expenses (₹ in lakh)	210.47	271.82	280.85	290.18	299.79



Asset-15					
Particulars	2014-15 (Pro-rata 290 days)	2015-16	2016-17	2017-18	2018-19
Sub-station bays (Numbers)					
400 kV Sub-station	1	1	1	1	1
220 kV Sub-station	3	3	3	3	3
Norm (₹ lakh/bay)					
400 kV Sub-station	60.30	62.30	64.37	66.51	68.71
220 kV Sub-station	42.21	43.61	45.06	46.55	48.10
Total O&M Expenses (₹ in lakh)	148.52	193.13	199.55	206.16	213.01

Asset-16					
Particulars	2014-15 (Pro-rata 187 days)	2015-16	2016-17	2017-18	2018-19
Sub-station bays (Numbers)					
400 kV Sub-station	1	1	1	1	1
220 kV Sub-station	1	1	1	1	1
Norm (₹ lakh/bay)					
400 kV Sub-station	60.30	62.30	64.37	66.51	68.71
220 kV Sub-station	42.21	43.61	45.06	46.55	48.10
Total O&M Expenses (₹ in lakh)	52.52	105.91	109.43	113.06	116.81

Asset-17					
Particulars	2014-15 (Pro-rata 85 days)	2015-16	2016-17	2017-18	2018-19
Sub-station bays (Numbers)					
220 kV Sub-station	2	2	2	2	2
Norm (₹ lakh/bay)					
220 kV Sub-station	42.21	43.61	45.06	46.55	48.10
Total O&M Expenses (₹ in lakh)	17.35	87.22	90.12	93.10	96.20

Asset-18					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station bays (Numbers)					
400 kV Sub-station	1	1	1	1	1
Norm (₹ lakh/bay)					
400 kV Sub-station	60.30	62.30	64.37	66.51	68.71
Total O&M Expenses (₹ in lakh)	60.30	62.30	64.37	66.51	68.71



Asset-19					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station bays (Numbers)					
400 kV Sub-station	-	1	1	1	1
Norm (₹ lakh/bay)					
400 kV Sub-station	-	62.30	64.37	66.51	68.71
Total O&M Expenses (₹ in lakh)	-	62.30	64.37	66.51	68.71
Asset-20 A					
Particulars	2016-17 (Pro-rata 327 days)		2017-18	2018-19	
Sub-station bays (Numbers)					
400 kV Sub-station	4		4	4	
220 kV Sub-station	4		4	4	
Norm (₹ lakh/bay)					
400 kV Sub-station	64.37		66.51	68.71	
220 kV Sub-station	45.06		46.55	48.10	
Total O&M Expenses (₹ in lakh)	392.15		452.24	467.24	
Asset-20 B					
Particulars	2016-17 (Pro-rata 327 days)		2017-18	2018-19	
Sub-station bays (Nos.)					
220 kV Sub-station	4		4	4	
Norm (₹ lakh/bay)					
220 kV Sub-station	45.06		46.55	48.10	
Total O&M Expenses (₹ in lakh)	161.48		186.20	192.40	
Asset-21					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station bays (Numbers)					
220 kV Sub-station	2	2	2	2	2
Norm (₹ lakh/bay)					
220 kV Sub-station	42.21	43.61	45.06	46.55	48.10
Total O&M Expenses (₹ in lakh)	38.16	87.22	90.12	93.10	96.20
Asset-22					
Particulars	2015-16 (Pro-rata 142 days)		2016-17	2017-18	2018-19
Sub-station bays (Numbers)					
400 kV Sub-station	2		2	2	2
Norm (₹ lakh/bay)					
400 kV Sub-station	62.30		64.37	66.51	68.71
Total O&M Expenses (₹ in lakh)	48.34		128.74	133.02	137.42



Asset-23				
Particulars	2015-16 (Pro-rata 49 days)	2016-17	2017-18	2018-19
Sub-station bays (Numbers)				
400 kV Sub-station	1	1	1	1
Norm (₹ lakh/bay)				
400 kV Sub-station	62.30	64.37	66.51	68.71
Total O&M Expenses (₹ in lakh)	16.68	128.74	133.02	137.42

Asset-24			
Particulars	2017-18 (Pro-rata 246 days)		2018-19
Sub-station bays (Numbers)			
400 kV Sub-station	1		1
Norm (₹ lakh/bay)			
400 kV Sub-station	66.51		68.71
Total O&M Expenses (₹ in lakh)	44.83		68.71

Asset-25	
Particulars	2018-19 (Pro-rata 329 days)
Sub-station bays (Numbers)	
400 kV Sub-station	1
Norm (₹ lakh/bay)	
400 kV Sub-station	68.71
Total O&M Expenses (₹ in lakh)	61.93

Asset-26			
Particulars	2016-17 (Pro-rata 27 days)	2017-18	2018-19
Sub-station bays (Numbers)			
220 kV Sub-station	2	2	2
Norm (₹ lakh/bay)			
220 kV Sub-station	45.06	46.55	48.10
Total O&M Expenses (₹ in lakh)	6.67	93.10	96.20

Asset-27			
Particulars	2016-17 (Pro-rata 48 days)	2017-18	2018-19
Sub-station bays (Numbers)			
220 kV Sub-station	2	2	2
Norm (₹ lakh/bay)			
220 kV Sub-station	45.06	46.55	48.10
Total O&M Expenses (₹ in lakh)	11.85	93.10	96.20



Asset-28	
Particulars	2018-19 (Pro-rata 110 days)
Sub-station bays (Numbers)	
220 kV Sub-station	2
Norm (₹ lakh/bay)	
220 kV Sub-station	48.10
Total O&M Expenses (₹ in lakh)	28.99

Asset-29			
Particulars	2016-17 (Pro-rata 149 days)	2017-18	2018-19
Sub-station bays (Numbers)			
220 kV Sub-station	2	2	2
Norm (₹ lakh/bay)			
220 kV Sub-station	45.06	46.55	48.10
Total O&M Expenses (₹ in lakh)	36.79	93.10	96.20

Asset-30			
Particulars	2016-17 (Pro-rata 239 days)	2017-18	2018-19
Sub-station bays (Numbers)			
220 kV Sub-station	1	1	1
Norm (₹ lakh/bay)			
220 kV Sub-station	45.06	46.55	48.10
Total O&M Expenses (₹ in lakh)	29.51	46.55	48.10

Asset-31			
Particulars	2016-17 (Pro-rata 239 days)	2017-18	2018-19
Sub-station bays (Numbers)			
220 kV Sub-station	1	1	1
Norm (₹ lakh/bay)			
220 kV Sub-station	45.06	46.55	48.10
Total O&M Expenses (₹ in lakh)	29.51	46.55	48.10

Asset-32		
Particulars	2017-18 (Pro-rata 322 days)	2018-19
Sub-station bays (Numbers)		
220 kV Sub-station	2	2
Norm (₹ lakh/bay)		
220 kV Sub-station	46.55	48.10
Total O&M Expenses (₹ in lakh)	82.13	96.20



Asset-33		
Particulars	2017-18 (Pro-rata 185 days)	2018-19
Sub-station bays (Numbers)		
220 kV Sub-station	2	2
Norm (₹ lakh/bay)		
220 kV Sub-station	46.55	48.10
Total O&M Expenses (₹ in lakh)	47.19	96.20

Interest on Working Capital (IWC)

65. The Petitioner is entitled to claim interest on working capital as per Regulation 28(1)(c) of the 2014 Tariff Regulations as follows:

i. Working Capital for Maintenance spares

Working Capital for Maintenance spares has been worked out based on 15% of Operation and Maintenance Expenses specified in Regulation 28.

ii. Working Capital for O & M Expenses

Working Capital for O&M Expenses has been considered for one month of the allowed O&M Expenses.

iii. Working Capital for Receivables

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

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.

66. The trued-up IWC has been worked out for the assets as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and allowed as follows:



(₹ in lakh)

Asset-1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	0.91	0.94	0.98	1.01	1.04
WC for Maintenance Spares (15% of O&M)	1.64	1.70	1.76	1.81	1.87
WC for Receivables (Equivalent to 2 months of annual transmission charges)	55.11	53.82	52.42	50.92	49.48
Total Working Capital	57.67	56.46	55.15	53.74	52.39
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	7.79	7.62	7.44	7.25	7.07

(₹ in lakh)

Asset-2					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	15.58	16.09	16.63	17.18	17.75
WC for Maintenance Spares (15% of O&M)	28.04	28.97	29.93	30.92	31.95
WC for Receivables (Equivalent to 2 months of annual transmission charges)	73.84	75.37	75.21	75.09	75.05
Total Working Capital	117.46	120.43	121.77	123.19	124.75
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	15.86	16.26	16.44	16.63	16.84

(₹ in lakh)

Asset-3 to Asset-9					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	86.50	89.37	92.34	95.41	98.57
WC for Maintenance Spares (15% of O&M)	155.70	160.87	166.22	171.73	177.43
WC for Receivables (Equivalent to 2 months of annual transmission charges)	816.74	835.78	836.56	824.26	814.68
Total Working Capital	1058.95	1086.02	1095.12	1091.40	1090.67
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	142.96	146.61	147.84	147.34	147.24

(₹ in lakh)

Asset-10 to Asset-13					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	66.15	68.35	70.62	72.96	75.38
WC for Maintenance Spares (15% of O&M)	119.07	123.03	127.11	131.33	135.68
WC for Receivables	628.42	643.71	649.42	639.61	632.04



Asset-10 to Asset-13					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
(Equivalent to 2 months of annual transmission charges)					
Total Working Capital	813.63	835.08	847.14	843.90	843.10
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	109.84	112.74	114.36	113.93	113.82

(₹ in lakh)

Asset-14					
Particulars	2014-15 (Pro-rata 292 days)	2015-16	2016-17	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	21.92	22.65	23.40	24.18	24.98
WC for Maintenance Spares (15% of O&M)	39.46	40.77	42.13	43.53	44.97
WC for Receivables (Equivalent to 2 months of annual transmission charges)	172.89	183.20	184.21	184.07	183.41
Total Working Capital	234.28	246.62	249.75	251.78	253.36
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	25.30	33.29	33.72	33.99	34.20

(₹ in lakh)

Asset-15					
Particulars	2014-15 (Pro-rata 290 days)	2015-16	2016-17	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	15.58	16.09	16.63	17.18	17.75
WC for Maintenance Spares (15% of O&M)	28.04	28.97	29.93	30.92	31.95
WC for Receivables (Equivalent to 2 months of annual transmission charges)	99.64	104.62	110.23	111.65	112.45
Total Working Capital	143.26	149.68	156.80	159.75	162.16
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	15.37	20.21	21.17	21.57	21.89

(₹ in lakh)

Asset-16					
Particulars	2014-15 (Pro-rata 187 days)	2015-16	2016-17	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	8.54	8.83	9.12	9.42	9.73
WC for Maintenance Spares (15% of O&M)	15.38	15.89	16.41	16.96	17.52
WC for Receivables	72.37	75.82	79.28	79.79	79.46



Asset-16					
Particulars	2014-15 (Pro-rata 187 days)	2015-16	2016-17	2017-18	2018-19
(Equivalent to 2 months of annual transmission charges)					
Total Working Capital	96.29	100.53	104.81	106.17	106.71
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	6.66	13.57	14.15	14.33	14.41

(₹ in lakh)

Asset-17					
Particulars	2014-15 (Pro-rata 85 days)	2015-16	2016-17	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	7.04	7.27	7.51	7.76	8.02
WC for Maintenance Spares (15% of O&M)	12.66	13.08	13.52	13.97	14.43
WC for Receivables (Equivalent to 2 months of annual transmission charges)	46.19	46.53	48.89	51.84	52.26
Total Working Capital	65.89	66.89	69.92	73.56	74.71
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	1.83	9.03	9.44	9.93	10.09

(₹ in lakh)

Asset- 18					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	5.03	5.19	5.36	5.54	5.73
WC for Maintenance Spares (15% of O&M)	9.05	9.35	9.66	9.98	10.31
WC for Receivables (Equivalent to 2 months of annual transmission charges)	21.90	24.81	25.88	26.16	26.44
Total Working Capital	35.97	39.35	40.90	41.68	42.47
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	4.86	5.31	5.52	5.63	5.73

(₹ in lakh)

Asset-19				
Particulars	2015-16	2016-17	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	5.19	5.36	5.54	5.73
WC for Maintenance Spares (15% of O&M)	9.35	9.66	9.98	10.31
WC for Receivables (Equivalent to 2 months of annual	35.49	37.30	37.48	37.89



Asset-19				
Particulars	2015-16	2016-17	2017-18	2018-19
transmission charges)				
Total Working Capital	50.03	52.32	53.00	53.92
Rate of Interest (in %)	13.50	13.50	13.50	13.50
Interest of working capital	6.75	7.06	7.15	7.28

(₹ in lakh)

Asset-20 A			
Particulars	2016-17 (Pro-rata 327 days)	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	36.48	37.69	38.94
WC for Maintenance Spares (15% of O&M)	65.66	67.84	70.09
WC for Receivables (Equivalent to 2 months of annual transmission charges)	421.89	431.29	433.06
Total Working Capital	524.03	536.81	542.09
Rate of Interest (in %)	12.80	12.80	12.80
Interest of working capital	60.09	68.71	69.39

(₹ in lakh)

Asset-20 B			
Particulars	2016-17 (Pro-rata 327 days)	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	15.02	15.52	16.03
WC for Maintenance Spares (15% of O&M)	27.04	27.93	28.86
WC for Receivables (Equivalent to 2 months of annual transmission charges)	56.31	57.02	57.81
Total Working Capital	98.37	100.46	102.70
Rate of Interest (in %)	12.80	12.80	12.80
Interest of working capital	11.28	12.86	13.15

(₹ in lakh)

Asset-21					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	7.04	7.27	7.51	7.76	8.02
WC for Maintenance Spares (15% of O&M)	12.66	13.08	13.52	13.97	14.43
WC for Receivables (Equivalent to 2 months of annual transmission charges)	26.68	26.86	26.95	26.99	27.19
Total Working Capital	46.38	47.21	47.98	48.71	49.63
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	2.83	6.37	6.48	6.58	6.70



(₹ in lakh)

Asset-22				
Particulars	2015-16 (Pro-rata 142 days)	2016-17	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	10.38	10.73	11.09	11.45
WC for Maintenance Spares (15% of O&M)	18.69	19.31	19.95	20.61
WC for Receivables (Equivalent to 2 months of annual transmission charges)	37.35	37.74	37.94	38.28
Total Working Capital	66.42	67.78	68.98	70.34
Rate of Interest (in %)	13.50	13.50	13.50	13.50
Interest of working capital	3.48	9.15	9.31	9.50

(₹ in lakh)

Asset-23 A				
Particulars	2015-16 (Pro-rata 49 days)	2016-17	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	5.19	5.36	5.54	5.73
WC for Maintenance Spares (15% of O&M)	9.35	9.66	9.98	10.31
WC for Receivables (Equivalent to 2 months of annual transmission charges)	16.62	17.14	17.54	18.08
Total Working Capital	31.15	32.16	33.06	34.11
Rate of Interest (in %)	13.50	13.50	13.50	13.50
Interest of working capital	0.56	4.34	4.46	4.60

(₹ in lakh)

Asset-23 B				
Particulars	2015-16 (Pro-rata 49 days)	2016-17	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	0.00	0.00	0.00	0.00
WC for Maintenance Spares (15% of O&M)	0.00	0.00	0.00	0.00
WC for Receivables (Equivalent to 2 months of annual transmission charges)	83.48	81.82	78.89	76.06
Total Working Capital	83.48	81.82	78.89	76.06
Rate of Interest (in %)	13.50	13.50	13.50	13.50
Interest of working capital	1.51	11.05	10.65	10.27



(₹ in lakh)

Asset-24 A		
Particulars	2017-18 (Pro-rata 246 days)	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	5.54	5.73
WC for Maintenance Spares (15% of O&M)	9.98	10.31
WC for Receivables (Equivalent to 2 months of annual transmission charges)	21.16	21.39
Total Working Capital	36.68	37.42
Rate of Interest (in %)	12.60	12.60
Interest of working capital	3.12	4.71

(₹ in lakh)

Asset-24 B		
Particulars	2017-18 (Pro-rata 246 days)	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	0.00	0.00
WC for Maintenance Spares (15% of O&M)	0.00	0.00
WC for Receivables (Equivalent to 2 months of annual transmission charges)	9.90	9.61
Total Working Capital	9.90	9.61
Rate of Interest (in %)	12.60	12.60
Interest of working capital	0.84	1.21

(₹ in lakh)

Asset-25 A	
Particulars	2018-19 (Pro-rata 329 days)
WC for O&M Expenses (O&M Expenses for 1 Month)	5.73
WC for Maintenance Spares (15% of O&M)	10.31
WC for Receivables (Equivalent to 2 months of annual transmission charges)	21.30
Total Working Capital	37.34
Rate of Interest (in %)	12.20
Interest of working capital	4.11

(₹ in lakh)

Asset-25 B	
Particulars	2018-19 (Pro-rata 329 days)
WC for O&M Expenses (O&M Expenses for 1 Month)	0.00
WC for Maintenance Spares (15% of O&M)	0.00
WC for Receivables (Equivalent to 2 months of annual transmission charges)	9.57
Total Working Capital	9.57
Rate of Interest (in %)	12.20
Interest of working capital	1.05



(₹ in lakh)

Asset-26			
Particulars	2016-17 (Pro-rata 27 days)	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	7.51	7.76	8.02
WC for Maintenance Spares (15% of O&M)	13.52	13.97	14.43
WC for Receivables (Equivalent to 2 months of annual transmission charges)	26.86	27.25	27.54
Total Working Capital	47.89	48.97	49.99
Rate of Interest (in %)	12.80	12.80	12.80
Interest of working capital	0.45	6.27	6.40

(₹ in lakh)

Asset-27			
Particulars	2016-17 (Pro-rata 48 days)	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	7.51	7.76	8.02
WC for Maintenance Spares (15% of O&M)	13.52	13.97	14.43
WC for Receivables (Equivalent to 2 months of annual transmission charges)	27.12	27.51	27.81
Total Working Capital	48.15	49.24	50.25
Rate of Interest (in %)	12.80	12.80	12.80
Interest of working capital	0.81	6.30	6.43

(₹ in lakh)

Asset-28	
Particulars	2018-19 (Pro-rata 110 days)
WC for O&M Expenses (O&M Expenses for 1 Month)	8.02
WC for Maintenance Spares (15% of O&M)	14.43
WC for Receivables (Equivalent to 2 months of annual transmission charges)	28.83
Total Working Capital	51.28
Rate of Interest (in %)	12.20
Interest of working capital	1.89

(₹ in lakh)

Asset-29			
Particulars	2016-17 (Pro-rata 149 days)	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	7.51	7.76	8.02
WC for Maintenance Spares (15% of O&M)	13.52	13.97	14.43
WC for Receivables (Equivalent to 2 months of annual transmission charges)	29.72	30.45	30.97
Total Working Capital	50.75	52.18	53.41



Rate of Interest (in %)	12.80	12.80	12.80
Interest of working capital	2.65	6.68	6.84

(₹ in lakh)

Asset-30			
Particulars	2016-17 (Pro-rata 239 days)	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	3.76	3.88	4.01
WC for Maintenance Spares (15% of O&M)	6.76	6.98	7.22
WC for Receivables (Equivalent to 2 months of annual transmission charges)	15.13	15.50	15.73
Total Working Capital	25.64	26.36	26.96
Rate of Interest (in %)	12.80	12.80	12.80
Interest of working capital	2.15	3.37	3.45

(₹ in lakh)

Asset-31			
Particulars	2016-17 (Pro-rata 239 days)	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	3.76	3.88	4.01
WC for Maintenance Spares (15% of O&M)	6.76	6.98	7.22
WC for Receivables (Equivalent to 2 months of annual transmission charges)	14.58	14.96	15.21
Total Working Capital	25.09	25.82	26.43
Rate of Interest (in %)	12.80	12.80	12.80
Interest of working capital	2.10	3.31	3.38

(₹ in lakh)

Asset-32		
Particulars	2017-18 (Pro-rata 322 days)	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	7.76	8.02
WC for Maintenance Spares (15% of O&M)	13.97	14.43
WC for Receivables (Equivalent to 2 months of annual transmission charges)	28.37	28.62
Total Working Capital	50.09	51.07
Rate of Interest (in %)	12.60	12.60
Interest of working capital	5.57	6.44

(₹ in lakh)

Asset-33		
Particulars	2017-18 (Pro-rata 185 days)	2018-19
WC for O&M Expenses (O&M Expenses for 1 Month)	7.76	8.02
WC for Maintenance Spares (15% of O&M)	13.97	14.43
WC for Receivables (Equivalent to 2 months of	32.44	32.73



annual transmission charges)		
Total Working Capital	54.16	55.18
Rate of Interest (in %)	12.60	12.60
Interest of working capital	3.46	6.95

Approved Annual Fixed Charges for the 2014-19 Tariff Period

67. The trued-up annual fixed charges approved for Asset-1 to Asset-33 for the 2014-19 tariff period are as follows:

(₹ in lakh)

Asset-1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	100.49	100.65	100.80	100.80	100.80
Interest on Loan	99.48	90.64	81.69	72.51	63.34
Return on Equity	111.97	112.68	112.86	112.86	113.16
Interest on Working Capital	7.79	7.62	7.44	7.25	7.07
O&M Expenses	10.96	11.33	11.70	12.09	12.49
Total	330.68	322.92	314.49	305.51	296.87

(₹ in lakh)

Asset-2					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	76.43	79.37	79.37	79.37	79.37
Interest on Loan	78.79	74.71	67.17	59.64	52.11
Return on Equity	85.04	88.73	88.73	88.73	88.97
Interest on Working Capital	15.86	16.26	16.44	16.63	16.84
O&M Expenses	186.93	193.13	199.55	206.16	213.01
Total	443.04	452.19	451.25	450.53	450.30

(₹ in lakh)

Asset-3 to Asset-9					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1164.33	1214.36	1237.72	1240.50	1243.61
Interest on Loan	1163.43	1124.45	1041.53	925.27	819.16
Return on Equity	1391.74	1456.75	1484.14	1487.54	1495.20
Interest on Working Capital	142.96	146.61	147.84	147.34	147.24
O&M Expenses	1038.01	1072.49	1108.11	1144.89	1182.84
Total	4900.47	5014.65	5019.34	4945.54	4888.05

(₹ in lakh)

Asset-10 to Asset-13					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	871.05	909.93	936.60	939.78	940.71
Interest on Loan	886.40	857.62	805.36	712.11	632.55
Return on Equity	1109.42	1161.81	1192.77	1196.33	1200.59
Interest on Working Capital	109.84	112.74	114.36	113.93	113.82



O&M Expenses	793.79	820.17	847.40	875.52	904.55
Total	3770.50	3862.26	3896.50	3837.66	3792.22

(₹ in lakh)

Asset-14					
Particulars	2014-15 (Pro-rata 292 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	164.51	226.76	232.42	236.64	238.73
Interest on Loan	210.51	268.36	252.87	233.35	214.21
Return on Equity	219.11	298.94	305.44	310.27	313.51
Interest on Working Capital	25.30	33.29	33.72	33.99	34.20
O&M Expenses	210.47	271.82	280.85	290.18	299.79
Total	829.89	1099.18	1105.29	1104.44	1100.44

(₹ in lakh)

Asset-15					
Particulars	2014-15 (Pro-rata 290 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	93.42	126.18	136.95	142.06	145.39
Interest on Loan	112.48	143.71	145.31	135.50	125.43
Return on Equity	105.22	144.48	158.43	164.59	169.01
Interest on Working Capital	15.37	20.21	21.17	21.57	21.89
O&M Expenses	148.52	193.13	199.55	206.16	213.01
Total	475.01	627.71	661.41	669.88	674.73

(₹ in lakh)

Asset-16					
Particulars	2014-15 (Pro-rata 187 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	49.31	102.79	110.40	113.40	114.63
Interest on Loan	58.34	115.57	115.34	108.05	99.19
Return on Equity	55.63	117.07	126.33	129.89	131.71
Interest on Working Capital	6.66	13.57	14.15	14.33	14.41
O&M Expenses	52.52	105.91	109.43	113.06	116.81
Total	222.46	454.92	475.66	478.73	476.75

(₹ in lakh)

Asset-17					
Particulars	2014-15 (Pro-rata 85 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	11.83	58.21	63.31	69.70	71.37
Interest on Loan	12.76	59.59	59.61	60.25	55.81
Return on Equity	13.18	65.17	70.88	78.03	80.11
Interest on Working Capital	1.83	9.03	9.44	9.93	10.09



O&M Expenses	17.35	87.22	90.12	93.10	96.20
Total	56.95	279.21	293.36	311.01	313.57

(₹ in lakh)

Asset- 18					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	20.77	25.96	27.96	28.66	29.25
Interest on Loan	22.33	26.22	26.12	24.08	22.13
Return on Equity	23.14	29.07	31.30	32.09	32.83
Interest on Working Capital	4.86	5.31	5.52	5.63	5.73
O&M Expenses	60.30	62.30	64.37	66.51	68.71
Total	131.40	148.87	155.28	156.97	158.65

(₹ in lakh)

Asset-19				
Particulars	2015-16	2016-17	2017-18	2018-19
Depreciation	44.61	48.56	50.48	51.97
Interest on Loan	48.50	48.20	42.87	39.62
Return on Equity	50.78	55.64	57.86	59.74
Interest on Working Capital	6.75	7.06	7.15	7.28
O&M Expenses	62.30	64.37	66.51	68.71
Total	212.95	223.83	224.87	227.32

(₹ in lakh)

Asset-20 A			
Particulars	2016-17 (Pro-rata 327 days)	2017-18	2018-19
Depreciation	413.31	486.33	497.88
Interest on Loan	665.51	725.66	692.78
Return on Equity	736.74	854.80	871.10
Interest on Working Capital	60.09	68.71	69.39
O&M Expenses	392.15	452.24	467.24
Total	2267.81	2587.74	2598.39

(₹ in lakh)

Asset-20 B			
Particulars	2016-17 (Pro-rata 327 days)	2017-18	2018-19
Depreciation	40.26	45.54	46.23
Interest on Loan	44.92	46.87	43.53
Return on Equity	44.76	50.63	51.53
Interest on Working Capital	11.28	12.86	13.15
O&M Expenses	161.48	186.20	192.40
Total	302.69	342.10	346.83



(₹ in lakh)

Asset-21					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	9.27	20.51	20.51	20.51	20.51
Interest on Loan	11.77	24.08	21.65	18.78	16.69
Return on Equity	10.33	22.96	22.96	22.96	23.02
Interest on Working Capital	2.83	6.37	6.48	6.58	6.70
O&M Expenses	38.16	87.22	90.12	93.10	96.20
Total	72.36	161.14	161.71	161.92	163.11

(₹ in lakh)

Asset-22				
Particulars	2015-16 (Pro-rata 142 days)	2016-17	2017-18	2018-19
Depreciation	10.52	27.12	27.12	27.12
Interest on Loan	12.82	31.09	27.82	25.18
Return on Equity	11.78	30.37	30.37	30.45
Interest on Working Capital	3.48	9.15	9.31	9.50
O&M Expenses	48.34	128.74	133.02	137.42
Total	86.94	226.47	227.64	229.67

(₹ in lakh)

Asset-23 A				
Particulars	2015-16 (Pro-rata 49 days)	2016-17	2017-18	2018-19
Depreciation	1.34	10.54	11.06	11.67
Interest on Loan	1.60	11.79	10.82	10.36
Return on Equity	1.50	11.80	12.38	13.10
Interest on Working Capital	0.56	4.34	4.46	4.60
O&M Expenses	16.68	128.74	133.02	137.42
Total	13.35	102.85	105.23	108.46

(₹ in lakh)

Asset-23 B				
Particulars	2015-16 (Pro-rata 49 days)	2016-17	2017-18	2018-19
Depreciation	24.62	183.90	183.90	183.90
Interest on Loan	13.36	90.06	72.90	55.74
Return on Equity	27.57	205.90	205.90	206.45
Interest on Working Capital	1.51	11.05	10.65	10.27
O&M Expenses	0.00	0.00	0.00	0.00
Total	67.05	490.91	473.36	456.37



(₹ in lakh)

Asset-24 A		
Particulars	2017-18 (Pro-rata 246 days)	2018-19
Depreciation	9.83	14.63
Interest on Loan	14.39	20.26
Return on Equity	13.42	20.01
Interest on Working Capital	3.12	4.71
O&M Expenses	44.83	68.71
Total	85.58	128.33

(₹ in lakh)

Asset-24 B		
Particulars	2017-18 (Pro-rata 246 days)	2018-19
Depreciation	15.50	23.00
Interest on Loan	6.35	7.62
Return on Equity	17.35	25.82
Interest on Working Capital	0.84	1.21
O&M Expenses	0.00	0.00
Total	40.04	57.64

(₹ in lakh)

Asset-25 A	
Particulars	2018-19 (Pro-rata 329 days)
Depreciation	13.36
Interest on Loan	17.59
Return on Equity	18.23
Interest on Working Capital	4.11
O&M Expenses	61.93
Total	115.22

(₹ in lakh)

Asset-25 B	
Particulars	2018-19 (Pro-rata 329 days)
Depreciation	20.73
Interest on Loan	6.72
Return on Equity	23.27
Interest on Working Capital	1.05
O&M Expenses	0.00
Total	51.77



(₹ in lakh)

Asset-26			
Particulars	2016-17 (Pro-rata 27 days)	2017-18	2018-19
Depreciation	1.39	18.85	18.91
Interest on Loan	1.75	22.67	20.99
Return on Equity	1.66	22.59	22.74
Interest on Working Capital	0.45	6.27	6.40
O&M Expenses	6.67	93.10	96.20
Total	11.92	163.48	165.24

(₹ in lakh)

Asset-27			
Particulars	2016-17 (Pro-rata 48 days)	2017-18	2018-19
Depreciation	2.50	19.07	19.14
Interest on Loan	3.24	23.75	22.06
Return on Equity	2.99	22.86	23.01
Interest on Working Capital	0.81	6.30	6.43
O&M Expenses	11.85	93.10	96.20
Total	21.40	165.09	166.84

(₹ in lakh)

Asset-28	
Particulars	2018-19 (Pro-rata 110 days)
Depreciation	6.09
Interest on Loan	7.97
Return on Equity	7.19
Interest on Working Capital	1.89
O&M Expenses	28.99
Total	52.13

(₹ in lakh)

Asset-29			
Particulars	2016-17 (Pro-rata 149 days)	2017-18	2018-19
Depreciation	9.58	24.30	24.88
Interest on Loan	12.17	29.20	27.64
Return on Equity	11.61	29.46	30.25
Interest on Working Capital	2.65	6.68	6.84
O&M Expenses	36.79	93.10	96.20
Total	72.80	182.73	185.81



(₹ in lakh)

Asset-30			
Particulars	2016-17 (Pro-rata 239 days)	2017-18	2018-19
Depreciation	7.89	12.53	12.83
Interest on Loan	10.33	15.33	14.41
Return on Equity	9.57	15.21	15.61
Interest on Working Capital	2.15	3.37	3.45
O&M Expenses	29.51	46.55	48.10
Total	59.44	93.00	94.39

(₹ in lakh)

Asset-31			
Particulars	2016-17 (Pro-rata 239 days)	2017-18	2018-19
Depreciation	7.26	11.58	11.87
Interest on Loan	9.59	14.28	13.44
Return on Equity	8.81	14.06	14.45
Interest on Working Capital	2.10	3.31	3.38
O&M Expenses	29.51	46.55	48.10
Total	57.28	89.77	91.24

(₹ in lakh)

Asset-32		
Particulars	2017-18 (Pro-rata 322 days)	2018-19
Depreciation	19.07	21.65
Interest on Loan	22.24	23.38
Return on Equity	21.16	24.09
Interest on Working Capital	5.57	6.44
O&M Expenses	82.13	96.20
Total	150.17	171.75

(₹ in lakh)

Asset-33		
Particulars	2017-18 (Pro-rata 185 days)	2018-19
Depreciation	14.95	29.59
Interest on Loan	16.44	30.64
Return on Equity	16.62	33.00
Interest on Working Capital	3.46	6.95
O&M Expenses	47.19	96.20
Total	98.66	196.39

DETERMINATION OF ANNUAL FIXED CHARGES FOR THE 2019-24 TARIFF PERIOD



68. The Petitioner has submitted tariff forms in respect of the Combined Asset consisting of Asset-1 to Asset-27, Asset-31 and Asset-32, which have achieved COD prior to 1.4.2019. 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 the 2019-24 tariff period. Transmission tariff for Asset-28, Asset-29, Asset-30 and Asset-33 for the 2019-24 tariff period has been worked out separately. The downstream system in case of Asset 28, Asset 29, Asset 30 and Asset 33 are yet to be put into commercial operation and therefore the transmission charges are to be borne by the entity/entities responsible for execution of the downstream system bilaterally. Accordingly, the tariff for these assets are approved separately and are not combined with other assets.

69. The transmission tariff claimed by the Petitioner for Combined Asset (Asset-1 to Asset-27, Asset-31 and Asset-32), Asset-28, Asset-29, Asset-30 and Asset-33 for the 2019-24 tariff period is as follows:

(₹ in lakh)

Combined Asset (Asset-1 to Asset-27, Asset-31 and Asset-32)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	4021.98	4055.47	4079.43	4079.43	4079.43
Interest on Loan	2822.07	2549.06	2259.28	2078.69	1959.45
Return on Equity	4871.62	4949.04	5008.34	5008.34	5008.34
Interest on working Capital	347.76	352.07	355.18	358.99	363.01
O&M Expenses	3937.17	4076.95	4219.60	4369.34	4517.82
Total	16000.60	15982.59	15921.83	15894.79	15928.05

(₹ in lakh)

Asset-28					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	21.10	24.91	27.62	27.62	27.62
Interest on Loan	27.03	32.37	35.19	32.51	29.84
Return on Equity	24.31	30.73	35.30	35.30	35.30
Interest on working Capital	3.06	3.36	3.59	3.62	3.65
O&M Expenses	45.11	46.69	48.33	50.01	51.77
Total	120.61	138.06	150.03	149.06	148.18



(₹ in lakh)

Asset-29					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	25.61	26.22	26.22	26.22	26.22
Interest on Loan	26.67	25.52	23.27	21.00	18.68
Return on Equity	29.91	30.93	30.93	30.93	30.93
Interest on working Capital	3.21	3.29	3.33	3.37	3.40
O&M Expenses	45.23	46.81	48.45	50.13	51.89
Total	130.63	132.77	132.20	131.65	131.12

(₹ in lakh)

Asset-30					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	13.13	13.43	13.43	13.43	13.43
Interest on Loan	13.75	13.05	11.81	10.57	9.27
Return on Equity	15.34	15.86	15.86	15.86	15.86
Interest on Working Capital	1.62	1.66	1.68	1.69	1.71
O&M Expenses	22.62	23.41	24.23	25.07	25.95
Total	66.46	67.41	67.01	66.62	66.22

(₹ in lakh)

Asset-33					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	29.34	29.34	29.34	29.34	29.34
Interest on Loan	27.90	25.41	23.06	20.71	18.17
Return on Equity	31.10	31.10	31.10	31.10	31.10
Interest on Working Capital	3.31	3.34	3.38	3.42	3.45
O&M Expenses	45.39	46.97	48.61	50.29	52.05
Total	137.04	136.16	135.49	134.86	134.11

70. The details of the Interest on Working Capital claimed by the Petitioner in respect of Combined Asset, Asset-28, Asset-29, Asset-30 and Asset-33 are as follows:

(₹ in lakh)

Combined Asset (Asset-1 to Asset-27, Asset-31 and Asset-32)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses	328.10	339.75	351.63	364.11	376.49
Maintenance Spares	590.58	611.54	632.94	655.40	677.67
Receivables	1,967.29	1,970.46	1,962.97	1,959.63	1,958.37
Total	2885.97	2921.75	2947.54	2979.14	3012.53
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	347.76	352.07	355.18	358.99	363.01



(₹ in lakh)

Asset-28					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses	3.76	3.89	4.03	4.17	4.31
Maintenance Spares	6.77	7.00	7.25	7.50	7.77
Receivables	14.83	17.02	18.50	18.38	18.22
Total	25.36	27.91	29.78	30.05	30.30
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	3.06	3.36	3.59	3.62	3.65

(₹ in lakh)

Asset-29					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses	3.77	3.90	4.04	4.18	4.32
Maintenance Spares	6.78	7.02	7.27	7.52	7.78
Receivables	16.06	16.37	16.30	16.23	16.12
Total	26.61	27.29	27.61	27.93	28.22
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	3.21	3.29	3.33	3.37	3.40

(₹ in lakh)

Asset-30					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses	1.89	1.95	2.02	2.09	2.16
Maintenance Spares	3.39	3.51	3.63	3.76	3.89
Receivables	8.17	8.31	8.26	8.21	8.14
Total	13.45	13.77	13.91	14.06	14.19
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	1.62	1.66	1.68	1.69	1.71

(₹ in lakh)

Asset-33					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses	3.78	3.91	4.05	4.19	4.34
Maintenance Spares	6.81	7.05	7.29	7.54	7.81
Receivables	16.85	16.79	16.70	16.63	16.49
Total	27.44	27.75	28.04	28.36	28.64
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	3.31	3.34	3.38	3.42	3.45

Effective Date of Commercial Operation (E-COD)

71. The Petitioner has claimed E-COD of the Combined Asset-1 to 27 and Asset-31 to 32 as 6.12.2013. Based on the trued-up admitted capital cost and actual COD of all the assets, E-COD of the said assets has been worked out as follows:

Assets	Actual COD	Admitted Capital Cost as on 31.3.2019	Weight (in %)	Number of days	Weighted
Asset-1	1.4.2012	1909.11	2.23	2227	49.75
Asset-2	1.4.2012	1501.01	1.76	2227	39.11
Asset-3 to Asset-9	1.8.2012	25260.02	29.56	2105	622.19
Asset-4 to Asset-13	1.8.2012	20255.48	23.70	2105	498.92
Asset-14	13.6.2014	5289.20	6.19	1424	88.13
Asset-15	15.6.2014	2861.62	3.35	1422	47.62
Asset-16	26.9.2014	2221.99	2.60	1319	34.29
Asset-17	16.1.2015	1351.62	1.58	1207	19.09
Asset-18	1.4.2014	562.24	0.66	1497	9.85
Asset-19	1.4.2015	1018.51	1.19	1132	13.49
Asset-20 A	9.5.2016	14768.79	17.28	728	125.81
Asset-20 B	9.5.2016	871.14	1.02	728	7.42
Asset-21	18.10.2014	388.35	0.45	1297	5.89
Asset-22	11.11.2015	513.68	0.60	908	5.46
Asset-23 A	12.2.2016	232.77	0.27	815	2.22
Asset-23 B	12.2.2016	3483.04	4.08	815	33.22
Asset-24 A	29.7.2017	337.64	0.40	282	1.11
Asset-24 B	29.7.2017	435.55	0.51	282	1.44
Asset-25 A	7.5.2018	341.21	0.40	0	0.00
Asset-25 B	7.5.2018	435.55	0.51	0	0.00
Asset-26	5.3.2017	383.57	0.45	428	1.92
Asset-27	12.2.2017	388.16	0.45	449	2.04
Asset-31	5.8.2016	243.79	0.29	640	1.83
Asset-32	14.5.2017	406.41	0.48	358	1.70
Total		85460.45	100.00		1612.50
Effective COD					06-12-2013

72. E-COD is used to determine the lapsed life of the Combined Asset (Asset-1 to Asset-27, Asset-31 and Asset-32) 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). However, tariff for the 2019-24 tariff period in respect of the Asset-28, Asset-29, Asset-30 and Asset-33 have been worked out separately. Hence, E-COD, for the Project as a whole, will be worked out



and considered in the next tariff period while determining tariff for the combined assets for the whole project.

Weighted Average Life (WAL)

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

74. 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 Weighted Average Life (WAL) has been used as the useful life of the Combined Assets.

75. WAL has been determined for the Combined Asset (Assets-1 to Asset-27, Asset-31 and Asset-32) 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 (Asset-1 to Asset-27, Asset-31 and Asset-32) has been worked out as 28 years and is demonstrated as follows:

Admitted Capital Cost as on 31.3.2019				
Particulars	Combined Asset Cost (₹ in lakh)	Life as per the 2019 Tariff Regulations (Years)	Weighted Cost (3) = [(1)x(2)]	Weighted Average Life of Asset (in years) (4) = [(3)/(1)]
Building	4749.69	25.00	118742.26	
Transmission Line	23320.72	35.00	816225.12	
Sub Station	47614.64	25.00	1190365.90	
PLCC	694.82	15.00	10422.23	
Leasehold Land	0.00	25.00	0.00	
IT Equipment and software	179.33	6.67	1195.53	
Total	76559.19		2136951.05	



76. As transmission tariff for the 2019-24 tariff period in respect of the Asset-28, Asset-29, Asset-30 and Asset-33 has been worked out separately, Weighted Average Life (WAL), for the Project as a whole, will be worked out and considered in the next tariff period while determining tariff for the combined assets for the whole project.

Capital Cost

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

“(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 capitalisation 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 utilisation 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 capitalisation and de-capitalisation for the respective year of tariff as determined in accordance with these regulations;
- (c) Capital expenditure on account of ash disposal and utilisation including handling and transportation facility;
- (d) Capital expenditure on account of ash disposal and utilisation including handling and transportation facility;
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to 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 JyotiYojana (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 decapitalised only after its redeployment;

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

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 for the transmission assets is combined together and it is as follows:

(₹ in lakh)

Asset	Combined Asset (Asset-1 to Asset-27, Asset-31 and Asset-32)	Asset-28	Asset-29	Asset-30	Asset-33	Capital Cost for Combined Asset as on 31.3.2019
Land	8901.26	0.00	0.00	0.00	0.00	8901.26
Building	4749.69	56.40	112.20	58.52	0.00	4976.81
Transmission Line	23320.72	0.00	0.00	0.00	0.00	23320.72
Sub Station	47614.64	341.76	387.43	199.22	538.84	49081.88
PLCC	694.82	4.61	10.69	5.58	18.78	734.48
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00
IT Equipment and software	179.33	0.00	0.00	0.00	0.00	179.33
Total	85460.45	402.77	510.32	263.32	557.62	87194.48

Additional Capital Expenditure (ACE)

79. Regulation 24 of the 2019 Tariff Regulations provides as follows:

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

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

(b) Works deferred for execution;

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

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

(e) Change in law or compliance of any existing law; and

(f) Force Majeure events:

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

(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.”

80. Regulation 25 of the 2019 Tariff Regulations provides as follows:



“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 capitalisation 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.”*

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

Assets	Projected Actual ACE for		Total
	2019-20	2020-21	
Asset-1	0.00	0.00	0.00
Asset-2	0.00	0.00	0.00
Asset-3	1.00	61.00	62.00
Asset-4	1.00	61.00	62.00
Asset-5	0.00	0.00	0.00
Asset-6	1.00	70.00	71.00
Asset-7	0.00	0.00	0.00
Asset-8	0.00	0.00	0.00
Asset-9	1.00	70.00	71.00
Asset-10	1.00	98.00	99.00
Asset-11	0.00	0.00	0.00
Asset-12	0.00	0.00	0.00
Asset-13	0.00	0.00	0.00
Asset-14	0.00	761.25	761.25



Asset-15	0.00	86.00	86.00
Asset-16	0.00	0.00	0.00
Asset-17	0.00	0.00	0.00
Asset-18	0.00	0.00	0.00
Asse-19	0.00	45.93	45.93
Asset-20 A	308.50	0.00	308.50
Asset-20 B	36.50	0.00	36.50
Asset-21	0.00	0.00	0.00
Asset-22	20.00	0.00	20.00
Asset-23 A	71.98	0.00	71.98
Asset-23 B	0.00	0.00	0.00
Asset-24 A	25.94	259.06	285.00
Asset-24 A	0.00	0.00	0.00
Asset-25 A	25.94	259.06	285.00
Asset-25 B	0.00	0.00	0.00
Asset-26	65.82	166.68	232.00
Asset-27	65.82	166.18	232.00
Asset-28	65.82	162.18	228.00
Asset-29	36.31	0.00	36.31
Asset-30	18.15	0.00	18.15
Asset-31	18.15	0.00	18.15
Asset-32	0.00	0.00	0.00
Asset-33	0.00	0.00	0.00
Total	763.93	2266.84	3030.77

82. The Petitioner has submitted reasons for additional capital expenditure beyond cut off date is on account of work deferred for execution for colony construction. The construction of colony at Sohawal and Shahjahanpur Sub-station was not constructed at these locations previously 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. However, considering the challenges faced in maintenance through MSH, it was felt appropriate to follow the earlier concept of sub-station maintenance by placing maintenance staff at these sub-stations and that for operation purpose, to place some operation staff in sub-station so that any contingency can be met immediately to avert any major breakdown. Accordingly, residential quarters for Operation & Maintenance staff at Sohawal and Shahjahanpur Sub-station are being constructed under NRTSS scheme in which colony were originally provisioned in DPR. Accordingly, the Petitioner has prayed to to



allow the ACE on account of colony construction as the same is required for efficient operation of the Grid.

83. The Commission observes that the claim of the Petitioner for construction of colony in Sohawal and Saharanpur sub-stations was related to 14 assets, namely, Asset-5, Asset-7, Asset-8, Asset-14, Asset-15, Asset-16, Asset-24, Asset-25, Asset-26, Asset-27, Asset-28, Asset-29, Asset-30 and Asset-31. Out of these assets, the Petitioner has claimed an expense of ₹1263 lakh incurred on building and civil works in case of Asset-24, Asset-25, Asset-26, Asset-27 and Asset-28 for construction works of colony in Sohawal and Saharanpur sub-stations. It is also observed that the Petitioner's claim of ₹670.58 lakh is within the cut-off date and ₹592.42 lakh is beyond the cut-off date. The details of the assets with the cost beyond the cut-off date is as follows:

Assets	Particulars	Actual COD	Cut-off date	Expenditure upto cut-off date (₹ in lakh)	Expenditure beyond cut-off date (₹ in lakh)
Asset-24	1x63 MVAR, 400 kV Bus Reactor-I at 400/220 kV Sohawal Sub-station under NRTSS	29.7.2017	31.3.2020	25.94	259.06
Asset-25	1x63 MVAR, 400 kV Bus Reactor-II at 400/220 kV Sohawal Sub-station under NRTSS	7.5.2018	31.3.2021	259.06	-
Asset-26	Two 220 kV bays of 220 kV (PG) - Sohawal(UP) transmission line at 400/220 kV Sohawal(PG) Sub-station	5.3.2017	31.3.2020	65.82	166.68
Asset-27	Two 220 kV bays No. 208 & 209 (Barabanki-I & II of UPPTCL) at 400/220 kV Sohawal(PG) Sub-station	12.2.2017	31.3.2020	65.82	166.68
Asset-28	Two 220 kV Line Bays of Sohawal (PG)-Tanda (UP) transmission line at 400/220 kV Sohawal (PG) Sub-station	12.12.2018	31.3.2021	228.00	-
	Total			670.58	592.42

84. The construction work at these sub-stations is delayed 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 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-stations so that any contingency can be met immediately to avert any major breakdown. The same being the decision of the Petitioner, the Commission in the present petition is not inclined to allow the expenditure beyond the cut-off date and has restricted the same upto cut-off date. However, the Petitioner is granted liberty to raise the issue at the time of truing-up for the Commission to take a view in terms of applicable regulations.

85. Subject to true-up, the ACE in respect of the Combined Asset (Asset-1 to Asset-27, Asset-31 and Asset-32) and Asset-28, Asset-29, Asset-30 and Asset-33 considered are as follows:

(₹ in lakh)		
Particulars	Regulation	ACE allowed (2019-24)
Combined Asset (Asset-1 to Asset-27, Asset-31 and Asset-32)	Regulation 25(1) (d) of the 2019 Tariff Regulations	914.83
Asset-28		228.00
Asset-29		36.31
Asset-30		0.00
Asset-33		0.00

Debt-Equity Ratio

86. 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 utilisation 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.”

87. The debt-equity ratio for the 2019-24 period is allowed as per Regulation 18(3) of the 2019 Tariff Regulations. The details of the debt-equity ratio considered for the purpose of tariff for the 2019-24 tariff period is as follows:



Funding Combined Asset (Asset-1 to Asset-27, Asset-31 and Asset-32)	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	59822.49	70.00	60462.88	70.00
Equity	25637.96	30.00	25912.41	30.00
Total	85460.46	100.00	86375.29	100.00

Funding Asset-28	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	281.94	70.00	441.54	70.00
Equity	120.83	30.00	189.23	30.00
Total	402.77	100.00	630.77	100.00

Funding Asset-29	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	357.23	70.00	382.65	70.00
Equity	153.09	30.00	163.98	30.00
Total	510.32	100.00	546.63	100.00

Funding Asset-30	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	184.33	70.00	184.33	70.00
Equity	78.99	30.00	78.99	30.00
Total	263.31	100.00	263.31	100.00

Funding Asset-33	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	390.34	70.00	390.34	70.00
Equity	167.28	30.00	167.28	30.00
Total	557.62	100.00	557.62	100.00

Depreciation

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

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

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the



generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

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

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

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

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

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

(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

*(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-I** to these regulations for the assets of the generating station and transmission system:*

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

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

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

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



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

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

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

89. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019 and weighted average rate of depreciation (WAROD). The WAROD at relevant Annexure has been worked out after taking into account the depreciation rates as specified in the 2019 Tariff Regulations. The depreciation allowed for the transmission assets is as follows:

(₹ in lakh)

Combined Asset(Asset-1 to Asset-27, Asset-31 and Asset-32)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block (a)	85460.45	85643.97	86375.28	86375.28	86375.28
Addition during the year 2019-24 due to projected Additional Capitalisation (b)	183.52	731.31	0.00	0.00	0.00
Closing Gross Block (c)=(a+b)	85643.97	86375.28	86375.28	86375.28	86375.28
Average Gross Block (d)=[(a/c)/2]	85552.21	86009.62	86375.28	86375.28	86375.28
Weighted average rate of Depreciation (WAROD)(in %) (e)	4.65	4.63	4.62	4.62	4.62
Balance useful life at the beginning of the year (f)	23	22	21	20	19
Aggregated Depreciable Value (g)	69003.79	69319.53	69552.68	69552.68	69552.68
Combined Depreciation during the year (h)=(d*e)	3977.97	3989.69	3998.34	3998.34	3998.34
Aggregate Cumulative Depreciation at the end of the year (i)	23767.65	27757.34	31755.68	35754.02	39752.37



(₹ in lakh)

Asset-28					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block (a)	402.77	468.59	630.77	630.77	630.77
Addition during the year 2019-24 due to projected Additional Capitalisation (b)	65.82	162.18	0.00	0.00	0.00
Closing Gross Block (c)=(a+b)	468.59	630.77	630.77	630.77	630.77
Average Gross Block (d)=[(a/c)/2]	435.68	549.68	630.77	630.77	630.77
Weighted average rate of Depreciation (WAROD)(in %) (e)	4.89	4.57	4.41	4.41	4.41
Balance useful life at the beginning of the year (f)	0.00	1.00	2.00	3.00	4.00
Aggregated Depreciable Value (g)	386.02	467.30	515.15	487.32	459.48
Combined Depreciation during the year (h)=(d*e)	21.32	25.13	27.84	27.84	27.84
Aggregate Cumulative Depreciation at the end of the year (i)	27.41	52.54	80.38	108.21	136.05
Remaining Aggregate Depreciable Value at the end of the year (j)=(g-i)	364.70	442.17	487.32	459.48	431.64

(₹ in lakh)

Asset-29					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block (a)	510.32	546.63	546.63	546.63	546.63
Addition during the year 2019-24 due to projected Additional Capitalisation (b)	36.31	0.00	0.00	0.00	0.00
Closing Gross Block (c)=(a+b)	546.63	546.63	546.63	546.63	546.63
Average Gross Block (d)=[(a/c)/2]	528.48	546.63	546.63	546.63	546.63
Weighted average rate of Depreciation (WAROD)(in %) (e)	4.89%	4.90	4.90	4.90	4.90
Balance useful life at the beginning of the year (f)	2.00	3.00	4.00	5.00	6.00
Aggregated Depreciable Value (g)	475.63	491.97	491.97	491.97	491.97
Combined Depreciation during the year (h)=(d*e)	25.84	26.80	26.80	26.80	26.80
Aggregate Cumulative Depreciation at the end of the year (i)	84.59	111.39	138.19	164.99	191.78
Remaining Aggregate Depreciable Value at the end of the year (j)=(g-i)	391.03	380.58	353.78	326.98	300.18

(₹ in lakh)

Asset-30					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block (a)	263.31	263.31	263.31	263.31	263.31
Addition during the year 2019-24 due to projected Additional Capitalisation (b)	0.00	0.00	0.00	0.00	0.00
Closing Gross Block (c)=(a+b)	263.31	263.31	263.31	263.31	263.31
Average Gross Block (d)=[(a/c)/2]	263.31	263.31	263.31	263.31	263.31



Asset-30					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Weighted average rate of Depreciation (WAROD)(in %) (e)	4.87	4.87	4.87	4.87	4.87
Balance useful life at the beginning of the year (f)	2.00	3.00	4.00	5.00	6.00
Aggregated Depreciable Value (g)	236.98	236.98	236.98	236.98	236.98
Combined Depreciation during the year (h)=(d*e)	12.83	12.83	12.83	12.83	12.83
Aggregate Cumulative Depreciation at the end of the year (i)	46.07	58.90	71.73	84.55	97.38
Remaining Aggregate Depreciable Value at the end of the year (j)=(g-i)	190.91	178.08	165.26	152.43	139.60

(₹ in lakh)

Asset-33					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	557.62	557.62	557.62	557.62	557.62
Addition during the year 2019-24 due to projected Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	557.62	557.62	557.62	557.62	557.62
Average Gross Block	557.62	557.62	557.62	557.62	557.62
Weighted average rate of Depreciation (WAROD)(in %)	5.32	5.32	5.32	5.32	5.32
Balance useful life at the beginning of the year	1.00	2.00	3.00	4.00	5.00
Aggregated Depreciable Value	501.86	501.86	501.86	501.86	501.86
Combined Depreciation during the year	29.64	29.64	29.64	29.64	29.64
Aggregate Cumulative Depreciation at the end of the year	74.18	103.82	133.46	163.10	192.74
Remaining Aggregate Depreciable Value at the end of the year	427.68	398.04	368.40	338.76	309.12

Interest on Loan (“IoL”)

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

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

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

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

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

(₹ in lakh)					
Combined Asset(Asset-1 to Asset-27, Asset-31 and Asset-32)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan (a)	59822.49	59950.96	60462.88	60462.88	60462.88
Cumulative Repayments up to Previous Year (b)	19789.68	23767.65	27757.34	31755.68	35754.02
Net Loan-Opening (c)=(a-b)	40032.82	36183.31	32705.54	28707.19	24708.85
Addition due to ACE (d)	128.46	511.92	0.00	0.00	0.00
Repayment during the year (e)	3977.97	3989.69	3998.34	3998.34	3998.34
Net Loan-Closing (f)=(c+d-e)	36183.31	32705.54	28707.19	24708.85	20710.51
Average Loan (g)=[(c+f)/2]	38108.06	34444.42	30706.36	26708.02	22709.68



Weighted Average Rate of Interest on Loan (in %) (h)	7.677	7.567	7.443	7.911	8.828
Interest on Loan (i)=(g*h)	2925.37	2606.48	2285.44	2112.92	2004.82

(₹ in lakh)

Asset-28					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan (a)	281.94	328.01	441.54	441.54	441.54
Cumulative Repayments up to Previous Year (b)	6.09	27.41	52.54	80.38	108.21
Net Loan-Opening (c)=(a-b)	275.84	300.60	389.00	361.17	333.33
Addition due to ACE (d)	46.07	113.53	0.00	0.00	0.00
Repayment during the year (e)	21.32	25.13	27.84	27.84	27.84
Net Loan-Closing (f)=(c+d-e)	300.60	389.00	361.17	333.33	305.49
Average Loan (g)=[(c+f)/2]	288.22	344.80	375.08	347.25	319.41
Weighted Average Rate of Interest on Loan (in %) (h)	9.472	9.458	9.442	9.422	9.399
Interest on Loan (i)=(g*h)	27.30	32.61	35.41	32.72	30.02

(₹ in lakh)

Asset-29					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan (a)	357.23	382.65	382.65	382.65	382.65
Cumulative Repayments up to Previous Year (b)	58.75	84.59	111.39	138.19	164.99
Net Loan-Opening (c)=(a-b)	298.48	298.06	271.26	244.46	217.67
Addition due to ACE (d)	25.42	0.00	0.00	0.00	0.00
Repayment during the year (e)	25.84	26.80	26.80	26.80	26.80
Net Loan-Closing (f)=(c+d-e)	298.06	271.26	244.46	217.67	190.87
Average Loan (g)=[(c+f)/2]	298.27	284.66	257.86	231.07	204.27
Weighted Average Rate of Interest on Loan (in %) (h)	8.897	8.907	8.937	8.969	8.984
Interest on Loan (i)=(g*h)	26.54	25.35	23.05	20.72	18.35

(₹ in lakh)

Asset-30					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan (a)	184.33	184.33	184.33	184.33	184.33
Cumulative Repayments up to Previous Year (b)	33.25	46.07	58.90	71.73	84.55
Net Loan-Opening (c)=(a-b)	151.08	138.26	125.43	112.60	99.78
Addition due to ACE (d)	0.00	0.00	0.00	0.00	0.00
Repayment during the year (e)	12.83	12.83	12.83	12.83	12.83
Net Loan-Closing (f)=(c+d-e)	138.26	125.43	112.60	99.78	86.95
Average Loan (g)=[(c+f)/2]	144.67	131.84	119.02	106.19	93.36
Weighted Average Rate of Interest on Loan (in %) (h)	9.112	9.069	9.052	9.030	8.947
Interest on Loan (i)=(g*h)	13.18	11.96	10.77	9.59	8.35



(₹ in lakh)

Asset-33					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan (a)	390.34	390.34	390.34	390.34	390.34
Cumulative Repayments up to Previous Year (b)	44.54	74.18	103.82	133.46	163.10
Net Loan-Opening (c)=(a-b)	345.80	316.16	286.52	256.88	227.24
Addition due to ACE (d)	0.00	0.00	0.00	0.00	0.00
Repayment during the year (e)	29.64	29.64	29.64	29.64	29.64
Net Loan-Closing (f)=(c+d-e)	316.16	286.52	256.88	227.24	197.60
Average Loan (g)=[(c+f)/2]	330.98	301.34	271.70	242.06	212.42
Weighted Average Rate of Interest on Loan (in %) (h)	8.517	8.520	8.576	8.644	8.644
Interest on Loan (i)=(g*h)	28.19	25.67	23.30	20.92	18.36

Return on Equity (RoE)

92. Regulations 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 celling 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;

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
(d)= 24%) 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. Any under-recovery or over-recovery of grossed up rate on return on equity after trueing up, shall be recovered or refunded to beneficiaries or the long-term customers, as the case may be, on year to year basis.”

93. BRPL has submitted that as per Regulation 31(3) of the 2019 Tariff Regulations, the Petitioner has a statutory duty to undertake the true up of the grossed-up rate of RoE at the end of every financial year based on actual tax paid. In response, the Petitioner has submitted that the Commission has approved effective tax rate as notified MAT rates and for 2019-24 tariff period, tariff has been claimed with grossing of RoE as 18.782% considering MAT rate of 17.472%. Further, issues of under recovery or over recovery of grossed-up rate of RoE will be taken up at the time of true up for the 2019-24 tariff period.

94. The RoE allowed for the instant transmission assets under Regulation 30 of the 2019 Tariff Regulations is as follows:

(₹ in lakh)

Combined Asset(Asset-1 to Asset-27, Asset-31 and Asset-32)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity (a)	25637.96	25693.02	25912.41	25912.41	25912.41
Addition due to Additional Capitalisation (b)	55.06	219.39	0.00	0.00	0.00
Closing Equity (c)=(a+b)	25693.02	25912.41	25912.41	25912.41	25912.41
Average Equity (d)=[(a+c)/2]	25665.49	25802.72	25912.41	25912.41	25912.41
Return on Equity (Base Rate) (in %) (e)	15.50	15.50	15.50	15.50	15.50
Tax Rate applicable (in %) (f)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax) (g)	18.782	18.782	18.782	18.782	18.782
Return on Equity (Pre-tax) (h)=(d*g)	4820.49	4846.27	4866.87	4866.87	4866.87



(₹ in lakh)

Asset-28					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity (a)	120.83	140.58	189.23	189.23	189.23
Addition due to Additional Capitalisation (b)	19.75	48.65	0.00	0.00	0.00
Closing Equity (c)=(a+b)	140.58	189.23	189.23	189.23	189.23
Average Equity (d)=[(a+c)/2]	130.70	164.90	189.23	189.23	189.23
Return on Equity (Base Rate) (in %) (e)	15.50	15.50	15.50	15.50	15.50
Tax Rate applicable (in %) (f)	17.47	17.47	17.47	17.47	17.47
Rate of Return on Equity (Pre-tax) (in %) (g)	18.78	18.78	18.78	18.78	18.78
Return on Equity (Pre-tax) (h)=(d*g)	24.55	30.97	35.54	35.54	35.54

(₹ in lakh)

Asset-29					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity (a)	153.09	163.98	163.98	163.98	163.98
Addition due to Additional Capitalisation (b)	10.89	0.00	0.00	0.00	0.00
Closing Equity (c)=(a+b)	163.98	163.98	163.98	163.98	163.98
Average Equity (d)=[(a+c)/2]	158.53	163.98	163.98	163.98	163.98
Return on Equity (Base Rate) (in %) (e)	15.50	15.50	15.50	15.50	15.50
Tax Rate applicable (in %) (f)	17.47	17.47	17.47	17.47	17.47
Rate of Return on Equity (Pre-tax) (in %) (g)	18.78	18.78	18.78	18.78	18.78
Return on Equity (Pre-tax) (h)=(d*g)	29.78	30.80	30.80	30.80	30.80

(₹ in lakh)

Asset-30					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity (a)	78.99	78.99	78.99	78.99	78.99
Addition due to Additional Capitalisation (b)	0.00	0.00	0.00	0.00	0.00
Closing Equity (c)=(a+b)	78.99	78.99	78.99	78.99	78.99
Average Equity (d)=[(a+c)/2]	78.99	78.99	78.99	78.99	78.99
Return on Equity (Base Rate) (in %) (e)	15.50	15.50	15.50	15.50	15.50
Tax Rate applicable (in %) (f)	17.47	17.47	17.47	17.47	17.47
Rate of Return on Equity (Pre-tax) (in %) (g)	18.78	18.78	18.78	18.78	18.78
Return on Equity (Pre-tax) (h)=(d*g)	14.84	14.84	14.84	14.84	14.84



(₹ in lakh)

Asset-33					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity (a)	167.28	167.28	167.28	167.28	167.28
Addition due to Additional Capitalisation (b)	0.00	0.00	0.00	0.00	0.00
Closing Equity (c)=(a+b)	167.28	167.28	167.28	167.28	167.28
Average Equity (d)=[(a+c)/2]	167.28	167.28	167.28	167.28	167.28
Return on Equity (Base Rate) (in %) (e)	15.50	15.50	15.50	15.50	15.50
Tax Rate applicable (in %) (f)	17.47	17.47	17.47	17.47	17.47
Rate of Return on Equity (Pre-tax) (in %) (g)	18.78	18.78	18.78	18.78	18.78
Return on Equity (Pre-tax) (h)=(d*g)	31.42	31.42	31.42	31.42	31.42

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

95. Regulations 35(3)(a) and (4) of the 2019 Tariff Regulations provide as follows:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<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
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<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.”

96. The Petitioner has claimed the following O&M Expenses for transmission elements during the 2019-24 period:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Operation and Maintenance Expense	Combined Asset (Asset-1 to Asset-27, Asset-31 and Asset-32)				
Transmission Line	189.56	196.24	203.12	210.21	217.54
Sub-station	3,733.57	3,866.67	4,002.44	4,145.09	4,286.24
Communication System	14.04	14.04	14.04	14.04	14.04
Total O&M Expense	3,937.17	4,076.95	4,219.60	4,369.34	4,517.82
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Operation and Maintenance Expense	Asset -28				
Transmission Line	-	-	-	-	-
Sub-station	45.02	46.60	48.24	49.92	51.68
Communication System	0.09	0.09	0.09	0.09	0.09
Total O&M Expense	45.11	46.69	48.33	50.01	51.77

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Operation and Maintenance Expense	Asset 29				
Transmission Line	-	-	-	-	-
Sub-station	45.02	46.60	48.24	49.92	51.68
Communication System	0.21	0.21	0.21	0.21	0.21
Total O&M Expense	45.23	46.81	48.45	50.13	51.89



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Operation and Maintenance Expense	Asset 33				
Transmission Line	-	-	-	-	-
Sub-station	22.51	23.30	24.12	24.96	25.84
Communication System	0.11	0.11	0.11	0.11	0.11
Total O&M Expense	22.62	23.41	24.23	25.07	25.95

97. Based on the number of bays and transmission system details provided by the Petitioner, the O&M Expenses approved for the Combined Asset (Asset-1 to Asset-27, Asset-31 and Asset-32), Asset-28, Asset-29, Asset-30 and Asset-33 are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A) Normative O&M	Combined Asset(Asset-1 to Asset-27, Asset-31 and Asset-32)				
Transmission Line	189.56	196.24	203.12	210.21	217.54
Sub-station	3733.57	3866.67	4002.44	4145.09	4286.23
Communication System	14.04	14.04	14.04	14.04	14.04
Total Normative O&M	3937.18	4076.94	4219.60	4369.36	4517.81

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A) Normative O&M	Asset-28				
Transmission Line	0.00	0.00	0.00	0.00	0.00
Sub-station	45.02	46.60	48.24	49.92	51.68
Communication System	0.09	0.09	0.09	0.09	0.09
Total Normative O&M	45.11	46.69	48.33	50.01	51.77

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A) Normative O&M	Asset-29				
Transmission Line	0.00	0.00	0.00	0.00	0.00
Sub-station	45.02	46.60	48.24	49.92	51.68
Communication System	0.21	0.21	0.21	0.21	0.21
Total Normative O&M	45.23	46.81	48.45	50.13	51.89

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A) Normative O&M	Asset-30				
Transmission Line	0.00	0.00	0.00	0.00	0.00
Sub-station	22.51	23.30	24.12	24.96	25.84
Communication System	0.11	0.11	0.11	0.11	0.11
Total Normative O&M	22.62	23.41	24.23	25.07	25.95



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A) Normative O&M	Asset-33				
Transmission Line	0.00	0.00	0.00	0.00	0.00
Sub-station	45.02	46.60	48.24	49.92	51.68
Communication System	0.37	0.37	0.37	0.37	0.37
Total Normative O&M	45.39	46.97	48.61	50.29	52.05

Interest on Working Capital (“IWC”)

98. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations provide as follows:

“34. Interest on Working Capital

(1)...

(c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:

- i. Receivables equivalent to 45 days of fixed cost;*
- ii. Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and*
- iii. Operation and maintenance expenses, including security expenses for one month”*

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

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

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

“3.Definitions ...

(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;”

99. The Petitioner has submitted that it has computed IWC for the 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%.

100. The 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, whereas, rate of interest for 2020-21 onwards has been considered as 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points). The components of the working capital and the interest allowed thereon are as follows:

(₹ in lakh)

Combined Asset(Asset-1 to Asset-27, Asset-31 and Asset-32)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
WC for O&M Expenses (One month of O&M Expenses)	328.10	339.75	351.63	364.11	376.48
WC for Maintenance Spares (15% of O&M Expenses)	590.58	611.54	632.94	655.40	677.67
WC for Receivables (45 days of Fixed Cost)	1968.31	1953.64	1932.73	1930.34	1930.48
Total Working Capital	2886.98	2904.92	2917.30	2949.86	2984.63
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	347.88	326.80	306.32	309.74	313.39

(₹ in lakh)

Asset-28					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
WC for O&M Expenses (One month of O&M Expenses)	3.76	3.89	4.03	4.17	4.31
WC for Maintenance Spares (15% of O&M Expenses)	6.77	7.00	7.25	7.50	7.77
WC for Receivables (45 days of Fixed Cost)	14.92	17.08	18.52	18.40	18.24
Total Working Capital	25.45	27.98	29.80	30.07	30.32
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	3.07	3.15	3.13	3.16	3.18

(₹ in lakh)

Asset-29					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
WC for O&M Expenses (One month of O&M Expenses)	3.77	3.90	4.04	4.18	4.32
WC for Maintenance Spares (15% of O&M Expenses)	6.79	7.02	7.27	7.52	7.78
WC for Receivables (45 days of Fixed Cost)	16.06	16.38	16.27	16.20	16.08
Total Working Capital	26.61	27.30	27.58	27.90	28.19
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	3.21	3.07	2.90	2.93	2.96



(₹ in lakh)

Asset-30					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
WC for O&M Expenses (One month of O&M Expenses)	1.89	1.95	2.02	2.09	2.16
WC for Maintenance Spares (15% of O&M Expenses)	3.39	3.51	3.63	3.76	3.89
WC for Receivables (45 days of Fixed Cost)	8.00	7.96	7.90	7.86	7.80
Total Working Capital	13.28	13.42	13.56	13.71	13.85
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	1.60	1.51	1.42	1.44	1.45

(₹ in lakh)

Asset-33					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
WC for O&M Expenses (One month of O&M Expenses)	3.78	3.91	4.05	4.19	4.34
WC for Maintenance Spares (15% of O&M Expenses)	6.81	7.05	7.29	7.54	7.81
WC for Receivables (45 days of Fixed Cost)	16.96	16.87	16.76	16.68	16.53
Total Working Capital	27.55	27.83	28.10	28.41	28.68
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	3.32	3.13	2.95	2.98	3.01

Annual Fixed Charges for the 2019-24 Tariff Period

101. The annual fixed charges approved for the Combined Asset (Asset-1 to Asset-27, Asset-31 and Asset-32) Asset-28, Asset-29, Asset-30 and Asset-33 for the 2019-24 tariff period are as follows:

(₹ in lakh)

Combined Asset(Asset-1 to Asset-27, Asset-31 and Asset-32)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	3977.97	3989.69	3998.34	3998.34	3998.34
Interest on Loan	2925.37	2606.48	2285.44	2112.91	2004.82
Return on Equity	4820.49	4846.27	4866.87	4866.87	4866.87
Interest on Working Capital	347.88	326.80	306.32	309.74	313.39
O & M Expenses	3937.18	4076.94	4219.60	4369.36	4517.81
Total	16008.90	15846.17	15676.56	15657.22	15701.22



(₹ in lakh)

Asset-28					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	21.32	25.13	27.84	27.84	27.84
Interest on Loan	27.30	32.61	35.41	32.72	30.02
Return on Equity	24.55	30.97	35.54	35.54	35.54
Interest on Working Capital	3.07	3.15	3.13	3.16	3.18
O & M Expenses	45.11	46.69	48.33	50.01	51.77
Total	121.35	138.55	150.25	149.26	148.35

(₹ in lakh)

Asset-29					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	25.84	26.80	26.80	26.80	26.80
Interest on Loan	26.54	25.35	23.05	20.72	18.35
Return on Equity	29.78	30.80	30.80	30.80	30.80
Interest on Working Capital	3.21	3.07	2.90	2.93	2.96
O & M Expenses	45.23	46.81	48.45	50.13	51.89
Total	130.59	132.84	131.99	131.38	130.80

(₹ in lakh)

Asset-30					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	12.83	12.83	12.83	12.83	12.83
Interest on Loan	13.18	11.96	10.77	9.59	8.35
Return on Equity	14.84	14.84	14.84	14.84	14.84
Interest on Working Capital	1.60	1.51	1.42	1.44	1.45
O & M Expenses	22.62	23.41	24.23	25.07	25.95
Total	65.07	64.54	64.09	63.76	63.42

(₹ in lakh)

Asset-33					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	29.64	29.64	29.64	29.64	29.64
Interest on Loan	28.19	25.67	23.30	20.92	18.36
Return on Equity	31.42	31.42	31.42	31.42	31.42
Interest on Working Capital	3.32	3.13	2.95	2.98	3.01
O & M Expenses	45.39	46.97	48.61	50.29	52.05
Total	137.96	136.84	135.92	135.26	134.48

Filing Fee and Publication Expenses

102. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. BRPL has objected to the claim of filing fee, submitting that



the same is at the discretion of the Commission. The Commission in order dated 11.9.2009 in Petition No. 129 of 2005 declined the reimbursement of filing fee holding that the Central Power Sector undertakings in furtherance of their business interests, are statutorily required to approach the Commission for determination and approval of the tariff. In response, the Petitioner submitted that the Commission in its order dated 28.3.2016 in Petition No. 137/TT/2015 has rejected similar contentions and allowed filing fee. The Petitioner is entitled to filing fee as per Regulation 70(1) of the 2019 Tariff Regulations.

103. We have considered the submissions of the Petitioner and BRPL. 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

104. The Petitioner has requested to allow it to bill and recover license fee and RLDC fees and charges separately from the Respondents. BRPL in its reply has submitted that the licence fee is the onus of Petitioner. No categorical response to the above submissions of BRPL was given by the Petitioner. However, the Petitioner has submitted that the recovery of license fees may be allowed under Regulation 70 of the 2019 Tariff Regulations.

105. We have considered the submissions of BRPL and the Petitioner. The Petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Regulation 70(3) and (4) of the 2019 Tariff Regulations.

Goods and Services Tax



106. The Petitioner has sought to recover GST on transmission charges separately from the Respondents, if GST on transmission is withdrawn from negative list in future. BRPL has objected to the prayer of the Petitioner regarding GST. In response, the Petitioner has submitted that while the transmission charges claimed herein are exclusive of GST, but if the same is levied in future, the same shall be additionally paid by the Respondents and the same shall be charged and billed separately by the Petitioner.

107. We have considered the submission of the Petitioner. GST is not levied on transmission service at present and we are of the view that Petitioner's prayer is premature.

Security Expenses

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

109. BRPL has submitted that if separate petitions are to be filed for claiming security expenses, then there is no need for IWC as the same is claimed in advance. BRPL



also submitted that the Petitioner should clarify the provision of Regulations, under which such a claim has been made.

110. We have considered the submissions of the Petitioner and BRPL. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The Commission vide order dated 3.8.2021 in Petition No. 260/MP/2020 approved security expenses from 1.4.2019 to 31.3.2024. 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

111. 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

112. The Commission approved the COD of the Asset-17, Asset 20(b), Asset-27, Asset-28, Asset-29, Asset-30, Asset-31 and Asset-33 under under proviso (ii) of Regulation 4(3) of 2014 Tariff Regulations as the associated downstream transmission system were not ready. The Petitioner in the instant true up petition has submitted the downstream status of Asset-17, Asset-18, Asset-20, Asset-27 to Asset-31 and Asset-33 and the same is as follows:



Assets	Asset Name	COD	Direction of the Commission	Present status
Asset-17	Extension of 400/220 kV GIS Gurgaon	16.1.2015	The Commission vide order dated 30.4.2016 held that transmission charges for the Asset-17 and Asset-18 shall be borne by the beneficiaries or the long term transmission customers/ DICs, as the case may be till the COD of the downstream system.	Power flow started from 30.4.2015
Asset-18	2x50 MVAR Bus Reactor at 400/220 kV Bareilly Sub-station alongwith associated bays (Existing Line Reactors retained and used as Bus Reactor)	1.4.2014		It is a Bus reactor and there is no linking with downstream system.
Asset-20	Combined: (i) 315 MVA 400/220 kV ICT-I & associated bays and 03 number of 220 kV line bays at Saharanpur Sub-station, (ii) 315 MVA 400/220 kV ICT-II & associated bays and 03 number of 220 kV line bays at Saharanpur Sub-station, (iii) 50MVA, 400 kV Bus Reactor-I at Saharanpur Sub-station and (iv) 50MVA, 400 kV Bus Reactor-II at Saharanpur Sub-station	9.5.2016	Out of 6 number of bays, 2 number of bays power flow started along with ICT's. The Commission vide Order dated 19.7.2018 held that the transmission charges of the 4 bays from 9.5.2016 upto the date of commercial operation of the downstream assets under the scope of UPPTCL will be borne by UPPTCL.	Power flow in Bay No.206 & Bay No.207 started form 5.6.2018 and in Bay No.210 & Bay No.211 started form 13.6.2018.
Asset-27	2 number of 220 kV bays No. 208 & 209 (Barabanki-I & II of UPPTCL) at 400/220 kV Sohawal (PG) Sub-station	12.2.2017	The Commission vide order dated 22.1.2010 held that transmission charges from 12.2.2017 to 30.4.2017 will be borne by UPPTCL and thereafter from 1.5.2018 (date of power flow) shall be recovered though PoC mechanism.	Allowed to recover under PoC from 1.5.2018 (date of power flow)
Asset-28	02 number of 220 kV Line Bays of Sohawal (PG)-Tanda (UP) TL at 400/220 kV Sohawal (PG) Sub-station	12.12.2018	The Commission vide order dated 22.1.2010 directed that the transmission charges from 12.12.2018 to till COD of downstream system will be borne by UPPTCL and thereafter the transmission charges shall be recovered though PoC mechanism.	220 kV Sohawal-Tandal Ckt-I charged on 28.5.2019 and Ckt-II on 8.6.2019



Asset-29	2 number of 220 kV bays No. 206 & 207 of Shahjahanpur (PG)-Shahjahanpur (UPPTCL) at 400/220 kV Shahjahanpur Sub-Station	3.11.2016	The Commission vide order dated 22.1.2010 held that the transmission charges in case of Asset-29 from 3.11.2016 and that of Asset-30 and Asset-31 from 5.8.2016 till COD of the downstream system under the scope of UPPTCL will be borne by UPPTCL and thereafter shall be recovered through PoC mechanism.	Yet to achieved COD
Asset-30	One 220 kV line bays No. 210 of Shahjahanpur (PG)-Shahjahanpur (UPPTCL) at 400/220 kV Shahjahanpur Sub-Station	5.8.2016		Yet to achieve COD
Asset-31	One 220 kV line bays No. 211 of Shahjahanpur (PG)-Shahjahanpur (UPPTCL) at 400/220 kV Shahjahanpur Sub-Station	5.8.2016		Power Flow started from 24.8.2016
Asset-33	2 number of 220 kV line bays(211 and 212) at 400/220 kV Jaipur (South) Sub-station	28.9.2017	The transmission charges in case of Asset-X from 28.9.2017 to till COD of the downstream transmission system under the scope of RRVPNL shall be borne by RRVPNL and thereafter the transmission charges shall be recovered through POC mechanism.	Yet to achieve COD

113. The Petitioner has further bifurcated the Asset 20 into Asset-20A and Asset-20B and the same is as follows:

Assets	Assets	COD
Asset-20 A	Combined:(i) 315 MVA 400/220 kV ICT-I & associated bays and one 220 kV line bays at Saharanpur Sub-station, (ii) 315 MVA 400/220 kV ICT-II & associated bays and one 220 kV line bays at Saharanpur Sub-station, (iii) 50 MVA, 400 kV Bus Reactor-I at Saharanpur Sub-station and (iv) 50 MVA, 400 kV Bus Reactor-II at Saharanpur Sub-station.	9.5.2016
Asset-20 B	04 number of 220 kV line bays at Saharanpur Sub-station	9.5.2016



114. The Commission vide order dated 30.4.2016 in Petition No. 33/TT/2015, vide order dated 19.7.2018 in Review Petition No. 45/RP/2017 and order dated 22.1.2020 in Petition No. 375/TT/2018 held that the transmission charges from COD to COD of the downstream transmission system is liable to be paid by the defaulting party. Accordingly, the liability of the transmission charges payable by the defaulting party is as follows:

Asset	Asset Name	COD approved under proviso (iii) of under Regulation 4(3) of the 2014 Tariff Regulations	Status of downstream system	Liability to pay transmission charges
Asset-17	Extension of 400/220 kV GIS Gurgaon	16.1.2015	Power flow started from 30.4.2015	The transmission charges in case of Asset-17, from 16.1.2015 to 29.4.2015 will be borne by UPPTCL and thereafter from 30.4.2015 (date of power flow) shall be recovered through PoC mechanism.
Asset-20(b)	04 number of 220 kV line bays at Saharanpur Sub-station	9.5.2016	Power flow in Bay No.206 & Bay No.207 started from 5.6.2018 and in Bay No.210 & Bay No.211 started from 13.6.2018.	The transmission charges of 2 number of bays from 9.5.2016 to 4.6.2018 and 2 number of bays from 9.5.2016 to 12.6.2018 in case of Asset-20(b) will be borne by UPPTCL and thereafter from 5.6.2018 (date of power flow) and 13.6.2018 (date of power flow) shall be recovered through PoC mechanism.
Asset-27	2 number of 220 kV Bay No. 208 & Bay No.209 (Barabanki-I & Barabanki-II of UPPTCL) at 400/220 kV Sohawal (PG) Sub-station	12.2.2017	Allowed to recover under PoC from 1.5.2018 (date of power flow)	The transmission charges of Asset-27 from 12.2.2017 to 30.4.2018 will be borne by UPPTCL and thereafter from 1.5.2018 (date of power flow) shall be recovered through PoC mechanism.
Asset-28	2 number of 220 kV Line Bays of Sohawal (PG)-Tanda (UP) TL at 400/220 kV Sohawal (PG) Sub-station	12.12.2018	220 kV Sohawal-Tandal Ckt-I charged on 28.5.2019 and Ckt-II on 8.6.2019	The transmission charges from 12.12.2018 to till COD of downstream system will be borne by UPPTCL and thereafter the transmission charges shall be recovered through POC mechanism.



Asset-29	2 number of 220 kV Bay No. 206 & Bay No.207 of Shahjahanpur (PG) - Shahjahanpur (UPPTCL) at 400/220 kV Shahjahanpur Sub-station	3.11.2016	Yet to achieve COD	The transmission charges in case of Asset-29 from 3.11.2016 till COD of the downstream system shall be borne by UPPTCL and thereafter shall be recovered though PoC mechanism.
Asset-30	One 220 kV line Bay No. 210 of Shahjahanpur (PG)- Shahjahanpur (UPPTCL) at 400/220 kV Shahjahanpur Sub-station	5.8.2016	Yet to achieve COD	The transmission charges in case of Asset-30 from 5.8.2016 to COD of the downstream system under shall be borne by UPPTCL and thereafter shall be recovered though PoC mechanism.
Asset-31	One 220 kV line Bay No. 211 of Shahjahanpur (PG)- Shahjahanpur (UPPTCL) at 400/220 kV Shahjahanpur Sub-station	5.8.2016	Power flow started from 24.8.2016	The transmission charges in case of Asset-31 from 5.8.2016 to 23.8.2016 shall be borne by UPPTCL and from 24.8.2016 (date of power flow) shall be recovered though PoC mechanism.
Asset-33	2 number of 220 kV line bays(Bay No.211 and Bay No.212) at 400/220 kV Jaipur (South) Sub-station	28.9.2017	Yet to achieve COD	The transmission charges in case of Asset-33 from 28.9.2017 to COD of the downstream transmission system shall be borne by RRVPNL and thereafter the transmission charges shall be recovered though PoC mechanism.

115. The transmission charges approved in this order for the remaining transmission assets i.e Asset-1 to 16, Asset-18, Asset-19, Asset-20(a), Asset-21 to 26 and Asset-32 shall be included in PoC pool.

116. The billing, collection and disbursement of the transmission charges with effect from 1.7.2011 shall be governed by the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 and with effect from 1.11.2020 (after repeal of the 2010 Sharing Regulations) by the Central



Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, as provided in Regulation 43 of the 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

117. To summarise, the trued-up Annual Fixed Charges approved for the transmission assets for the 2014-19 tariff period is as follows:

(₹ in lakh)					
Annual Fixed Charges					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-1	330.68	322.92	314.49	305.51	296.87
Asset-2	443.04	452.19	451.25	450.53	450.30
Asset-3 to Asset-9	4900.47	5014.65	5019.34	4945.54	4888.05
Asset-10 to Asset-13	3770.50	3862.26	3896.50	3837.66	3792.22
Asset-14	829.89	1099.18	1105.29	1104.44	1100.44
Asset-15	475.01	627.71	661.41	669.88	674.73
Asset-16	222.46	454.92	475.66	478.73	476.75
Asset-17	56.95	279.21	293.36	311.01	313.57
Asset-18	131.40	148.87	155.28	156.97	158.65
Asset-19		212.95	223.83	224.87	227.32
Asset-20 A			2267.81	2587.74	2598.39
Asset-20 B			302.69	342.10	346.83
Asset-21	72.36	161.14	161.71	161.92	163.11
Asset-22		86.94	226.47	227.64	229.67
Asset-23 A		13.35	102.85	105.23	108.46
Asset-23 B		67.05	490.91	473.36	456.37
Asset-24 A				85.58	128.33
Asset-24 B				40.04	57.64
Asset-25 A					115.22
Asset-25 B					51.77
Asset-26			11.92	163.48	165.24
Asset-27			21.40	165.09	166.84
Asset 28					52.13
Asset 29			72.80	182.73	185.81
Asset 30			59.44	93.00	94.39
Asset-31			57.28	89.77	91.24
Asset-32				150.17	171.75
Asset 33				98.66	196.39



118. The Annual Fixed Charges approved for the Combined Asset (Asset-1 to Asset-27, Asset-31 and Asset-32), Asset-28, Asset-29, Asset-30 and Asset-33 for the 2019-24 tariff period in this order is as follows:

(₹ in lakh)

Annual Fixed Charges					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset (Asset-1 to Asset-27, Asset-31 and Asset-32)	16008.90	15846.17	15676.56	15657.22	15701.22
Asset-28	121.35	138.55	150.25	149.26	148.35
Asset-29	130.59	132.84	131.99	131.38	130.80
Asset-30	65.07	64.54	64.09	63.76	63.42
Asset-33	137.96	136.84	135.92	135.26	134.48

119. Annexure-I to Annexure-XXXIII given hereinafter form part of this order.

120. This order disposes of Petition No. 625/TT/2020 in terms of the above discussions and findings.

sd/-
(P. K. Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(I. S. Jha)
Member

sd/-
(P. K. Pujari)
Chairperson



Annexure-I

Asset-1	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Transmission Line	1903.27	0.00	5.84	0.00	0.00	0.00	1909.11	5.28	100.49	100.65	100.80	100.80	100.80
	Total	1903.27	0.00	5.84	0.00	0.00	0.00	1909.11		100.49	100.65	100.80	100.80	100.80
	Weighted Average Rate of Depreciation (in %)									5.28	5.28	5.28	5.28	5.28
	Average Gross Block (₹ in lakh)									1903.27	1906.19	1909.11	1909.11	1909.11



Annexure-II

Asset-2	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Sub station	1380.78	109.41	0.00	0.00	0.00	0.00	1490.19	5.28	75.79	78.68	78.68	78.68	78.68
	PLCC	9.13	1.69	0.00	0.00	0.00	0.00	10.82	6.33	0.63	0.68	0.68	0.68	0.68
	Total	1389.91	111.10	0.00	0.00	0.00	0.00	1501.01		76.43	79.37	79.37	79.37	79.37
	Weighted Average Rate of Depreciation (in %)									5.29	5.29	5.29	5.29	5.29
	Average Gross Block (₹ in lakh)									1445.46	1501.01	1501.01	1501.01	1501.01



Annexure-III

	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Asset-3 to Asset-9	Land	1398.94	0.00	0.00	0.00	0.00	0.00	1398.94	0.00	0.00	0.00	0.00	0.00	0.00
	Building	613.51	112.31	110.18	10.88	17.16	0.00	864.04	3.34	22.37	26.08	28.10	28.57	28.86
	Transmission line	10208.19	140.64	122.12	0.00	0.00	0.00	10470.95	5.28	542.71	549.64	552.87	552.87	552.87
	Sub station	10693.11	835.22	621.86	47.95	35.74	69.36	12303.24	5.28	586.65	625.11	642.80	645.01	647.78
	PLCC	190.79	16.75	12.09	1.71	1.51	0.00	222.85	6.33	12.61	13.52	13.96	14.06	14.11
	Total	23104.54	1104.92	866.25	60.54	54.41	69.36	25260.02		1164.33	1214.36	1237.72	1240.50	1243.61
	Weighted Average Rate of Depreciation (in %)										4.92	4.93	4.93	4.93
Average Gross Block (₹ in lakh)										23657.00	24642.59	25105.98	25163.46	25225.34



Annexure-IV

	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Asset-10 to Asset-13	Land	2203.40	0.00	0.00	0.00	0.00	0.00	2203.40	0.00	0.00	0.00	0.00	0.00	0.00
	Building	416.27	220.41	100.90	0.00	0.00	0.00	737.58	3.34	17.58	22.95	24.64	24.64	24.64
	Transmission line	8202.66	84.18	341.83	0.00	0.00	0.00	8628.67	5.28	435.32	446.57	455.59	455.59	455.59
	Sub station	7361.69	324.68	518.85	85.91	34.35	0.89	8326.37	5.28	397.27	419.54	435.50	438.68	439.61
	PLCC	180.13	0.00	0.00	0.00	0.00	0.00	180.13	6.33	11.40	11.40	11.40	11.40	11.40
	IT equipment & software	179.33	0.00	0.00	0.00	0.00	0.00	179.33	5.28	9.47	9.47	9.47	9.47	9.47
	Total	18543.48	629.27	961.58	85.91	34.35	0.89	20255.48		871.05	909.93	936.60	939.78	940.71
Weighted Average Rate of Depreciation (in %)										4.62	4.63	4.64	4.64	4.64
Average Gross Block (₹ in lakh)										18858.12	19653.54	20177.29	20237.42	20255.04



Annexure-V

Asset-14	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Land	748.64	0.00	0.00	0.00	0.00	0.00	748.64	0.00	0.00	0.00	0.00	0.00	0.00
	Building	69.72	2.73	13.74	8.26	8.12	0.00	102.57	3.34	2.38	2.65	3.02	3.29	3.43
	Transmission line	2157.24	148.91	5.84	0.00	0.00	0.00	2311.99	5.28	117.84	121.92	122.07	122.07	122.07
	Sub station	1282.56	504.23	109.14	69.15	67.93	0.00	2033.01	5.28	81.03	97.22	101.93	105.55	107.34
	PLCC	64.63	9.63	8.55	5.14	5.05	0.00	93.00	6.33	4.4	4.97	5.40	5.73	5.89
	Total	4322.77	665.51	137.27	82.55	81.10	0.00	5289.20		205.63	226.76	232.42	236.64	238.73
	Weighted Average Rate of Depreciation (in %)									4.42	4.48	4.50	4.51	4.51
	Average Gross Block (₹ in lakh)									4655.53	5056.92	5166.83	5248.65	5289.20



Annexure-VI

Asset-15	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Building	65.50	9.65	155.52	19.17	22.86	0.00	272.70	3.34	2.35	5.11	8.02	8.73	9.11
	Sub station	2172.10	0.00	219.54	75.08	89.55	20.57	2576.84	5.28	114.69	120.48	128.26	132.61	135.51
	PLCC	8.61	0.00	1.46	0.92	1.09	0.00	12.08	6.33	0.54	0.59	0.67	0.73	0.76
	Total	2246.21	9.65	376.52	95.17	113.50	20.57	2861.62		117.58	126.18	136.95	142.06	145.39
	Weighted Average Rate of Depreciation (in %)									5.22	5.16	5.11	5.10	5.10
	Average Gross Block (₹ in lakh)									2251.03	2444.12	2679.96	2784.30	2851.33



Annexure-VII

Asset-16	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Building	66.18	1.36	57.43	10.95	7.66	0.00	143.58	3.34	2.23	3.21	4.36	4.67	4.80
	Sub station	1757.03	25.25	185.23	59.81	41.86	0.00	2069.18	5.28	93.44	98.99	105.46	108.15	109.25
	PLCC	9.23	0.00	0.00	0.00	0.00	0.00	9.23	6.33	0.59	0.58	0.58	0.58	0.58
	Total	1832.44	26.61	242.66	70.76	49.52	0.00	2221.99		96.25	102.79	110.40	113.40	114.63
	Weighted Average Rate of Depreciation (in %)									5.21	5.19	5.17	5.16	5.16
	Average Gross Block (₹ in lakh)									1845.75	1980.38	2137.09	2197.23	2221.99



Annexure-VIII

Asset-17	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Sub station	1086.1	8.98	14.60	178.85	63.09	0.00	1351.62	5.28	57.57	58.21	63.31	69.70	71.37
	Total	1086.1	8.98	14.60	178.85	63.09	0.00	1351.62		57.57	58.21	63.31	69.70	71.37
	Weighted Average Rate of Depreciation (in %)									5.28	5.28	5.28	5.28	5.28
	Average Gross Block (₹ in lakh)									1090.59	1102.38	1199.11	1320.08	1351.62



Annexure-IX

Asset-18	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Sub- station	322.09	142.46	54.41	21.16	5.44	16.68	562.24	5.28	20.77	25.96	27.96	28.66	29.25
	Total	322.09	142.46	54.41	21.16	5.44	16.68	562.24		20.77	25.96	27.96	28.66	29.25
	Weighted Average Rate of Depreciation (in %)									5.28	5.28	5.28	5.28	5.28
	Average Gross Block (₹ in lakh)									393.32	491.75	529.54	542.84	553.90



Annexure-X

Asset-19	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Building	20.46	0.00	35.99	3.87	3.69	0.00	64.01	3.34	0.00	1.28	1.95	2.08	2.14
	Sub station	775.77	0.00	89.74	34.64	33.08	21.27	954.50	5.28	0.00	43.33	46.61	48.40	49.84
	Total	796.23	0.00	125.73	38.51	36.77	21.27	1018.51		0.00	44.61	48.56	50.48	51.97
	Weighted Average Rate of Depreciation (in %)									0.00	5.19	5.16	5.16	5.16
	Average Gross Block (₹ in lakh)									0.00	859.09	941.21	978.85	1007.87



Annexure-XI

Asset-20A	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Land	4455.12	0.00	0.00	0.00	0.00	0.00	4455.12	0.00	0.00	0.00	0.00	0.00	0.00
	Building	1816.73	0.00	0.00	383.88	29.96	64.53	2295.10	3.34	0.00	0.00	67.1	74.00	75.58
	Sub station	7157.29	0.00	0.00	384.03	295.81	80.80	7917.93	5.28	0.00	0.00	388.04	405.99	415.93
	PLCC	96.63	0.00	0.00	2.84	1.16	0.00	100.64	6.33	0.00	0.00	6.21	6.33	6.37
	Total	13525.78	0.00	0.00	770.75	326.93	145.33	14768.79		0.00	0.00	461.34	486.33	497.88
	Weighted Average Rate of Depreciation (in %)									0.00	0.00	3.32	3.36	3.39
	Average Gross Block (₹ in lakh)									0.00	0.00	13911.16	14460.00	14696.13



Annexure-XII

Asset-20B	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Sub station	815.35	0.00	0.00	0.00	21.38	3.48	840.21	5.28	0.00	0.00	43.05	43.62	44.27
	PLCC	29.85	0.00	0.00	0.00	1.08	0.00	30.93	6.33	0.00	0.00	1.89	1.92	1.96
	Total	845.2	0.00	0.00	0.00	22.46	3.48	871.14		0.00	0.00	44.94	45.54	46.23
	Weighted Average Rate of Depreciation (in %)									0.00	0.00	5.32	5.32	5.32
	Average Gross Block (₹ in lakh)									0.00	0.00	845.2	856.43	869.4



Annexure-XIII

Asset-21	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Sub station	388.35	0.00	0.00	0.00	0.00	0.00	388.35	5.28	20.51	20.51	20.51	20.51	20.51
	Total	388.35	0.00	0.00	0.00	0.00	0.00	388.35		20.51	20.51	20.51	20.51	20.51
	Weighted Average Rate of Depreciation (in %)									5.28	5.28	5.28	5.28	5.28
	Average Gross Block (₹ in lakh)									388.35	388.35	388.35	388.35	388.35



Annexure-XIV

Asset-22	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Sub station	513.68	0.00	0.00	0.00	0.00	23.37	513.68	5.28	0.00	27.12	27.12	27.12	27.12
	Total	513.68	0.00	0.00	0.00	0.00	23.37	513.68		0.00	27.12	27.12	27.12	27.12
	Weighted Average Rate of Depreciation (in %)									0.00	5.28	5.28	5.28	5.28
	Average Gross Block (₹ in lakh)									0.00	513.68	513.68	513.68	513.68



Annexure-XV

Asset-23A	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Sub station	189.92	0.00	0.00	19.48	0.00	23.37	232.77	5.28	0.00	9.98	10.54	11.06	11.67
	Total	189.92	0.00	0.00	19.48	0.00	23.37	232.77		0.00	9.98	10.54	11.06	11.67
	Weighted Average Rate of Depreciation (in %)									0.00	5.28	5.28	5.28	5.28
	Average Gross Block (₹ in lakh)									0.00	189.92	199.66	209.40	221.09



Annexure-XVI

Asset-23B	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Sub station	3483.04	0.00	0.00	0.00	0.00	0.00	3483.04	5.28	0.00	183.90	183.90	183.90	183.90
	Total	3483.04	0.00	0.00	0.00	0.00	0.00	3483.04		0.00	183.90	183.90	183.90	183.90
	Weighted Average Rate of Depreciation (in %)									0.00	5.28	5.28	5.28	5.28
	Average Gross Block (₹ in lakh)									0.00	3483.04	3483.04	3483.04	3483.04



Annexure-XVII

Asset-24A	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Land	47.58	0.00	0.00	0.00	0.00	0.00	47.58	0.00	0.00	0.00	0.00	0.00	0.00
	Building	35.1	0.00	0.00	0.00	1.17	0.00	35.27	3.34	0.00	0.00	0.00	1.13	1.18
	Sub station	253.35	0.00	0.00	0.00	1.44	0.00	254.79	5.28	0.00	0.00	0.00	13.45	13.45
	Total	336.03	0.00	0.00	0.00	1.61	0.00	337.64		0.00	0.00	0.00	14.58	14.63
	Weighted Average Rate of Depreciation (in %)									0.00	0.00	0.00	4.33	4.33
	Average Gross Block (₹ in lakh)									0.00	0.00	0.00	336.84	337.64



Annexure-XVIII

Asset-24B	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Sub station	435.55	0.00	0.00	0.00	0.00	0.00	435.55	5.28	0.00	0.00	0.00	23.00	23.00
	Total	435.55	0.00	0.00	0.00	0.00	0.00	435.55		0.00	0.00	0.00	23.00	23.00
	Weighted Average Rate of Depreciation (in %)									0.00	0.00	0.00	5.28	5.28
	Average Gross Block (₹ in lakh)									0.00	0.00	0.00	435.55	435.55



Annexure-XIX

Asset-25A	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Land	47.58	0.00	0.00	0.00	0.00	0.00	47.58	0.00	0.00	0.00	0.00	0.00	0.00
	Building	35.26	0.00	0.00	0.00	0.00	0.00	35.26	3.34	0.00	0.00	0.00	0.00	1.18
	Sub station	258.37	0.00	0.00	0.00	0.00	0.00	258.37	5.28	0.00	0.00	0.00	0.00	13.64
	Total	341.21	0.00	0.00	0.00	0.00	0.00	341.21		0.00	0.00	0.00	0.00	14.82
	Weighted Average Rate of Depreciation (in %)									0.00	0.00	0.00	0.00	4.34
	Average Gross Block (₹ in lakh)									0.00	0.00	0.00	0.00	341.21



Annexure-XX

Asset-25B	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Sub station	435.55	0.00	0.00	0.00	0.00	0.00	435.55	5.28	0.00	0.00	0.00	0.00	23.00
	Total	435.55	0.00	0.00	0.00	0.00	0.00	435.55		0.00	0.00	0.00	0.00	23.00
Weighted Average Rate of Depreciation (in %)										0.00	0.00	0.00	0.00	5.28
Average Gross Block (₹ in lakh)										0.00	0.00	0.00	0.00	435.55



Annexure-XXI

Asset-26	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Building	71.6	0.00	0.00	0.05	0.51	0.00	72.16	3.34	0.00	0.00	2.39	2.40	2.41
	Sub station	303.12	0.00	0.00	0.21	2.18	0.00	305.51	5.28	0.00	0.00	16.00	16.07	16.13
	PLCC	5.85	0.00	0.00	0.00	0.04	0.00	5.89	6.33	0.00	0.00	0.37	0.37	0.37
	Total	380.58	0.00	0.00	0.26	2.73	0.00	383.57		0.00	0.00	18.76	18.85	18.91
	Weighted Average Rate of Depreciation (in %)									0.00	0.00	4.93	4.93	4.93
	Average Gross Block (₹ in lakh)									0.00	0.00	380.71	382.2	383.57



Annexure-XXII

Asset-27	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Building	72.56	0.00	0.00	0.07	0.51	0.00	73.14	3.34	0.00	0.00	2.47	2.43	2.44
	Sub station	306.54	0.00	0.00	0.31	2.18	0.00	309.03	5.28	0.00	0.00	16.19	16.26	16.32
	PLCC	5.94	0.00	0.00	0.01	0.04	0.00	5.99	6.33	0.00	0.00	0.38	0.38	0.38
	Total	385.04	0.00	0.00	0.39	2.73	0.00	388.16		0.00	0.00	19.04	19.07	19.14
	Weighted Average Rate of Depreciation (in %)									0.00	0.00	4.93	4.93	4.93
	Average Gross Block (₹ in lakh)									0.00	0.00	385.23	386.79	388.16



Annexure-XXIII

Asset-28	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Building	56.4	0.00	0.00	0.00	0.00	0.00	56.4	3.34	0.00	0.00	0.00	0.00	1.88
	Sub station	341.76	0.00	0.00	0.00	0.00	0.00	341.76	5.28	0.00	0.00	0.00	0.00	18.04
	PLCC	4.61	0.00	0.00	0.00	0.00	0.00	4.61	6.33	0.00	0.00	0.00	0.00	0.29
	Total	402.77	0.00	0.00	0.00	0.00	0.00	402.77		0.00	0.00	0.00	0.00	20.22
	Weighted Average Rate of Depreciation (in %)									0.00	0.00	0.00	0.00	5.02
	Average Gross Block (₹ in lakh)									0.00	0.00	0.00	0.00	402.77



Annexure-XXIV

Asset-29	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Building	104.71	0.00	0.00	2.23	5.26	0.00	112.2	3.34	0.00	0.00	3.53	3.66	3.75
	Sub-station	361.48	0.00	0.00	7.73	18.22	0.00	387.43	5.28	0.00	0.00	19.29	19.98	20.46
	PLCC	9.98	0.00	0.00	0.21	0.50	0.00	10.69	6.33	0.00	0.00	0.64	0.66	0.68
	Total	476.17	0.00	0.00	10.17	23.98	0.00	510.32		0.00	0.00	23.46	24.30	24.88
	Weighted Average Rate of Depreciation (in %)									0.00	0.00	4.88	4.88	4.88
	Average Gross Block (₹ in lakh)									0.00	0.00	481.26	498.33	510.32



Annexure-XXV

Asset-30	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Building	54.05	0.00	0.00	1.81	2.66	0.00	58.52	3.34	0.00	0.00	1.84	1.91	1.95
	Sub station	183.98	0.00	0.00	6.16	9.08	0.00	199.22	5.28	0.00	0.00	9.88	10.28	10.52
	PLCC	5.16	0.00	0.00	0.17	0.25	0.00	5.58	6.33	0.00	0.00	0.33	0.35	0.35
	Total	243.18	0.00	0.00	8.14	11.99	0.00	263.31		0.00	0.00	12.04	12.53	12.83
	Weighted Average Rate of Depreciation (in %)									0.00	0.00	4.87	4.87	4.87
	Average Gross Block (₹ in lakh)									0.00	0.00	247.25	257.32	263.31



Annexure-XXVI

Asset-31	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Building	49.81	0.00	0.00	1.81	2.66	0.00	54.28	3.34	0.00	0.00	1.66	1.77	1.81
	Sub-station	169.1	0.00	0.00	6.16	9.08	0.00	184.34	5.28	0.00	0.00	8.93	9.49	9.73
	PLCC	4.75	0.00	0.00	0.17	0.25	0.00	5.17	6.33	0.00	0.00	0.30	0.32	0.33
	Total	223.66	0.00	0.00	8.14	11.99	0.00	243.79		0.00	0.00	10.89	11.58	11.87
	Weighted Average Rate of Depreciation (in %)									0.00	0.00	4.87	4.87	4.87
	Average Gross Block (₹ in lakh)									0.00	0.00	227.73	237.79	243.79



Annexure-XXVII

Asset-32	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Sub-station	387.12	0.00	0.00	0.00	1.19	0.00	388.31	5.28	0.00	0.00	0.00	20.44	20.50
	PLCC	18.1	0.00	0.00	0.00	0.00	0.00	18.1	6.33	0.00	0.00	0.00	1.14	1.15
	Total	405.22	0.00	0.00	0.00	1.19	0.00	406.41		0.00	0.00	0.00	21.58	21.05
	Weighted Average Rate of Depreciation (in %)									0.00	0.00	0.00	5.33	5.33
	Average Gross Block (₹ in lakh)									0.00	0.00	0.00	405.81	406.41



Annexure-XXVIII

Asset-33	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				
			2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Sub station	534.93	0.00	0.00	0.00	2.15	1.76	538.84	5.28	0.00	0.00	0.00	28.45	28.40
	PLCC	18.78	0.00	0.00	0.00	0.00	0.00	18.78	6.33	0.00	0.00	0.00	1.18	1.19
	Total	553.71	0.00	0.00	0.00	2.15	1.76	557.62		0.00	0.00	0.00	29.63	29.59
	Weighted Average Rate of Depreciation (in %)									0.00	0.00	0.00	5.32	5.32
	Average Gross Block (₹ in lakh)									0.00	0.00	0.00	554.78	556.74



Annexure-XXIX

Combined Asset (Asset-1 to Asset-27, Asset-31 and Asset-32)	Particulars	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE 2019-24					Admitted Capital Cost as on 1.4.2024 (₹ in lakh)	Rate of Depre- ciation (in %)	Annual Depreciation as per Regulations				
			2019-20	2020-21	2021-22	2022-23	2023-24			2019-20	2020-21	2021-22	2022-23	2023-24
	Land	8901.26	0.00	213.19	0.00	0.00	0.00	9114.45	0.00	0.00	0.00	0.00	0.00	0.00
	Building	4749.69	183.52	518.12	0.00	0.00	0.00	5451.33	3.34	161.70	173.42	182.07	182.07	182.07
	Transmission line	23320.72	0.00	0.00	0.00	0.00	0.00	23320.72	5.28	1231.33	1231.33	1231.33	1231.33	1231.33
	Sub station	47614.64	0.00	0.00	0.00	0.00	0.00	47614.64	5.28	2514.05	2514.05	2514.05	2514.05	2514.05
	PLCC	694.82	0.00	0.00	0.00	0.00	0.00	694.82	6.33	43.98	43.98	43.98	43.98	43.98
	IT equipment & software	179.33	0.00	0.00	0.00	0.00	0.00	179.33	5.28	26.90	26.90	26.90	26.90	26.90
	Total	85460.45	183.52	731.31	0.00	0.00	0.00	86375.28		3977.97	3989.69	3998.34	3998.34	3998.34
	Weighted Average Rate of Depreciation (in %)									4.65	4.64	4.63	4.63	4.63
	Average Gross Block (₹ in lakh)									85552.21	86009.62	86375.28	86375.28	86375.28



Annexure-XXX

Asset-28	Particulars	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE 2019-24					Admitted Capital Cost as on 1.4.2024 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
			2019-20	2020-21	2021-22	2022-23	2023-24			2019-20	2020-21	2021-22	2022-23	2023-24
	Building	56.4	65.82	162.18	0.00	0.00	0.00	284.4	3.34	2.98	6.79	9.50	9.50	9.50
	Sub-station	341.76	0.00	0.00	0.00	0.00	0.00	341.76	5.28	18.04	18.04	18.04	18.04	18.04
	PLCC	4.61	0.00	0.00	0.00	0.00	0.00	4.61	6.33	0.29	0.29	0.29	0.29	0.29
	Total	402.77	65.82	162.18	0.00	0.00	0.00	630.77		21.32	25.13	27.84	27.84	27.84
	Weighted Average Rate of Depreciation (in %)									4.89	4.57	4.41	4.41	4.41
	Average Gross Block (₹ in lakh)									435.68	549.68	630.77	630.77	630.77



Annexure-XXXI

Asset-29	Particulars	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE 2019-24					Admitted Capital Cost as on 1.4.2024 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
			2019-20	2020-21	2021-22	2022-23	2023-24			2019-20	2020-21	2021-22	2022-23	2023-24
	Building	112.2	0.00	0.00	0.00	0.00	0.00	112.2	3.34	3.75	3.75	3.75	3.75	3.75
	Sub-station	387.43	36.31	0.00	0.00	0.00	0.00	423.74	5.28	21.41	22.37	22.37	22.37	22.37
	PLCC	10.69	0.00	0.00	0.00	0.00	0.00	10.69	6.33	0.68	0.68	0.68	0.68	0.68
	Total	510.32	36.31	0.00	0.00	0.00	0.00	546.63		25.84	26.80	26.80	26.80	26.80
	Weighted Average Rate of Depreciation (in %)									4.89	4.90	4.90	4.90	4.90
	Average Gross Block (₹ in lakh)									528.48	546.63	546.63	546.63	546.63



Annexure-XXXII

Asset-30	Particulars	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE 2019-24					Admitted Capital Cost as on 1.4.2024 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
			2019-20	2020-21	2021-22	2022-23	2023-24			2019-20	2020-21	2021-22	2022-23	2023-24
	Building	58.52	0.00	0.00	0.00	0.00	0.00	58.52	3.34	1.95	1.95	1.95	1.95	1.95
	Sub-station	199.22	0.00	0.00	0.00	0.00	0.00	199.22	5.28	10.52	10.52	10.52	10.52	10.52
	PLCC	5.58	0.00	0.00	0.00	0.00	0.00	5.58	6.33	0.35	0.35	0.35	0.35	0.35
	Total	263.31	0.00	0.00	0.00	0.00	0.00	263.31		12.83	12.83	12.83	12.83	12.83
	Weighted Average Rate of Depreciation (in %)									4.87	4.87	4.87	4.87	4.87
	Average Gross Block (₹ in lakh)									263.31	263.31	263.31	263.31	263.31



Annexure-XXXIII

Asset-33	Particulars	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE 2019-24					Admitted Capital Cost as on 1.4.2024 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
			2019-20	2020-21	2021-22	2022-23	2023-24			2019-20	2020-21	2021-22	2022-23	2023-24
	Sub-station	538.84	0.00	0.00	0.00	0.00	0.00	538.84	5.28	28.45	28.45	28.45	28.45	28.45
	PLCC	18.78	0.00	0.00	0.00	0.00	0.00	18.78	6.33	1.19	1.19	1.19	1.19	1.19
	Total	557.62	0.00	0.00	0.00	0.00	0.00	557.62		29.64	29.64	29.64	29.64	29.64
	Weighted Average Rate of Depreciation (in %)									5.32	5.32	5.32	5.32	5.32
	Average Gross Block (₹ in lakh)									557.62	557.62	557.62	557.62	557.62

